

UNIVERSITY OF SOUTHAMPTON

FACULTY OF SOCIAL, HUMAN AND MATHEMATICAL SCIENCES

Southampton Education School

STUDENT PROGRESS IN THE INDONESIA OPEN UNIVERSITY

by

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Thesis for the degree of Doctor of Philosophy

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UNIVERSITY OF SOUTHAMPTON**ABSTRACT**

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The high number of non-enrolment students have affected the retention rate in the Indonesia Open University. This study was aimed to explore the predictors of student progress in the Indonesia Open University and the extent to which the identified variables influence student progress in the Indonesia Open University.

This study used a mixed methods approach by employing a sequential explanatory study. In the first phase, this study employed a web-based survey to collect data from 153 participants. In the second phase, the multiple case study was conducted to investigate in-depth about the extent to which the identified factors (individual, institutional, and external factors) contribute to student progress by conducting semi-structured interviews with 13 purposefully selected participants.

In the quantitative phase, a logistic regression analysis generated 12 predictors that had important contributions to the predictive model of student progress: age, gender, prior education, intrinsic motivation, extrinsic motivation, self-efficacy, volitional strategies, student support services, learning services, interaction, family and friends, and work environment. Meanwhile, in the qualitative phase, five major themes emerged from the case study analysis: (1) self-motivation; (2) volitional strategies; (3) quality of institutional support; (4) interaction; and (5) supporting environment.

The integration of quantitative and qualitative findings demonstrated that student progress in the Indonesia Open University is influenced by individual, institutional, and external factors. The findings also reported that intrinsic and extrinsic motivation co-existed together in contributing to student progress. Finally, implications of the study and recommendations for future studies were discussed in the study.

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DECLARATION OF AUTHORSHIP

I, Muhammad Husni Arifin declare that the thesis entitled

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and the work presented in it are my own and has been generated by me as the result of my own original research. I confirm that:

1. This work was done wholly or mainly while in candidature for a research degree at this University;
2. Where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
3. Where I have consulted the published work of others, this is always clearly attributed;
4. Where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work;
5. I have acknowledged all main sources of help;
6. Where the thesis is based on work done by myself jointly with others, I have made clear exactly what was done by others and what I have contributed myself;
7. None of this work has been published before submission

Signed: 

Date: 06/01/2016

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Chapter 1 Introduction

In this first chapter, the rationale and aims for conducting this study are explored in the sections of statement of problem and purpose of the study. Following this, research questions are developed to address the problem statement. Then, the definition of student progress used in this study is discussed by comparing with other terms, such as student persistence, dropout, retention, completion, and withdrawal. Significance of the study is explained in the next section. Finally, an overview of the whole chapters is described in the last section.

1.1 Statement of Problem

Student persistence¹ has been a major interest of researchers in both face to face and distance education. Student persistence is deemed as an important measure of higher education programme effectiveness and outcome, and student participation in further and higher education (Rovai, 2003; Simpson, 2003). Student persistence is also a complex issue involving a multitude of academic, social, and behavioural factors that are difficult to define and harder to control (Astin, 2003; Holder, 2007; Rovai, 2003). These factors change over time as the needs and expectations of students and institutions change, and are context dependent or culturally bounded (Hagedorn, 2011; Holder, 2007).

In the context of distance education, student persistence is the biggest problem (Simpson, 2013). Student persistence according to various prior studies, is lower than in conventional or face-to-face programmes (Diaz &

¹ Student persistence is often used interchangeably with student retention and student completion. These terms relate to behaviour of continuing learning and success of education despite encountering distractions (Rovai, 2003).

Cartnal, 2006; Simpson, 2003). Carr (2000) showed that persistence in distance education programmes has been often 10 – 20 percentage points lower than in conventional programmes and less than 50% of distance education students finish their courses. Furthermore, Simpson (2003, 2013) also demonstrated that student persistence in open and distance learning courses is typically no higher than in conventional learning and is often worse.

The low persistence rate in distance education contexts has attracted researchers to investigate the factors influencing student persistence in various contexts and with numerous theoretical frameworks. In general, there were two influential models used to explain the persistence of adult learners (Rovai, 2003): (1) the psychological model of persistence; and (2) the model of institution-student “fit”. The psychological model asserts that motivation and volition make important contributions in explaining persistence. However, motivation and volition play different roles in influencing student persistence. Motivation could be used to depict why a student is motivated to enrol in the programme but motivation is not sufficient for explaining the fluctuation of motivation when obstacles and distractions occur during the learning process. At this point, persistence can be explained from volitional processes which maintains focus and effort toward goals despite potential distractions (Deimann & Bastiaens, 2010; Garcia et al. 1998; Husman, McCann, & Crowson, 2000). Meanwhile, a model of institution-student “fit” is a more recent model and explains the persistence by looking at the student, institutional, and environmental variables. Several influential models in this approach are Tinto's ‘Model of Departure’ (1975, 1993), Bean and Metzner's Model (1985), and Kember's ‘Model of Student Progress’ (1994; 1992; 1995).

The empirical studies on student persistence in distance education conducted in the past ten years (2000 – 2010) have validated the function of a model of institution-student “fit”. The findings of those studies reported that student persistence mostly could be explained from three significant factors: student factors, course/programme factors, and environmental factors. Student factors

consisted of several sub-factors, such as academic background, prior educations, relevant skills, and psychological attributes (for instance, motivation, locus of control, self-efficacy, and satisfaction). Course/programme factors encompassed course design, institutional supports, and students' interactions. Meanwhile, environmental factors comprised work commitments and supportive study environments including supports from family, friends, or colleagues (Lee & Choi, 2011).

However, most of those empirical studies of student retention in distance education settings were conducted in online learning programmes and in dual mode institutions. A dual mode institution is an institution that adds distance education to its previously established campus and class-based teaching (Moore & Kearsley, 2012). These dual mode institutions have different characteristics from the Open University as a single-mode institution, a distance learning university in which all faculties and staffs of the institution are exclusively devoted to distance education. The Open University typically aims to deliver education to students who are not physically "on site" and typically employ an open entry admission (Lee & Choi, 2011; Moore & Kearsley, 2012).

Moreover, the majority of prior studies on student persistence explained dropout or retention problems in distance learning settings with a single mainstream culture. In the other words, there is a paucity of empirical studies on the relationship between students' cultural orientations and their persistence in distance learning settings. Belawati (1998) found in her study on increasing persistence in Indonesian post-secondary distance education that persistence rates differ from island to island and from Regional Office to Regional Office. Therefore, Belawati (1998) stated that it is necessary to acknowledge the importance of cultural differences in understanding persistence problem. In line with this perspective, Guiffrida (2006) insisted the significance in recognising cultural variables in the withdrawal studies, particularly the dropout problem among minority ethnic students. In similar

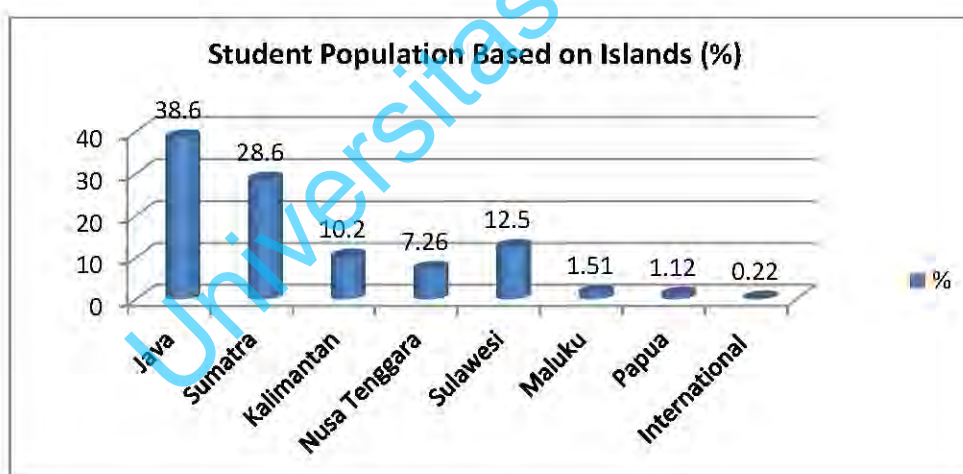
way, McQueen (2009) asserts that understanding the complexities of student retention in the higher education demands a more subtle analysis that takes into account the cultural and social-psychological factors in which they occur.

Low retention is also a big challenge for the Indonesia Open University (Universitas Terbuka). Several prior studies have shown that Indonesia Open University has been noted for having a low rate of completion and a low level of achievement (Belawati, 1998; Kadarko, 2003; Ratnaningsih et.al., 2008). The Indonesia Open University, in 2012, enrolled about 585,700 students, spread out in different parts of the country and some overseas locations. Over 95% of these students are working adults. Since its foundation in 1984, the Indonesia Open University has enrolled over 1.4 million students and has produced about 700,000 alumni, working in various professional fields (Universitas Terbuka, 2012b). This data indicated that the Indonesia Open University has high enrolment, but low completion rates.

The student population of the Indonesia Open University (Universitas Terbuka) spread out in the seven main islands of Java, Sumatra, Kalimantan, Nusa Tenggara, Sulawesi, Maluku, Papua and over hundred ethnic groups including international students (Universitas Terbuka, 2012). There are over 1,000 ethnic/sub-ethnic groups in Indonesia and the largest ethnic group is the Javanese who make up 41.71% of the total population (Muller & Vothknecht, 2013; Suryadinata, Arifin, & Ananta, 2003). However, the variation of students' cultural backgrounds are generally neglected in understanding students' persistence in open and distance learning, particularly in Indonesia Open University. Dunbar (1991) in his observation of distance education in Indonesia said that the "fundamental cause of distance education failure in Indonesia has been the adoption of Western models, without adaptation to suit the acculturated behaviours of Indonesian teachers and learners". In addition, Ramanujam (2001) asserts that Indonesia has a large population, a strong Islamic culture, an oral tradition of teaching which hold the teachers with high respect and assume learners as receivers of knowledge. Therefore, the

successful of distance education in Indonesia and developing countries in general is not only depending on the creative adaptation of a western successful model but also needs the psychological and cultural preparedness of both the teachers and learners.

Therefore, this study seeks to investigate factors influencing student progress in the Indonesia Open University (Universitas Terbuka - UT) and to what extent the three identified factors (individual, institutional, and external factors) influence student progress. Student progress in this study refers to the behaviour of continuing learning and progressive re-enrolment despite the presence of obstacles. In other words, student progress is operationalised as a decision to enrol as an active student and register for courses within four consecutive semesters. In contrast, due to the absence of a dropout policy in the Indonesia Open University, a student who does not enrol and register for courses within four consecutive semesters is classified as an inactive student.



Source: UT in Numbers (Universitas Terbuka, 2012c).

Figure 1.1: Student population based on Islands

1.2 Purpose of the Study

The purpose of this sequential explanatory mixed methods study is to explain the predictors of student progress in the Indonesia Open University and the extent to which the identified variables influence student progress by employing a quantitative method with a survey design, followed by obtaining qualitative data from the multiple case study analysis. In the first phase, this study determined the predictors influencing student progress in the Indonesia Open University. In the second phase, the multiple case study was conducted to investigate in-depth about the extent to which the identified factors (individual, institutional, and external factors) in the quantitative phase contributed to student progress.

1.3 Research Questions

In order to address the problem statement, this study was guided by following research questions:

1. What factors influence student progress in the Indonesia Open University?"
2. To what extent do individual factors influence student progress?
3. To what extent do institutional factors influence student progress?
4. To what extent do external factors influence student progress?

1.4 Definition of Student Progress

The term 'student progress' became popular when Kember (1992) used it as part of his paper's title: "Student progress in distance education: Identification of explanatory constructs". According to Kember (1992; 1995), student progress refers to behaviour whereby students continue to make progress through a course or degree programme by remaining continuously enrolled. However, definition of student progress or dropout could vary depending on

the context of *where the study is conducted* and *whether the institution's or the student's perspective is taken*. A student could define completion as the end of a course; otherwise, an institution may define completion as the end of a programme of study or graduation. For example, if a student enters an institution to gain specific knowledge that will be advantageous towards future goals and leaves after the completion of one course having feel as though they gained an appropriate level of knowledge, the student may be satisfied and feel that the goal has been attained. The institution, on the other hand, may see the student as a dropout because they only completed one course rather than the programme. Obviously, the dilemma of perspective shows the challenge in determining retention and attrition rates for institutions and finding a standard method of measurement (Gwekwerere, 2003; Sorensen, 2010).

Student progress in many studies is often used interchangeably with persistence, retention and completion, and relates to success of education. Meanwhile, the term of 'dropout' is the most commonly used by many researchers in discussing the phenomenon of dropout. In addition, other terms frequently used in explaining drop-out are withdrawal, attrition, non-persistence, and non-completion (Kember, 1995; Lee & Choi, 2011). Park and Choi (2009) considered that persistence and attrition are complimentary and like two sides of a coin. 'Persistence' is a positive term that has been used to measure a programme's ability (the programme that works) to satisfy a student's needs, whilst, 'student attrition' points to a negative affect that is usually financially costly for the institution and the student alike. Inherent in the assumption that attrition is negative is the belief that dropping out of a course programme indicates a failure.

Lee & Choi (2011) found in the reviewed 35 empirical studies on student drop-out in post-secondary online courses within the last ten years in peer-reviewed journals that the term 'dropout' was not defined consistently in the studies which made it difficult to compare dropout factors and retention strategies

across universities. However, Lee & Choi (2011) classified two sorts of definitions. In *the first*, some studies defined dropout as students' active behaviour to withdraw. For instance, Levy (2011) defined dropout as those who voluntarily withdraw from e-learning after the period of acquiring financial penalties. In the second classification, other studies defined dropout as non-completion of a course as indicated by a student's final assessment (an incomplete or fail). For example, Liu et al. (2009) defined retention as a completion of a course with a grade between a "C" and an "A," thereby implying that any students who did not complete a course with at least a "C" were considered as dropouts. In the meantime, the term of persistence was only found in one study of 35 reviewed empirical studies that was conducted by Poellhuber et.al (2008). This study defined persistence as "completion of all required assignments and taking the final exam regardless of the pass or fail verdict for the course".

In the context of Open University, Lee & Choi (2011) included six studies in their review: Bocchi et al. 2004; Morgan and Tam 1999; Pigliapoco and Bogliolo, 2008; Pierrakeas et al., 2004; Xenos et al., 2002; and Shin & Kim, 1999. In these studies, Lee & Choi highlighted that students' drop-out was defined as students who simply did not register for classes for consecutive semesters. In particular, Shin and Kim (1999) portrayed specific definition of dropout at the Korea National Open University whereby learners were not regarded as dropouts until they failed to register for three consecutive terms.

In this study, the usage of student progress was based on the considerations that Open University had no dropout policy and the students' characteristics of Open University who were predominantly part-time learners and who, from time-to-time, may need to postpone or interrupt their studies. Therefore, according to Boston (2011), student progress or persistence can be perceived as "the progressive re-enrolment in college, whether continuous from one term to the next or temporarily interrupted and then resumed". As long as a given

individual is continuously enrolled or returns to his/her studies within a reasonable period, that individual should be considered as a returning student.

Moreover, the term 'student progress' is intended as a positive term rather than the more negative connotations such as 'student dropout' arising from a 'pathological' approach. According to Woodley (2004), pathology is the study of disease or abnormality. Thus this approach is usually associated with the negative terms, such as 'wastage', 'attrition', 'student mortality', and, indeed, the term 'dropout' itself. This language has led to, or reflects, the educators' attempts to explain, 'treat' and 'cure' student dropout by drawing on models that implicitly or explicitly are taken from the health or crime domains.

Therefore, the negative terms, such as dropout, retention, and withdrawal are "unhealthy" either for conventional institutions or distance education institutions for several reasons. *First*, in systems where the great majority of students withdraw, it seems unreasonable to treat this as 'abnormal' behaviour. *Second*, it is widely acknowledged that a proportion of the dropout relates to positive decisions made by students—for example, they have achieved their goals, or they are transferring to another institution. *Third*, it is questionable whether the role of the educational provider is the same as that of a 'health provider'. In the health field, the doctor and patient are united in their aim to cure the disease, whereas in education there may be a conflict of interest. Funding arrangements and performance indicators may mean that educational institutions need to retain their students more than students need to be retained by them (Woodley, 2004).

In the context of the Indonesia Open University (Universitas Terbuka), the students are allowed to study at their own pace. This means that students can register, suspend, and re-register any time as long as the study suspension is no longer than four consecutive semesters. Therefore, the Indonesia Open University divides student enrolment status into two categories: active students are those who maintain their student status (continuation of registration for every semester and do not exceed the allowed study suspension) and non-

active students are those who do not maintain their student status (or do not re-register for any new course) for more than four consecutive semesters (Universitas Terbuka, 2015b).

In summary, student progress in this study refers to the behaviour of continuing learning in the course programme by continuation of enrolment within four consecutive semesters. Meanwhile, 'non-progression students' (who will possibly come back and continue at a later stage) are those who do not enrol as active students and do not register for any new course within four consecutive semesters.

1.5 Significance of the Study

This study attempts to understand the adult learners' experiences and factors influencing student progress in the Indonesia Open University. In explaining the student progress, individual, institutional and external factors are investigated regarding their contributions to progression and non-progression decisions. The main significance of this study lies in the fact that there was a paucity of existing studies exploring student progress in the context of Open University by investigating individual, institutional, and external factors. Therefore, this study contributes to the area of research related to student progress in the Open University setting as a single-mode institution.

Furthermore, it is important to know factors contributing to student progress in the Open University settings due to the high demands of higher student retention from government, universities, funding agencies, and students themselves. In particular, knowledge and understanding of factors that affect student progress may help academic institutions, particularly the Indonesia Open University to better meet students' needs and increase their satisfaction and self-motivation and in turn increase their progression and degree completion rate. Likewise, an understanding of students' behaviour may also

serve as a baseline for policy makers in the Open Universities in formulating evidence based policies in distance education, developing appropriately instructional designs, and improving the quality of student support services.

1.6 Overview of Thesis

Low persistence rates and a paucity of existing studies exploring factors of non-enrolment in the context of Open University are the main fascination for conducting this research. I also explore definition of student progress and low persistence rates as a challenging problem in distance education context and the Indonesia Open University in particular in chapter 1. I go on in chapter 2 to discuss theoretical foundations used in this study and prior studies on student persistence in the Open University context. In Chapter 3, I present a contextual background by explaining open and distance learning system applied in the Indonesia Open University. Further in chapter 4, I discuss a mixed methods study as the methodological and analytical approach and explain two sequential phases of data collection and analysis. In Chapter 5, I demonstrate quantitative results of the study. Meanwhile, qualitative findings are reported in chapter 6 by presenting multiple case study analysis and single case analysis. In Chapter 7, both quantitative and qualitative data are integrated and interpreted by engaging with the relevant theories and studies. Finally, summary of the study is provided in chapter 8 along with discussion of implications of the study and recommendations for further studies.

In the following chapter, the literature review elaborates some issues pertinent to distance education and its development, three theoretical models used in this study, and previous empirical studies on student persistence in distance education contexts.

Chapter 2 Literature Review

In this chapter, the literature review is demonstrated by exploring definition of distance education, development of distance education, and characteristics of distance learners. Furthermore, three foundational theories are elaborated in this section and then followed up by reviewing previous studies on student persistence in Open University contexts. Afterwards, a conceptual framework of this study is elaborated in the final section.

2.1 Distance Education

2.1.1 Definition of Distance Education

The term of distance education has become commonplace amongst scholars and grown in importance in explaining the system of teaching and learning conducted by open universities, correspondence colleges, distance departments of conventional colleges or universities and distance training units of corporate providers. There are several terminologies widely used in the world, such as distance learning, distance teaching, online learning, open education, open learning, and open and distance learning (ODL). However, distance education is a generic term and commonly used for designating the education of those who choose not to attend the schools, colleges and universities of the world but study at their homes, or sometimes their workplaces (Keegan, 1996; Perraton, 2000).

The basic idea of distance education is a separation between teachers and students in different places for all or most of the time. Therefore, they need some form of communication technology to interact with each other (Moore & Kearsley, 2012). However, the distance between teachers and learners is not

simply a matter of geographic distance, but is a pedagogical phenomenon. In this context, Moore (1993, p. 20-35) introduced the concept of “transactional distance” to denote the impact of the geographic separation between teachers and learners on teaching and learning, particularly on the interaction between learners and teachers, on the design of courses, and on the organisation of human and technological resources (Moore & Kearsley, 2012, p. 209). In addition, ‘distance education’, according to Keegan (1996), could encompass the range of educational fields, such as children’s education at a distance, further education at a distance for vocational qualifications (distance training), higher education at a distance for university qualifications (university-level distance education), and corporate distance training (in-house courses in which the public may not be invited to enrol).

The usage of the term ‘distance education’ in this study is not only driven by its popularity as a generic term in the field of education but also because it embraces two main characteristics of distance education: the course development subsystem (distance teaching) and a student support subsystem (distance learning) (Keegan, 1996). The idea of using a term of distance education is also encouraged by Perraton’s explanation (2000) that a term of distance education brings together both open learning and distance education. In this context, Perraton (2000, p.10) defines distance education as “an educational process in which a significant proportion of the teaching is conducted by someone removed in space and/or time from the learner”.

Perraton’s definition of distance education above is a basic and the simplest definition of distance education. However perhaps, the broadest and the most widely cited definition by scholars (Kember, 2007) was revealed by Keegan (1996, p.50) in which he proposed a definition of distance education as a form of education encompassing the following main elements:

1. The quasi-permanent separation of teacher and learner throughout the length of the learning process (this distinguishes it from conventional face to face education);
2. The influence of an educational organisation both in the planning and preparation of learning materials and in the provision of student support services (this distinguishes it from private study and teach-yourself programmes);
3. The use of technical media – print, audio, video or computer – to unite teacher and learner and carry the content of the course;
4. The provision of two-way communication so that the student may benefit from or even initiate dialogue (this distinguishes it from other uses of technology in education); and
5. The quasi-permanent absence of the learning group throughout the length of the learning process so that people are usually taught as individuals and not in groups, with the possibility of occasional meetings for both didactic and socialisation purposes.

Kember (2007) criticises the fourth element of two-way communication as the most challenging task in delivering distance education courses and is difficult to carry out meaningfully even in the conventional face-to-face universities. Moreover, in conjunction with the growth of communication, information, and technology in the recent years, two-way communication between teacher and learner can be intensified either synchronously or asynchronously.

Furthermore, Garrison and Shale (1987, p. 7-13) also commented on Keegan's definition of distance education as too restrictive in relation to the rapid of social changes and the growth of learning technology. Therefore, they stress on three essential characteristics in explaining the distance education process:

1. Distance education implies that the majority of educational communication between (among) teacher and student (s) occurs non-contiguously;

2. Distance education must involve two-way communication between (among) teacher and student (s) for the purpose of facilitating and supporting the educational process;
3. Distance education uses technology to mediate the necessary two-way communication.

In relation to the fifth element of Keegan's definition, there are growing acknowledgments amongst researchers in distance education settings that peer interaction and sense of community have critical roles in students' achievement and retention (Anderson, Annand, & Wark, 2005; Rovai & Wighting, 2005; Rovai, 2002). Therefore, many distance education institutions attempt to build learning communities in order to provide a sense of community which in turn will motivate students to master their studies.

It is important therefore to synthesise both the traditional definition of distance education and the current view of distance education. A definition of distance education revealed by Moore and Kearsley (2012) probably represents an effort to capture the multidimensional nature of distance education. Moore and Kearsley (2012, p.2) defined distance education as:

"Distance education is teaching and planned learning in which teaching normally occurs in a different place from learning, requiring communication through technologies as well as special institutional organisation [sic]."

2.1.2 Development of Distance Education

The development of distance education can be distinguished based on the communication technology used and pedagogy frameworks (Anderson & Dron, 2011). Anderson and Dron (2011) classify distance education into three distinct generations: cognitive and behaviourist (CB) pedagogy, social-constructivist pedagogy, and connectivist pedagogy. Meanwhile, Moore and

Kearsley (2012) classify the history of distance education by the medium of communication and advances in communication technology into five generations: correspondence, broadcast radio and television, open universities, teleconferencing, and internet/web.

Correspondence is the first generation of distance education in which has the main characteristic of using a single medium of communication (printed or written text), and a lack of direct student interaction with the educational institution. The role of tutors in this model is typically to assess assignments, write feedback, and post the assignment back to the students through the postal service. The main form of learning materials are printed or duplicated books (Kember, 2007; Moore & Kearsley, 2012).

The advent of radio and television as new technology in the early part of twentieth century has influenced the method of teaching in the distance education, particularly at the post-secondary level. Broadcasting generation is a one-way form of communication using radio or television as the broadcasting medium. Broadcasting universities have been used widely in China with the huge numbers of students (Kember, 2007; Moore & Kearsley, 2012).

From the pedagogy frameworks, correspondence and broadcast generations show the dominant features of cognitive-behaviourist generation (CB model). The cognitive and behaviourist (CB) model stresses that learning is an individual process in addition to the necessity for measuring actual behaviours as the learning outcomes. This CB model focuses the importance of using an instructional system design model where the learning objectives are clearly identified and stated and exist apart from the learner and the context of study. The social presence in this model is almost totally absent, focusing on individualised learning (space and pace) and generally suitable with technologies of print packages, mass media (radio and television, and postal-correspondence interaction. Furthermore, the learning package is predominantly self-contained and complete, requiring only teacher-learner interaction for marking and evaluation (Anderson & Dron, 2011). In this model,

the institution typically would provide reading lists of books and articles to student who would study independently. The institution would hire tutors or instructors mainly to mark assignments and possibly to give feedback to students before taking the examination (Bates, 2005; Kaufman, 1989; Nipper, 1989).

The third generation of distance education is open universities. This model is characterised by the use of a combination of media and supporting services (a system approach). The learning materials are typically designed for studying at a distance and the institutions provide tutors to communicate with students regarding the learning materials. Moreover, the third generation institutions usually have very large numbers of students and classified as mega-universities (over 100,000 students). The United Kingdom of the Open University (UKOU) presumably is seen by most of the scholars in the distance education as a predominant model of the third generation of distance education. The UKOU model of distance education is based on the package of course materials and offers the supporting tutorial and counselling services. In recent years, the use of communication technology has increased for offering support (Kember, 2007; Moore & Kearsley, 2012).

The teleconferencing generation is a two-way communication and distinct from the broadcasting model as being purely a one-way communication. This model is closer to the face-to-face classroom teaching, but students do not physically attend the classroom. A teleconference channel links both tutors and students. This model is distinct from the Open University generation, so even though teleconferences and online forums are used in the Open University generation, they are not the main vehicle for delivering content and knowledge and serve as supplements to learning through the course package.

The open universities and the teleconferencing generations are typically associated with the social-constructivist pedagogy of distance education. The locus of control in a social-constructivist system shifts away from teacher-

oriented to become more of a guide than as an instructor. In this model, distance education is beyond the narrow type of knowledge transmission and characterized by using synchronous and asynchronous media, human communications-based learning, and the intensive student-student and student-teacher interactions. The learners are actively engaged, and interaction with peers is perhaps the most cost-effective way to support cognitive presence (Anderson & Dron, 2011). The significant characteristics of second-generation distance education are integrated multiple-media approach (print and broadcasting media). The learning materials are typically designed for a study at a distance and the institutions provide tutors with the means to communicate with students regarding the learning materials (Bates, 2005; Kaufman, 1989; Nipper, 1989).

The fifth generation of distance education is the internet and web-based teaching (e-learning). E-learning can be defined as any learning process which uses internet, both for delivering learning content as well as for enabling interaction between the students and their teachers (Belawati, 2010). This model has similar characteristics with the teleconferencing generation but the communication technology used is networked computers (Moore & Kearsley, 2012). This generation is much more related to the third generation of distance-education pedagogy, connectivism. This model focuses on problem solving learning by building capacity to find information from networked connections and apply knowledge when and where it is needed. Therefore, connectivism assumes that learners have access to powerful networks and have self-efficacy in networked-based cognitive skills (Anderson & Dron, 2011).

In connectivist pedagogy, social presence and social capital have pivotal roles in enriching interactions. Social presence and social capital are built through the interwoven networks created and sustained by current and past learners, and based on knowledge relevant to the learning goals. Social presence and social capital are enhanced through the activities of learners represented from learners' contribution to the online communities or forums, such as Wikis,

Twitter, Facebook, threaded conferences, and other network tools. The involvement of network groups in constructing knowledge showed that connectivism was developed from principles of a constructivist model of learning (Anderson & Dron, 2011).

The three distinct generations of distance education pedagogy even though predominantly flourished in different eras, these three pedagogical generations were still employed by educational practitioners to deal with learning needs (Anderson & Dron, 2011).

2.1.3 Characteristics of Distance Learners

Most distance learners are adult learners and they are perceived as “dynamic individual” whose characteristics often change in response to both educational and life experiences (Moore & Kearsley, 2012). Schutze (1986) pointed out four categories of adult learners: (1) those who enter or re-enter higher education to pursue mainstream studies leading to a full first degree or diploma; (2) those who re-enter to update their professional knowledge, or seek to acquire additional qualifications; (3) those without previous experience in higher education, who enrol for professional purposes, especially in courses of short duration; and (4) those with or without previous experiences in higher education, who enrol for courses with the explicit purpose of personal fulfilment.

Furthermore, the profiles of adult learners are mostly characterised by autonomy, persistence, independence, self-direction and flexibility (Garrison, 2003; Keegan, 1996). In terms of age characteristics, most distance learners were adults beyond the traditional age of undergraduate level or typically above 25 years of age, most of whom were employed and with household responsibilities (Granger & Benke, 1998; Moore & Kearsley, 2012). Thompson (1998) revealed that the majority of adult learners has the following

characteristics: older than the typical undergraduate, probably female, more likely to be employed full time, married, self-motivated and self-disciplined, often with instrumental rather than developmental educational goals. Moreover, the major difference between distance learners and traditional classroom learners is motivation. In the majority of studies, distance learners were found to be highly motivated (Simonson, Smaldino, Albright, & Zvacek, 2000).

2.1.4 Summary

There are many definitions of distance education and the most cited definition is provided by Keegan (1996). However, a definition of distance education in recent years needs to capture the multidimensional nature of distance education and a definition of distance education envisaged by Moore and Kearsley (2012) on page 16 of this thesis represents these recent changes.

The development of distance education can be distinguished based on the communication technology used and pedagogy frameworks. As reported above, Moore and Kearsley (2012) classified the history of distance education by the medium of communication and advances in communication technology into five generations. In line with this perspective, distance education can be differentiated based on the three generations of distance education pedagogy: (a) cognitive-behaviorist; (b) social constructivist; (c) connectivist.

The characteristics of distance learners are adults beyond the traditional age of undergraduate level or above 25 years of age, most of them employed, married with family obligations, self-motivated and self-disciplined, and often with instrumental rather than developmental educational goals.

2.2 Theoretical Models of Student Persistence

This study uses three theories of student persistence as a theoretical foundation: Tinto's model of student departure, Kember's model of student progress, and Rovai's composite model of student persistence. Tinto's model of student departure is the influential model in the genre of student-institution "fit" and his specific themes about social and academic integration are beneficial in analysing student progress in this study. Kember's model of student progress is the important model tailored for examining student progress in the distance education settings. Meanwhile, Rovai's composite model represents a model for explaining persistence and attrition in online distance education in particular. The Rovai's model is selected as the Indonesia Open University offers online tutorials to student as part of learning services. Additionally, it is considered that Tinto's model of student departure and Kember's model of student progress were developed before online teaching and learning become common.

2.2.1 Tinto's Model of Student Departure

Tinto's model of student departure developed by Vincent Tinto, probably, is the most widely cited theory and the most influential theoretical framework to explain the process of dropout in higher education (Guifrida, 2006; Kember, 1989, 1995). The Tinto model has not only been used to interpret attrition studies in face-to-face teaching, but has been cited by researchers who conducted studies related to distance education (Kember, 1989, 1995).

Tinto's model of student dropout conceptualised persistence as a student's commitment to completing a programme of study at a particular institution. In this model, persistence is an outcome of students' interactions with the institution's academic and social characteristics (Cabrera, 1990; Tinto, 1988, 1993). Therefore, students who fail to integrate into an institution's social and

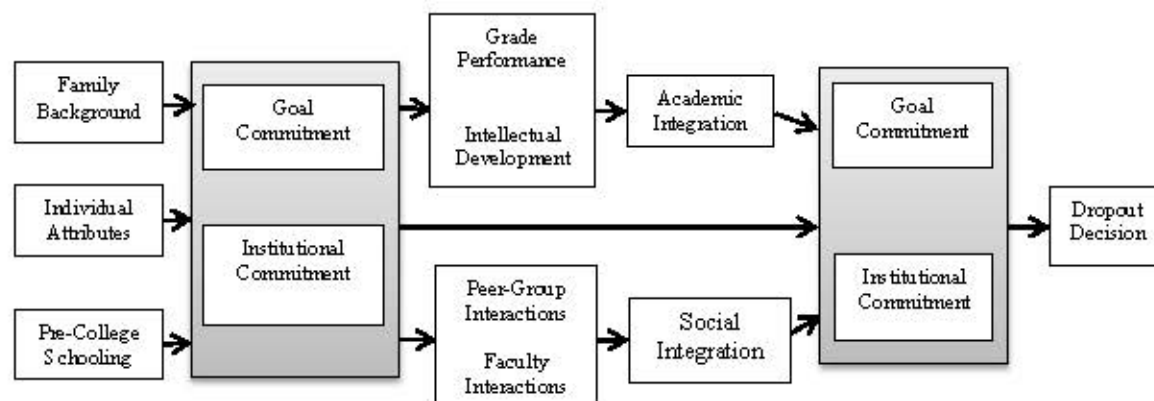
academic system are more likely to drop out of college (Hammond, 2006; Tinto, 1988, 1993). Students' abilities to interact successfully with institution and other students is the key point for students to persist in their studies (Lint, 2011; Porta-Merida, 2009). To sum up, Tinto (1975) theorised student persistence as a social process:

In brief, this theoretical model of dropout argues that the process of dropout from college can be viewed as a longitudinal process of interactions between the individual and the academic and social systems of college during which a person's experiences in those systems (as measured by his normative and structural integration) continually modify his goal and institutional commitment in ways lead to persistence and/or to varying forms of dropout (Tinto, 1975, p. 94)

The Tinto model consists of five constructs in a causal order: (1) background characteristics; (2) initial goal and institutional commitments; (3) academic and social integration [Tinto (1993) postulated academic integration as a sense of membership in the classroom along with an ability to achieve academic success. Meanwhile, social integration encompasses a sense of membership in the larger college community typically experienced through residence hall life, student activities, and socialising with peers]; (4) subsequent goal and institutional commitments; and (5) dropout decisions. Tinto proposes a longitudinal model where students enter an institution with varying background characteristics, such as personal, family and academic characteristics and commitment. These factors are drawn from experiences prior to college and have direct and indirect impacts on college performance. These experiences are input variables that affect initial the strength of goal commitment and the level of institutional commitment. Subsequently, students' intentions and commitments are modified over time as they interact with the primary academic and social systems of the institution. In this phase, students encounter college or university policies and practices which Tinto referred as to "integration" variables (social and academic integration). The

successful academic integration is measured by grade point average (GPA), and social integration is assessed by the development and occurrence of positive interactions with peers and faculty, and engagement in extracurricular activities. Tinto presumes there to be the congruence with the academic and social systems of the college reinforces students' commitment to their institution and educational goals, which leads to persistence. Otherwise, negative encounters will reduce academic and social integration, distancing the student from the institution, reducing institutional and goal commitment and promoting dropout (Pascarella, Duby, & Iverson, 1983; Rovai, 2003; Tello, 2002). Therefore, in the Tinto model, social and academic integrations are major components of student dropout. Successful students will be determined by the degree to which they integrate into an institution and the degree to which students establish committed goals for being graduated (Ivankova & Stick, 2007; Rovai, 2003; Tinto, 1982)

However, Tinto's theory has some limitations if applied in the context of distance education. Tinto's theory was deemed best suited for students in conventional colleges that have different characteristics relative to adult learners (Rovai, 2003). Moreover, Tinto's theory did not address external factors (friends and working environment) that have an important contribution in influencing perceptions, preferences, and commitments to persist or dropout in the distance education institutions (Bean & Metzner, 1985; Kember, 1995). In addition, the Tinto model more focused on the sociological explanations of dropout decisions rather than attempting to integrate both sociological and psychological approaches, such as self-motivation, self-efficacy, and self-regulated learning (Bean & Eaton, 2000).



Source: (Tinto, 1993, p. 114).

Figure 2.1: Tinto's model of student departure

However, in more recent works, Tinto (1997) emphasised the importance of learning communities that facilitate collaborative work so that students can learn together and encourage discourse about learning. Tinto also updated also his model to posit that interaction with faculty and staff, extracurricular activities, and informal peer interactions lead to both academic and social integration, and that academic and social integration promote persistence. His model also predicts that older students are less likely to persist as external commitments (such as child care, work schedules, family or health issues) might interfere with attainment of their goals (Blaine, 2010).

2.2.2 Kember's Model of Student Progress

Another attempt to explain student persistence was made by David Kember (1995). Kember's model of student progress focuses on adult learners and stems from three prominent bases: (1) the seminal work of Tinto (1975) about student dropout in the conventional college; (2) Kember's own research on student progress in distance education institutions since the mid-1970s; and (3) a comprehensive review of literature that was employed to examine the connection among variables in the model (Woodley, Lange, & Tanewski, 2001).

Based on the Tinto's model, Kember (1995) adds other characteristics into entry characteristics: work background and work environment. Therefore, it is not only their individual attributes, family backgrounds, and educational experiences that are important; their work circumstances must also be taken into consideration. Another difference is a reconceptualisation of "social and academic integration" variables in the context of distance education. Kember (1995) defined social integration as the extent to which students are able to integrate study with the employment, social life, and family. Meanwhile, academic integration is defined as embracing all aspects of a distance education course and all elements including both academic and administrative support systems, the learning materials, and all forms of contact between an institution and the students (Ivankova & Stick, 2007; Kember, 1995; Woodley et al., 2001).

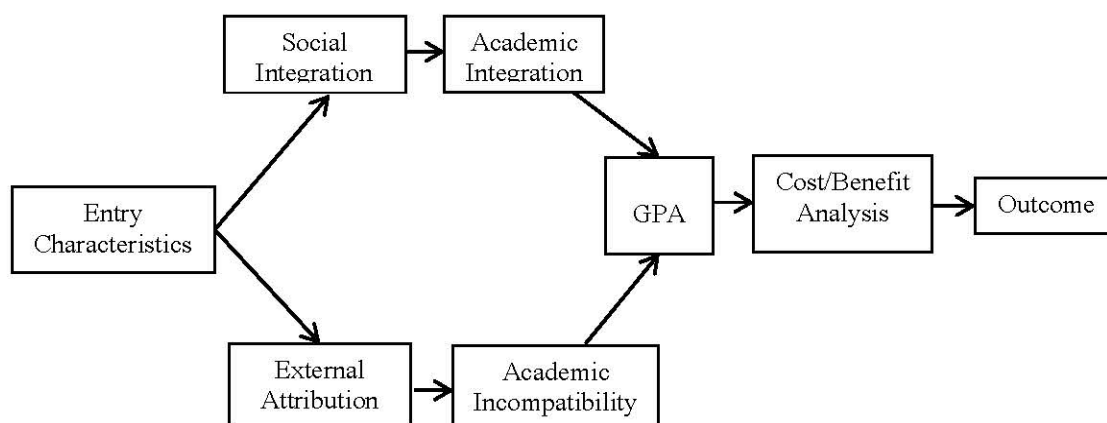
Furthermore, Kember proposed substantial changes to the basic structure of Tinto's model itself regarding the path analysis between social integration and academic integration. In this case, Tinto postulated social and academic integration as being distinct and parallel, but Kember presumed both of them as linearly connected. In the positive path, social integration leads to academic integration whereas in its negative form, external attribution generates academic incompatibility (Woodley et al., 2001).

Kember (1995) basically developed his model of student progress by constructing a model which has two paths: positive and negative paths. The students who have positive background attributes tend to proceed down the positive path in the model: positive background characteristics (age, gender, years of working experience, marital status, and highest academic qualification) – social integration (enrolment encouragement, study encouragement, and family support) – academic integration (deep approach, intrinsic motivation, positive course evaluation, positive telephone counselling, and reading habit) – grade point average (GPA) – cost/benefit analysis – and outcome. In the positive path, the students will be able to integrate study with

family, employment, and social life (social integration) and to encompass all facets of a course, the package of learning materials, and all interactions between an institution and the students including both academic and administrative support systems (academic integration). The students who experience a positive path through the study process will be more likely to get satisfactory grade point average (GPA) scores (Ivankova & Stick, 2007; Kember, 1995; Woodley et al., 2001).

On the other side, the students with negative entry characteristics tend to have difficulty achieving social and academic integration. The students who move through the study process on the negative path will experience external attribution (insufficient time, events hindering study, distractions, and potential drop-out) and academic incompatibility (surface approach, extrinsic motivation, negative course evaluation, potential drop-out, and English ability) during their study, and finally will be more likely to perform least satisfactorily in their grade point average (GPA) scores (Kember, 1995).

Kember (1995) also includes a recycling loop and a cost/benefit variables in his model. A recycling loop is intended to accommodate the changing aspects of students' life during study process and a cost/benefit analysis refers to students' consideration by asking themselves whether to continue or drop out. As long as the advantages of study compensate the costs, the student will continue to study (Woodley et al., 2001).



Source: (Kember, 1995, p. 222-223)

Figure 2. 2: Kember's model of student progress

Several studies have been undertaken to evaluate and test the theoretical underpinnings of Kember's student progress model. One of the recent studies supporting Kember's model was conducted by Lint (2011). This study investigated the impact of student progress factors on student persistence in e-learning at a public community college in Maryland. The results of the study explained that external attribution was the determinant factor affecting student persistence. These external attributions include the amount of use of social networking between family and peers and time management between work and study. Evidently, the robust social interactions in this study did not have a positive effect on the student's performance (GPA). Therefore, this study concluded that the lower external attribution, the more likely students persist and intend to enrol next semester. As stated in the Kember model (Kember, 1995), external attributions are the negative sources that could lead to academic incompatibility which is detrimental factors for student progress. Furthermore, this study also confirmed that grade point average (GPA) was another significant factor to influence student progress (Lint, 2011).

Another study conducted by Houle (2004) proved the validity of Kember's model in the web-based education. This study explored adult student persistence in web-based education at six colleges/schools that offered the

online degree in the United States of America (USA). The study involved three hundred eight students as population and those students were enrolled at the start of the Spring 2003 semester. Further, the data, consisting of 212 usable surveys, were analysed by confirmatory factor analysis concurrently with structural equation modelling using linear structural relations (LISREL) software (LISREL is a statistical software package used for analysing structural equation modelling).

The results of the study were largely consistent with Kember's findings that the social integration construct had a positive statistically significant effect on the academic integration factor and the external attribution construct has a statistically positive effect on the academic incompatibility construct. Therefore, these findings confirmed Kember's theory that the student who has a high level of social integration may be able to get the ease of academic integration. However, the background constructs (pre-enrolment education, professional status, prior online experience, and course design) did not have statistically significant correlations with the Kember's four key constructs of social integration, external attribution, academic integration, and academic incompatibility. These findings indicated that the background characteristics did not affect a student's academic experience in web-based education (Houle, 2004).

Although many studies had confirmed Kember's model as the comprehensive and workable model in open and distance learning, Woodley et al. (2001) claimed that Kember's model had not been verified through statistical replications. Therefore, Woodley et al. (2001) replicated Kember's work using the same questionnaire and the same statistical techniques, but applied them to a cohort of business school students enrolled at the Open University of the United Kingdom (OUUK). The study employed the Distance Education Student Progress (DESP) inventory with slight changes to make it suitable for the OUUK setting.

The study of Woodley et al. showed that there was little internal consistency in the most of the 15 sub-scales of Kember's DESP inventory. Apparently, most of the individual items in the DESP inventory were not measuring the same concept. The study however found the preferred level of internal consistency when the sub-scale scores were applied to produce Kember's four key constructs:

When the sub-scale scores were used to create Kember's four key constructs of academic incompatibility, academic integration, external attribution and social integration, three achieved the desired level of internal consistency. However, this was not the case with Kember's reported data (Woodley et al., 2001, p. 121).

Therefore, given the inconsistency in the sub-scale level of Kember's model, Woodley et al., (2001) suggested a revision of the items then re-test for further development of distance education student progress (DESP) inventory in achieving internal validity and generalisability. Additionally, Woodley et al., (2001, p. 130) also recommended that "subsequent research into student progress must attempt to define and measure the different types of student dropout and to model each type separately".

2.2.3 Rovai's Composite Persistence Model

Tinto's model of student departure and Kember's model of student progress were developed before the internet was fully privatised and web-based teaching and learning became common. Therefore, Rovai (2003) sought to devise a composite model from previous influential models to better explain persistence and attrition in online courses and programmes.

Rovai's composite persistence model (CPM) is drawn from Tinto's model of student departure and Bean and Metzner's models. Rovai (2003) proposed a

synthesis of Tinto's model as a representation of sociological approach and Bean and Metzner's model as a psychological model of persistence.

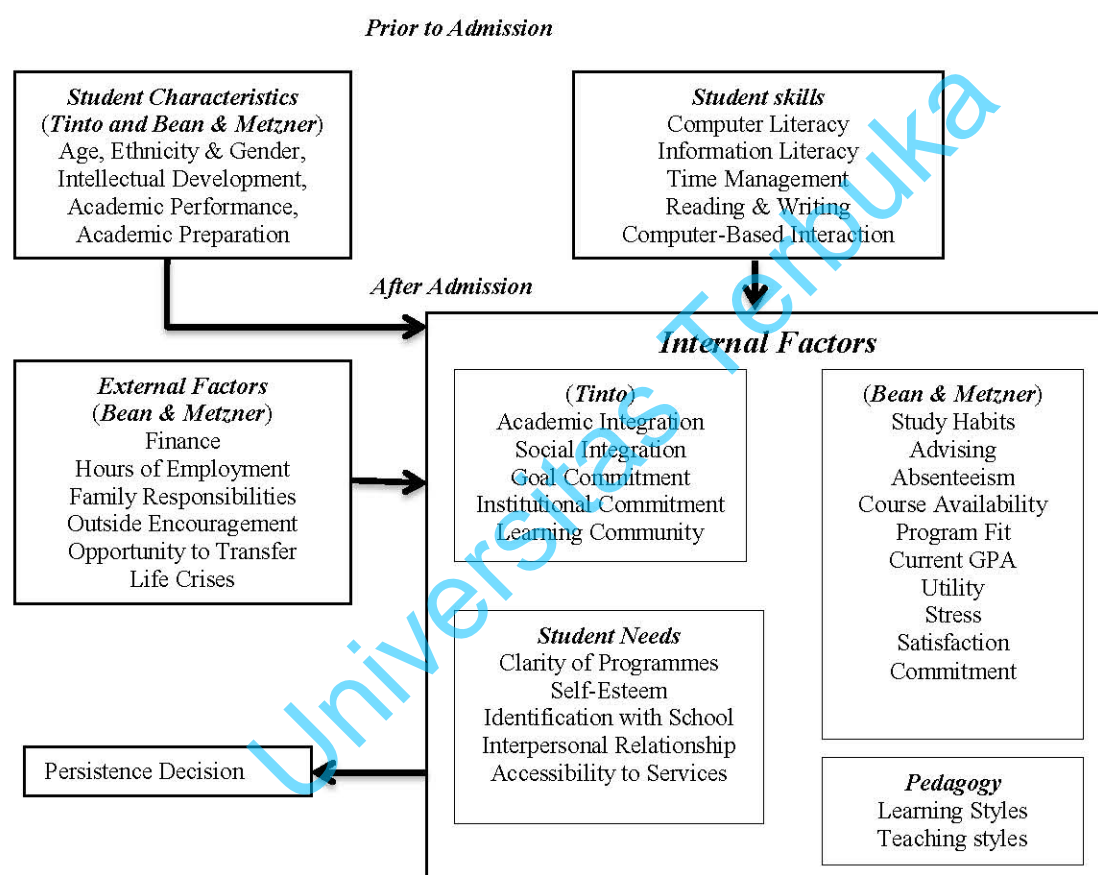
Furthermore, both Tinto's model and Bean and Metzner's model are the influential models explaining the process of persistence and attrition by applying a function of student-institution "fit", and elucidating persistence and attrition by exploring student, institutional, and environmental variables (Rovai, 2003). Additionally, Rovai (2003) includes other factors that will help students succeed in online learning, such as student skills (Cole, 2000; Rowntree, 1995); the special needs of distance education students (Workman & Stenard, 1996); and learning and teaching styles (Grow, 1991).

Rovai's model classifies persistence factors into two groups: prior to admission and after admission. The 'prior to admission' group contains student characteristics and student skills. Meanwhile the 'after admission' group consists of external and internal factors (Rovai, 2003).

Student characteristics prior to admission that influence student persistence include age, ethnicity, gender, intellectual development, and academic performance and preparation prior to college. For example, minority students in online courses are prone to drop out due to lack of interaction. Several studies confirmed that females tend to be more successful in online courses than males (Rovai, 2003). Beside student characteristics, Rovai identified four factors as needed skills for student to persist: (a) computing, (b) literacy discussion, (c) time management, and (d) interpersonal interaction.

Deficiencies in these special skills can lead to academic difficulties and attrition (Patterson, 2007; Rovai, 2003). However, few studies statistically confirmed the relationship between student skills and attrition in online learning (Park, 2007). Therefore, both student characteristics and student skills have been concluded to have indirect impacts on student persistence and influence directly the level of internal factors. Success in online courses, according Rovai's model, usually necessitates a high level of internal factors.

Meanwhile, factors affecting the students' decision to persist after admission include external and internal factors. Rovai (2003) embraced Bean and Metzner's (1985) model to explain the external factors of the composite model, such as finances, hours of work, family responsibilities, outside encouragement, and other demands on time. In the meantime, when considering internal factors, Rovai (2003) synthesised Tinto's model, Bean and Metzner's model, and the theory of special needs of distance education students from Workman and Stenard (1996).



Source: (Rovai, 2003, p. 9)

Figure 2.3: Rovai's composite persistence model

Internal factors have a significant contribution directly to student persistence and became the core concept in the Rovai model. Success in online courses requires students' engagement to their school, active participation, and frequently interaction with the faculty and other students. Furthermore, satisfaction of the learner's needs is also critical. These needs include:

- Consistency and clarity of online programme, policies, and procedures. Detailed information about the institution, course programme, courses, course design, and enrolment will help students to understand their institution's policies and practices and will increase students' satisfaction;
- Self-esteem development. A sense of self-esteem can be developed through an orientation programme prior to the course, communication of concise and measurable learning objectives during coursework, and timely feedback from the lecturer or tutor and peer students regarding mastery of learning objectives;
- Establishment of a sense of community or institutional commitment. This attempt to develop a sense of identification with the school so students do not feel themselves as outsiders;
- Need for social integration met through the development of interpersonal relationships with peers, faculty, and institutional staff. This need is also closely related to a sense of community;
- Need for ready access to support services such as bookstores, library, financial aid, and advisers (Patterson, 2007; Rovai, 2003).

The other variables explained in the internal factors are the harmonisation of learning and teaching styles. In order to be successful in online courses, an online learner must have a learner autonomy, such as self-direction ability, self-motivation, self-discipline, and responsibility (Grow, 1991; Rovai, 2003). According to Price (2000, as cited in Rovai, 2003, p. 11), self-direction in learning encompasses the student's ability to: (a) identify and set personally meaningful goals for their own learning; (b) develop and use a wide range of

learning strategies appropriate to different learning task; (c) work independently and with others to achieve their learning goals; and (d) persist to overcome obstacles in order to achieve their learning goals.

External factors are also significant factors that help explain student persistence in online courses. When students enrol in an online programme, they must ensure they receive support from external factors, such as financial protection, adequate childcare arrangements, or adjustment of work schedules. Failure to attain these external supports will affect the level of internal factors and in turn will be unlikely to persist in college (Rovai, 2003).

In general, Rovai's composite model is the most comprehensive model to explain student persistence and attrition in online learning. Furthermore, the four factors of Rovai's model (student characteristics, student skills, internal and external factors) is supported by many studies with the variety of research method (Park, 2007). However, Park (2007), based on his reviewed studies, recommended a revision of the structure of the model and excluded some variables that have little empirical support in previous studies. The major revision is to redefine the relationship among external factors, internal factors, and persistence decision. According to Park (2007), the relationship between internal factors and external factors should be conveyed as interconnection and has a direct impact on student dropout.

...the external factors are moved between 'prior to' and 'during' the course because these are affecting student decisions not only during the course but also prior to the course. Adult distance learners drop out of the course due to increased workload or job change that happens during the course, but some learners may drop out of a course even before they start due to such external reasons. In addition, external factors and internal factors are likely to interact with each other. For example, when a learner has a heavy workload and little time for study, they are more likely to drop out of a course when they cannot get feedback or if it is

hard to contact the instructors than when they can easily communicate with and get more responses from them (Park, 2007).

2.2.4 Summary

This study is not intended to verify the validity of the three models but it employs the principle elements of the three models to explain the factors of student progress in the Indonesia Open University, particularly integration and involvement as central elements.

The three models reveal that students' persistence in distance education should be explained from at least three dimensions: individual, institutional, and external factors.

All of the three models postulate that student background is an important factor in the model but does not have a direct influence on student persistence. Social integration and academic integration are the common themes in the all of the models. However, social integration in Kember's model has different meaning tailored with the distance education setting.

2.3 Student Persistence in Distance Education

There are many empirical studies conducted in examining student persistence in the distance education contexts. However, in recent years, most studies on student persistence in distance education were conducted in online courses within dual-mode institutions rather than within single-mode institutions like the Open University. This phenomenon is conceivable because online learning is expanding in availability and popularity. Most of post-secondary institutions in the world offer online courses either as a single programme or as complementary programme. Lee & Choi (2011) reviewed and analysed 35 empirical studies in peer-reviewed journals from 1999 to 2009 in order to examine the predictors affecting the students' decision to drop out of online

courses in post-secondary institutions. Of those 35 empirical studies, only seven studies (20%) were conducted in Open University contexts.

In terms of examining student persistence in distance education settings, Rovai (2003) implemented the student-institution “fit” approach by exploring internal, institutional, and environmental factors. Diaz & Cartnal (2006) reinforced the significance of this approach and suggested four factors in examining and predicting student persistence in distance education.

1. Student situation: events that arise from life circumstances such as changes in family and employer support, employment or financial status, educational status, health, and academic self-concept.
2. Student disposition: personal characteristics, including learning style, motivation, and perception-of-obligation (i.e., feelings of being obligated to a specific instructor or classmates to remain enrolled in the class) as well as other demographic variables such as academic preparation, Grade Point Average (GPA), ethnicity, gender, Web and e-mail competency, family size, number of dependents, and socioeconomic status.
3. Institutional system: Factors relating to the quality of the course, such as the instructor’s planning, preparation and delivery, and the quality of student support provided by the instructor, other faculty, staff, administrators, and the institution. Examples would include class and Web design, class size, term length, technical support, and student-services support.
4. Course content: The difficulty, or perceived difficulty, of the subject matter.

The reviewed study conducted by Lee & Choi (2011) included the predictors of student dropout that were found to be statistically significant in quantitative studies and the most prominent factors according the authors’ judgment in qualitative studies. Eventually, the reviewed study found 69 dropout factors and were classified into three main categories and nine sub-factors:

- The first group is student factors which consisted of academic backgrounds (9%, 6 factors), relevant experiences (10%, 7 factors), relevant skills (16%, 11

factors), and psychological attributes (20%, 14 factors). Student factors were the most frequently mentioned variables in the reviewed studies, occupying 55% of the total number of identified dropout factors (28 out of 69 factors).

- The second group is course/programme factors that occupied 20% (14 out of 69 factors) of all factors considered. These factors related to course design and implementation as well as institutional supports. There are three sub-categories in these factors, namely course design (6%, 4 factors), institutional supports (6%, 4 factors), and interactions (9%, 6 factors).
- The third group is environmental factors that occupied 24% of all identified factors (14 out of 69 factors). These factors divided into two sub-categories: work commitment (10%, 7 factors) and supportive study environments (14%, 10 factors).

In responding to three major dropout factors, the study suggested three primary strategies to enhance dropout in online courses: identifying students' challenges and potential, developing high-quality courses and well-structured supports, and managing environmental issues and emotional challenges.

In the same way, Street (2010) reviewed eight studies on student attrition in online learning with purpose to identify common themes among the studies. Based on this reviewed study, there appears no single set of variables that is able to predict attrition in an online course. However, there are three common themes have come out across the research: (1) person factors such as self-efficacy and autonomy; (2) academic factors such as time and study management; (3) and external factors such as course factors and support.

In addition, Lee & Choi (2011) revealed that human behaviours are influenced by the environments in which humans are situated. Therefore, future studies of student attrition could investigate the relationship between student retention and the type of institution offering the course, for instance an open university. Furthermore, researchers of student attrition should give more attention to the course/programme (institutional factors) and environmental factors contributing to student withdrawal.

In summary, student persistence in the distance education is better explained by using the student-institution “fit” approach (Rovai, 2003). This approach focuses to illuminate student persistence by exploring internal, institutional, and environmental factors.

2.4 Student Persistence in Open University Contexts

There are few studies on student persistence conducted in the Open Universities as a single-mode institution that can be found in the peer-reviewed journals within the last 15 years. Most of the empirical studies on student persistence in distance education settings are conducted in dual-mode institutions in which carry out dual mode of learning: face-to-face learning and online or web-based learning.

However, 12 empirical studies of student persistence in the Open University contexts had been found in the peer-reviewed journals (6 out of 12 studies referred to Lee and Choi, 2011). From these 12 studies, 38 factors had been identified as having statistically significant predictors of persistence or as the most influential factors according the authors of qualitative studies. The 38 factors were then refined and classified into nine categories: (a) student demography; (b) previous education; (c) skills; (d) psychological attributes; (e) learning services; (f) student support; (g) interaction; (h) work environment; (i) supporting environment. The nine categories were grouped into 3 main groups: (1) individual factors (a,b,c,d); (2) institutional factors (e,f,g); and (3) external factors (h,i).

Individual factors occupied 39% of all the factors considered (15 out of 38). Individual factors were the most frequently stated factors and encompassed four sub-factors: student demography (20%, 3 factors), previous education (20%, 3 factors), skills (33%, 5 factors), and psychological attributes (27%, 4 factors). Meanwhile, institutional factors occupied 37% of all the identified factors (14 out of 38). The institutional factors can be divided into three sub-

factors: learning services (50%, 7 factors), student supports (43%, 6 factors), and interaction (7%, 1 factor). Finally, external factors contained 24% of the whole number of factors (9 out of 38). There were two sub-factors in this category: work environment (44%, 4 factors) and supporting environment (56%, 5 factors).

The reviews of 12 empirical studies of student persistence are as follow:

Belawati (1998) performed the mixed methods study by employing experimental study and semi-structured interview to explain student persistence in the Indonesia Open University (Universitas Terbuka). This study aimed to evaluate the effectiveness of any transition stage intervention (e.g. Five increasingly detailed sets of written contacts containing information, reminders, encouragement, a brochure about independent learning strategies, and list of peers' names and addresses) in escalating student persistence at the Indonesian Open University. In this study, persistence was defined as course completion and continuation (re-registration). There were three indicators to measure students' persistence: self-test submission, examination attendance, and re-registration in the second semester without interruption. The findings of experimental analysis presented that the interventions did not have direct impact on any of the three measures (self-test submission, examination attendance, and re-registration). In contrast, the post-experimental interview of 16 students revealed that "(1) the treatment letter (s) to be encouraging, reminding and motivating regarding their study commitments; (2) the independent learning strategies brochure to be useful in helping them find their own learning strategies; and (3) the list of peers names and addresses to be helpful in giving them sense of grouping, but not in finding them friends to study with" (p. 105). However, the study identified several variables which have a greater effect on students' persistence: age, gender, number of children, previous education, employment status, and number of registered courses (course load). Finally, Belawati (1998) inferred that the lack of persistence in the Indonesia Open University was due to the

partial implementation of the distance education system as compared with other open universities. Therefore, students' persistence might be increased by providing fully instructional and support system to students.

Shin & Kim (1999) carried out a longitudinal study to investigating learners' achievement and enrolment status in the Korea National Open University. In this study, learners' achievement were measured by grade point average (GPA) and enrolment status was predicted by enrolment activity in the Spring of 1996 and one year later. This study employed three exogenous variables (job load, social integration, and willingness) and three endogenous variables (the amount of study time, planned learning, and face-to-face activities). The findings of the path analysis reported that learner achievement was influenced by three endogenous variables: study time, planned learning, and face-to-face activities. Learner achievement was also assumed to be linked indirectly to other three exogenous variables such as job load, social integration, and willingness. However, among those variables, study time was the most significant predictor of learner achievement. Meanwhile, the logistic regression analysis presented that there were two variables being important contributors to enrolment or non-enrolment status: face-to-face activities and social integration. In addition, the study found negative relationship between social integration and enrolment activity. Therefore, this study suggested further investigations about the role of social integration in influencing learner progress and dropout.

Vergidis and Panagiotakopoulos (2002) studied factors influencing student dropout at the Hellenic Open University. In this study, student dropout referred to discontinuity of courses during the study. The structured interview was conducted with 108 students who dropped out from all five modules (courses). The results of study revealed that student dropout was predominantly affected by workload, work commitment, and family obligation. The research also found that gender had significant contribution to dropping out in which female students were vulnerable due to family obligations. Therefore, time

management and time allocation during study will be the significant factors to reduce student dropout.

Kemp (2002) investigated the link between persistence, life events, external commitments, and resiliency in undergraduate course at Athabasca University. Student persistence in this study was defined as successful course completion of the student's first undergraduate course at Athabasca University. The study involved a sample random of 460 students and used mailed survey as data collection method. Of the 460 students, 124 students completed and returned the questionnaire package. In Kemp's study, independent variables consisted of scores from the Resiliency Attitudes Scale (RAS), the Life Events Inventory (LEI), and a questionnaire on external commitments. The study found that the best predictors of persistence were four of the resiliency skills and five of the resiliency sub skills: insight, relationships, generating, recruiting, attaching, initiative, valuing, general resilience, and persistence. Meanwhile, of the six external commitments entered in the discriminant analysis, only work commitments that made significant contributions to student persistence.

Tait (2004) envisaged the tutor/facilitator role in student retention at the UK Open University by using secondary data. There were three data sources used for Tait's study: 1) the Higher Education Learning and Development (HELD) project; 2) the 'From Competence to Excellence' project which focused on tutor's roles in supporting 'failing' students; and 3) information about the tutor role in retention draws on work carried out by the UKOU's Student Support Research Group (SSRG). The findings of Tait's study suggested several strategies for tutors in relation to enhance student retention: 1) the tutors/facilitators should make proactive contact by creating a welcoming environment in the moment of initial contact between the student and the tutor. Furthermore, the tutor should provide an encouragement for the submission of a first assignment by giving prompt feedback on assignments. 2) It is important to develop strong relationships amongst student, tutor, and the institution in order to overcome distance, manage students' expectations

and ambitions, and enable students to make effective choices in a context of open learning. Additionally, the research report indicates that successful learning derives from good relationships and from well-timed and structured interventions. 3) As an effort to enable student retention, it needs strong commitment from tutors to their own development and to students' progress. It also needs organisational supports related to the use of retentions staff.

Castles (2004) undertook a qualitative study to examine the factors identified in the literature as contributing to persistence in the UK Open University. In this study, student persistence was defined as completion of an Open University module. This study used a qualitative method by employing semi-structured interviews to undergraduate students of the UK Open University who were studying in Northern Ireland. The results of qualitative analysis reported three levels of importance factors in relation to student persistence. The first level importance was composed of support, strong coping strategies, and being a life-challenger. At the second level of importance, ability to juggle roles in family, work and study, success in study, and love of learning were all factors seen as important by most participants. Meanwhile, the third level of importance included six factors: positive early educational experiences, no family/personal crises, strategic approach to learning, smooth interaction with institution/tutors, good physical health, and lack of new stressor, e.g. work-related/financial.

The survey study was conducted by Pierrakeas et al. (2004) and examined the factors and root causes leading to student dropout at the Hellenic Open University. This study used a survey method to collect data from two academic programmes: 1) a two-year Bachelor's degree in Informatics programme; and 2) a two-year Master's degree in Education. A comparative analysis of these two different courses demonstrated important similarities and differences in dropout percentages and the reasons of dropout. The results reported that the overall percentage of student dropouts tend to be much higher in undergraduate courses as compared to postgraduate courses due to a lack of

university-level academic experience. Furthermore, there were similarities between both programmes regarding the numbers of students who elected to drop out because of family, personal, or health reasons.

Fozdar, Kumar, and Kannan (2006) conducted a survey study of withdrawal at Indira Gandhi National Open University (IGNOU). The aim of this study is to investigate the reasons that influence students' decisions to withdraw from the course programme. Based on the review of literature, 20 factors were identified for the measuring relative importance of student drop out. These 20 reasons were then broadly grouped into three categories: personal reasons (lack of sufficient time; poor health condition; absence of interaction with other students; financial constraints; admission system to conventional programme; and admission to professional programme), programme/course related reasons (difficulty in learning via the distance mode; expectation of programme not met; the language used was difficult to understand; unavailability of the programme in mother tongue; difficulty in term-end examination paper; difficulty in doing assignments; and to study all courses need longer time), and student-support related reasons (insufficient academic support; study centre too far from residence; insufficient counselling sessions; difficulty in attending lab sessions; lack of suitability between theory and lab session; lack of response from the institution; and no receipt of course materials, assignment, and other relevant information). The findings of this study revealed that there were nine main reasons determining students' decisions for withdrawal: 1) study centre too far from residence; 2) insufficient academic support from study centre; 3) programme was too time consuming to study all the courses; 4) difficulty in attending lab sessions due to distance; 5) absence of interaction with other students; 6) difficulty to study science through distance; 7) difficulty in term-end examination; 8) insufficient counselling sessions; 9) lack of responsiveness from study centre. Based on these factors, the study suggested several recommendations:

Increasing the number of study centres throughout India; providing information in advance about the upcoming counselling session; help students to anticipate problem related to travel and time management; proper monitoring to improve the management of the larger study centre network (p. 11-12).

Ibrahim, Rwegasira, & Taher (2007) performed a survey study to examine the relationship between institutional factors and the intention of undergraduate students to withdraw from or complete their distance education courses in the Arab Open University (AOU). An explanatory mixed methods design was employed to examine the model on a pilot sample of 127 students and then re-examined on the field study of 587 students. The findings of the study reported that the quality of instructors and the variety of technologies used to support and deliver these distance learning (DL) programmes have significantly contributed to influencing the intention to persist in the DL programmes.

Perry et al. (2008) conducted the qualitative study to investigate the reasons of student withdrawals from an online programme in nursing and health studies at the Athabasca University. This study used Rovai's (2002) Composite Persistence Model (CPM). Rova's model incorporates student characteristics and skills as well as external and internal influences on students' decision to stay in or leave online learning programmes. This study employed the content analysis of qualitative data collected between the years 1999-2004. The results of the study reported two major reasons of students' withdrawals: personal reasons related to life or work commitment and programme reasons related to learning style and relevant with career. These findings provided some background for strategies to minimise attrition rates, such as identification of students at-risk of leaving as early as possible and providing them the relevant supports, providing the relevant support for students who are leaving the programme for reasons related to career change, and providing the induction for new students about how to study successfully in online programme.

Lee & Choi (2012) examined the effects of internal academic locus of control, learning strategies, flow experience, and student satisfaction on student persistence in online courses at the Korean National Open University. In this study, persistence was defined as “the learner’s will to continue in order to achieve learning goals, or to continuance to participate in educational programme” (p. 37). The sample of this study was 282 adult students and they were asked to participate by completing online survey. Structural equation modelling (SEM) was used to analyse and validate the conceptual model. The findings reported that there were significant direct relationships between internal ALOC and persistence, between satisfaction and persistence, between internal ALOC and satisfaction, between flow and satisfaction, and between learning strategies and flow. Furthermore, in the model, there were significant mediating effects of student satisfaction and the student’s experience on the student persistence.

Choi et al. (2013) investigated the predominant reasons for non-re-enrolment by employing a survey in the Korea National Open University. This study used the term ‘non re-enrolment’ to refer to students who had enrolled in a programme for at least one semester but then decided not to re-enrol at all. This study used a survey design with the sample size of 1,353 students. The demographics findings revealed that the majority of participants were employed, aged in 30s or 40s, half of participants were female, married, and one-third of them were high school graduates. Meanwhile, a confirmatory factor analysis as the first step analysis indicated three determinant factors for explaining non re-enrolment in the Korea National Open University: 1) the lack of feedback on the students’ work, 2) the heavy workloads demanded in students’ workplace, and 3) the difficulty to study at a distance. In addition, Structural Equation Modelling (SEM) analysis found that learner’s perceptions of the value of the degree had a significant influence on the institutional related, course related, socio-economic related, and emotion related barriers. Age also had a statistically significant influence on non-re-enrolment mediated with course related and socio-economic related barriers. Finally, gender,

educational background, and age had significant contributions to non-re-enrolment decision mediated by the socio-economic related variable.

2.4.1 Summary

The definition of student persistence or student drop out in most of the studies is not consistent with one another. Some of studies defined student persistence as individual course completion, continuity of enrolment, and combination of both course completion and continuity of enrolment.

The 38 factors that are shown to be statistically significant predictors of persistence or as the most influential factors according the authors of qualitative studies were identified from the 12 empirical studies [6 out of 12 studies referred to Lee and Choi, (20011)]. Internal factors occupied 39% of all the factors considered (15 out of 38). Internal factors were the most frequently stated factors and encompassed four sub-factors: student demography (20%, 3 factors), previous education (20%, 3 factors), skills (33%, 5 factors), and psychological attributes (27%, 4 factors). Institutional factors occupied 37% of all the identified factors (14 out of 38). The institutional factors can be divided into three sub-factors: learning services (50%, 7 factors), student supports (43%, 6 factors), and interaction (7%, 1 factor). Finally, external factors contained 24% of the whole number of factors (9 out of 38). There were two sub-factors in this category: work environment (44%, 4 factors) and supporting environment (56%, 5 factors).

2.5 Factors Related to Student Progress

Student progress has been little researched in the Open University contexts. Therefore, the elaboration of factors related to student progress includes literatures of student persistence in distance education settings in general. In this section, the three main factors (individual, institutional, and external) are

elaborated based on the findings of previous studies on student persistence in distance education contexts.

2.5.1 Individual Factors

Individual factors are all personal reasons encompassing student's characteristics, academic backgrounds, relevant experiences, skills, and psychological attributes (Diaz & Cartnal, 2006; Kember, 1995; Lee & Choi, 2011; Rovai, 2003; Tinto, 1993).

Individual factors were the most frequently stated factors in the Open University context (39%, 15 out of 38 factors) and online learning settings (55%, 28 out of 69 factors). In the Open University context, students' prior skills were the most frequently studied sub-factors (33%, 5 factors) in the reviewed studies. All the students' skills could be categorised into management skills (Lee & Choi, 2011): the ability to estimate the time and effort required for a task (Pierrakeas et al., 2004); to manage time effectively (Shin & Kim, 1999); and to cope with threats or crises during courses (Castles, 2004; Kemp, 2002).

Meanwhile, in the online learning courses (Lee & Choi, 2011), psychological attributes had the major contributions to dropout factors, occupying 20% of the total number of the identified factors (14 out of 69 factors). Psychological attributes consisted of students' locus of control (Morris et al., 2005; Parker, 2003; 1999), motivation (Castles, 2004; Chyung, 2001; Ivankova & Stick, 2007; Osborn, 2001; Parker, 2003), self-efficacy (Holder, 2007; Ivankova & Stick, 2007), satisfaction with courses and faculty (Levy, 2007; K. Moore et al., 2003; Müller, 2008); and confidence in their ability to use a computer (Osborn, 2001).

Table 2.1: Individual factors in contributing student persistence in Open Universities

Individual factors	Findings
Student characteristics	<ul style="list-style-type: none"> • Age (Belawati, 1998; Choi et al., 2013) • Gender (Belawati, 1998; Vergidis, 2002; Choi et al., 2013) • Number of children (Belawati, 1998)
Previous education	<ul style="list-style-type: none"> • Previous education (Belawati, 1998; Choi et al., 2013) • Grade Point Average (Shin & Kim, 1999) • Previous academic performance (Castle, 2004)
Skills	<ul style="list-style-type: none"> • Resilience (Kemp, 2002) • Time management (Shin & Kim, 1999) • Ability to manage roles/balancing multiple responsibilities (Castle, 2004) • Strong coping plans (Castle, 2004) • Underestimation of the time required to balance their academic and professional obligations (Pierrakeas et al., 2004)
Psychological attributes	<ul style="list-style-type: none"> • Love of learning (Castle, 2004) • Internal academic locus of control (Lee & Choi, 2012) • Satisfaction (Lee & Choi, 2012) • Dislike of distance learning (Choi et al., 2013)

The identified factors that are relevant to this study are used as a conceptual framework along with the additional relevant factors from literature. Within individual factors, there are four sub-factors postulated to have significant contributions to student progress in Open University: student background, self-motivation, volitional strategies, and self-efficacy.

a. Student Background

Rovai (2003) in his composite model included student characteristics and student skills in pre-entry factors. Student characteristics such as age, ethnicity, gender, intellectual development, and academic performance and preparation prior to college can affect student persistence (Bean & Metzner, 1985; Rovai, 2003). Student skills prior to admission are also deemed as a prerequisite for successful learning at a distance using the Internet. Rovai (2003) identified five required student skills, such as computer literacy, information literacy, time management, reading and writing, and computer-based interactions.

Park (2007) reviewed Rovai's composite model and found that there were four student characteristics which have significant empirical support in previous studies, namely age, gender, education, and employment status. On the contrary, there is little evidence or study that statistically explains the relationship between student skill variables and dropout in distance learning.

Kember (1995) stated that mainstream research has not used student entry characteristics or demographic data to predict student persistence because there was no significant relationship between them. However, it though does not directly predict student persistence, it can provide useful information about at-risk student and appropriate counselling for that student. Kember (1995) included entry characteristics, such as educational qualifications, family status, employment, and demographic information.

Lee & Choi (2011) described in their review that there was no consensus among many studies regarding the relationship between demographics and online student persistence in online courses. Likewise, there was no conclusive correlation between students' gender and their decision of dropping out. However, Lee & Choi (2011) found significant empirical evidence for several variables, such as GPA and previous academic performance (Castles, 2004; Cheung & Kan, 2002; Dupin-Bryant, 2004; Morris et al., 2005; Osborn, 2001;

Poellhuber et al., 2008; Shin & Kim, 1999), educational level and previous experience (Cheung & Kan, 2002; Dupin-Bryant, 2004; Levy, 2007; Osborn, 2001; Xenos, Pierrakeas, & Pintelas, 2002), time management skills (Castles, 2004; Holder, 2007; Ivankova & Stick, 2007; Osborn, 2001; Shin & Kim, 1999), and computer skills (Dupin-Bryant, 2004; Osborn, 2001).

Age, Gender, and Ethnicity

Aragon and Johnson (2008) reported in their study of online persistence in community college that age and ethnicity were not important predictor for student persistence. In contrast, Pierrakeas et al. (2004) indicated that students who are age 30 or under being more vulnerable to dropping out than students age over 30. The younger students typically lack university-level academic experience.

In terms of gender, Vergidis and Panagiotakopoulos (2002) propounded that gender was a factor influencing a student's decision to dropping out. In this case, female students are more vulnerable to dropping out than male students due to family obligations. In line with this finding, Aragon and Johnson (2008) indicated that gender made an important contribution in determining persistence among online learners in community college. Aragon and Johnson (2008) found that females had a greater possibility of accomplishing online courses than male students. However, Pierrakeas et al. (2004) reported that gender had no impact on student dropout in an undergraduate programme and postgraduate programme at a Greek distance education university. In line with this study, Kemp (2002) found in the study of persistence at Athabasca University that gender was no a significant predictor of student persistence.

Previous Educational Experience

The prior educational experience is most widely used as a predictor of success in educational courses (Kember, 1995). The relationship between prior educational experience and persistence has been widely studied. Dupin-Bryant (2004) found in the study of online courses that non-completing students

tended to be lower in cumulative grade point averages than completing students. Only a few had completed online distance education courses prior to participation in the study. This finding supports the belief that previous involvement in academic programme leads to an evolving student perception that shapes persistence and may help students increase their confidence through an awareness of university expectations and a familiarity with the online distance-learning milieu. The study conducted by Morris et al. (2005) and Diaz (2002) support this finding that successful online students exhibit GPAs prior to enrolment in the online course than unsuccessful students. However, according to Osborn (2001), GPA and educational levels make an important contribution to the prediction equation, but they are not sufficient predictors in isolation.

Kember (1995) suggested that the interpretation of the information of educational experience needs to be done carefully, particularly in the context of distance learning. Data on educational experience may not be highly relevant for adult students who left high school some years previously. The information about educational background can only be included from formal school qualifications or examination results. Furthermore, it seems worthwhile using such data as an influence on later components of the model rather than predictors of success or barriers for entry to the course or programme.

In contrast with previous studies, Packham et al. (2004) showed that students of e-learning with prior higher education qualifications were less successful in comparison to learners with no previous academic attainment. This finding can be interpreted that students with prior HE qualifications came onto the programme seeking 'quick fix' solutions and immediate vocational skills. The attainment of another educational degree was not a high priority and such students soon withdrew. Students with no prior HE qualifications were motivated to attain both the qualification and the entrepreneurial skills.

Family Status

Family status refers to family obligations and tasks that should be carried out by students as a father or a mother. An adult student with many tasks in the home, several young children, and living in small house normally finds difficulty to complete the course. Therefore, an adult student with young children will have to find a place and a time to study free from the potential distractions of the children. In other words, an adult student will have to determine a balance between time spent on study, with children and on other tasks and pleasures. However, family status variables are not direct predictors of student progress, but as indicators of the degree of social integration (Kember, 1995).

Student Skills

Students of the Open University needs to have special skill like computer literacy in order to become a successful learner in the distance learning and deficiency in this skill can lead to academic difficulties (Rovai, 2003; Osborn, 2001). Osborn (2001) reported in her study that computer confidence is one of the strongest indicators in differentiating completing students from non-completing students. This finding is supported by Dupin-Bryant (2004) in her study that completing students in online courses had taken much more computer training courses than their counterparts. A number of prior computer training courses consist of searching for information on the web, operating systems and file management, and internet application. However, the variable years of computer experience is not an important indicator of completion in online courses. Therefore, students who have adequate computer training in relevant technologies are more likely to complete online courses since the computer technologies are less likely to impede the learning process.

Lim (2001) also reported that the years of computer use and frequency of computer use were significantly related to computer self-efficacy. Furthermore,

computer self-efficacy was an important factor in adult learner's satisfaction and intent to take future web-based courses. However, Harrell & Bower (2011) found an unexpected finding from the relationship between basic computer skill and online persistence. In their study of persistence in community college, basic computer skill was reported as having a significant contribution to dropping out. In other words, a high level of basic computer skill was associated with an increase of course withdrawal. There were three major possible explanations regarding this result: 1) Many students overestimated their levels of computer experience; 2) students with very high levels of computer skills were prone to withdraw due to the distractions of the internet and were reluctant to participate in computer activities. Moreover, some students underestimated the necessary skills to master as a requirement to succeed in online learning; and 3) the result perhaps came from a relatively small sample size of students who withdrew from an online course.

b. Self-Motivation

Most researchers in distance education would agree that motivation has a significant role in determining student achievement and persistence. Furthermore, they argue that motivation is not only a necessary condition for success but is also a sufficient one. A motivated learner will overcome barriers of situation and time, find ways of developing appropriate skills and be able to deal with the stress of study with very little extra external support (Simpson, 2008).

Lee & Choi (2011) revealed that psychological attributes were the most frequently researched category of factors in their reviewed studies of persistence in distance education (20%). Psychological attributes encompass various aspects of students' attitudes towards learning in general, toward particular courses, and toward their interaction with their instructor and other students. The studies on students' psychological attributes explained that students possessing an internal locus of control and/or higher levels of self-motivation, self-efficacy, satisfaction with courses, and confidence in their

computer skills were more likely to complete online courses (Chyung, 2001; Ivankova & Stick, 2007; Osborn, 2001).

Ivankova & Stick (2007) delineated in their mixed methods study that self-motivation was a quantitatively significant predictor on student persistence in the distance education programme. This finding was supported by case study analysis that motivation was a strong factor for successful students. Self-motivation was measured by indicators of love for learning, personal challenge, a lifelong dream, and experiencing the new learning format. Similarly, Osborn (2001) found that a student's motivation had significant contribution on a students' decision to drop out. In this study, motivation was measured by questions about each student's attitude towards their learning goals, homework, and interaction with peers.

Morris et al. (2005) examined the predictors of retention in online general education courses at the University System of Georgia. Discriminant analysis revealed that locus of control significantly predicted student attrition with 74.5% accuracy (i.e. Locus of control was measured by Rotter's (1966) internal-external locus of control scale or I-E scale). Locus of control indicates the difference between internal and external motivation. Individuals with internal motivation believe that events occurred due to their own interest, needs, and behaviour. Those with external motivation believe that events are decided by environmental factors such as rewards and punishment. Similarly, Parker (2003; 1999) reported also that a student's internal locus of control was found to be a positive indicator of persistence in online courses.

On the other hand, Holder (2007) explained that the completing students in online courses tend to score higher self-efficacy, emotional support, and time and study management. The level of perceived emotional support accounted for a large portion of the environmental scale difference between persisters and non-persisters. Having the experience of a supportive group of friends and family and the comfort of knowing that they are not alone in this learning

process was a significant function related to students' persistence. Those who also had high self-efficacy for learning and performance had higher expectations to do well in their programme and a strong sense of their own personal ability to succeed in their new learning environment. An additional key factor of successful students related to their time and study management. The persisters practised good study habits, kept up with the weekly reading and assignments, and managed their time and activities to a greater degree than did the non-persisters.

Poellhuber, et al. (2008) reported in their mixed methods study of the impact of peer interaction and collaborative learning on student self-efficacy beliefs and persistence in a distance education context. The finding of the quasi-experimental study revealed that students' motivation to persist in the online courses was not influenced by peer interaction. Meanwhile, the qualitative study delineated that collaborative learning had important contribution in developing self-efficacy and increasing persistence.

Learning Motivation in Self-Determination Theory

One of the most referenced, researched, and validated theory for understanding educational motivation in distance education is self-determination theory (SDT) (Chen & Jang, 2010; Guifrida, 2006; Simpson, 2008). According to SDT (Ryan & Deci, 2000a, p. 54), a motivated people refers to a person who is energised to do something toward a goal. In the context of educational motivation, SDT elucidates that people or students are motivated to learn by one of two motivational orientations: (a) intrinsic motivation which refers to doing something because it is inherently interesting or enjoyable, or learning because one finds the content interesting; or (b) extrinsic motivation which refers to doing something because it leads to a separable outcome, or learning as a means to an end (Deci, Vallerand, Pelletier, & Ryan, 1991; Guifrida, 2006; Ryan & Deci, 2000a, 2000b; Vallerand & Bissonnette, 1992). Moreover, SDT addresses the state of lacking intrinsic or extrinsic motivation which is defined as 'amotivation' (Ryan & Deci, 2000, p. 61). Amotivation

results from not valuing an activity, not feeling competent to do it, or not believing it will yield a desired outcome. Amotivation is found to be associated with learned helplessness and poor academic performance. However, SDT is central to human's intrinsic need to learn and develop. Therefore, the most meaningful and successful learning occurs when students are motivated intrinsically (Guiffida, 2006; Niemiec & Ryan, 2009; Ryan & Deci, 2000a, 2000b; Sungur & Senler, 2010).

Intrinsic learning motivation

Intrinsically motivated learners are those who learn something for the pleasure and satisfaction. In other words, intrinsic motivation refers to doing an activity for the inherent satisfaction of the activity itself. Therefore, an intrinsically motivated student goes to class because he or she finds it interesting and satisfying to learn more about certain subjects rather than controlled by some external reasons, such as good grades, rewards, or avoidance of negative consequences (Deci et al., 1991; Ryan & Deci, 2000a, 2000b; Sungur & Senler, 2010; Vallerand & Bissonnette, 1992; Vallerand et al., 1992).

According to SDT (Ryan & Deci, 2000a, 2000b), intrinsic motivation in learning focuses on three psychological needs: the innate needs for autonomy, competence and relatedness. The first focus is the need for autonomy. The autonomous students are those who choose, in their own, to become engaged in learning because the subject and activities are closely aligned to students' interest, curiosity, and values (Guiffida, 2006). For example, students are autonomous when they self-endorse in respect of allocating time and energy to their studies (Niemiec & Ryan, 2009). The second need is competence or the need to be effective in interactions with the environment (Guiffida, 2006). For example, students are competent when they feel able to meet the challenges of their assignments. Importantly, satisfaction of both autonomy and competent need is essential to maintain intrinsic motivation for learning (Niemiec & Ryan, 2009). The third requirement is relatedness or the need to establish close,

secure relationship with others (Guiffrida, 2006). The primary reason people are likely to be willing to behave accordingly is that they are valued by significant others to whom they feel (or would like to feel) connected, whether that be a family, a peer group, or a society (Ryan & Deci, 2000a, 2000b). In the classroom, relatedness is deeply associated with a student feeling that the teacher genuinely likes, respects, and values him or her. Students who report such relatedness are more likely to exhibit identified and integrated regulation for the arduous task involved in learning, whereas those who feel disconnected or rejected by teachers are more likely to move away from internalisation and thus respond to external contingencies and controls (Niemic & Ryan, 2009).

Extrinsic learning motivation

Extrinsic motivation refers to a wide variety of behaviours performed to obtain some outcome beyond those inherent in the activity itself (Niemic & Ryan, 2009; Ryan & Deci, 2000a, 2000b; Vallerand & Bissonnette, 1992). According to SDT, there are four types of extrinsic motivation which can be ordered along a self-determination continuum, and the process of internalisation is important for transformation of extrinsically motivated behaviours into self-determined behaviours. Internalisation involves assimilation and reconstitution of formerly external regulatory processes into internal regulatory processes (Sungur & Senler, 2010). The four types of extrinsic motivation are (a) external regulation, (b) introjected regulation, (c) identified regulation, and (d) integrated regulation (Niemic & Ryan, 2009; Ryan & Deci, 2000a, 2000b; Vallerand & Bissonnette, 1992).

External regulation is the least autonomous form of intrinsic motivation. Such behaviours occur to satisfying an external demand or obtaining an external rewards or constraints (Ryan & Deci, 2000a, 2000b; Vallerand & Bissonnette, 1992). For example, a student might study for an exam to earn a good grade, but that student would probably not seek out additional information on the topic once the exam is finished (Niemic & Ryan, 2009). The next type of extrinsic motivation is introjected regulation, whereby students begin to

internalise the reasons for learning. However, this form of internalisation is not truly self-determined since it is driven by rewards and constraints that are imposed by the individual and not by others (Deci et al., 1991; Vallerand & Bissonnette, 1992). For example, the student who originally studied to perform well on the exam now studies to feel pride or to avoid feeling guilty for not having studied enough. In this type of extrinsic motivation, ego involvement, which refers to one's self esteem being contingent on one's performance, is internalised and accordingly a student feels internal pressure to learn so as to avoid shame or to feel worthy (Niemic & Ryan, 2009). Both external regulation and introjected regulation are perceived as having an external perceived locus of causality and negative learning effect (Guiffreda, 2006; Niemic & Ryan, 2009).

The next two types of extrinsic motivation with greater autonomy are identified regulation and integrated regulation. Identified regulation involves the motivation to engage in an activity because it is considered personally important or valuable. With identification, the regulatory process has become more fully a part of the self, so the person does the activity more willingly and autonomously. For instance, a student may study anatomy and physiology because mastery of such information is important for future competence in medicine (Deci et al., 1991; Niemic & Ryan, 2009; Ryan & Deci, 2000a, 2000b; Sungur & Senler, 2010). Finally, the most autonomous form of extrinsic motivation is integrated regulation. Integrated regulation involves both identification of the importance of behaviours and its integration to other aspects of self (Sungur & Senler, 2010). For example, a student may plan to attend college since attending college can be in harmony with other aspects of the self. Both identified regulation and integrated regulation are perceived as emanating from, and congruent with, the self and thus have an internal perceived locus of causality (Niemic & Ryan, 2009; Sungur & Senler, 2010). Integrated regulation has some relationship with intrinsic motivation because both are forms of autonomous self-regulation. However, intrinsic motivation

and integrated regulation are different. Intrinsic motivation is characterised by interest in the activity itself, whereas integrated regulation is characterised by the activity's being personally important for a valued outcome (Deci et al., 1991).

c. Volitional Strategies

Volition has a pivotal role in maintaining motivation in pursuing a degree for distance education learner. An adult learner is typically overwhelmed by multiple and conflicting responsibilities, such as job, family, and study obligations, and this situation may undermine the learner's motivation (Deimann & Bastiaens, 2010). In this regard, volitional theories provide a profound basis of explanations about increased and decreased motivation on distance education learners. Volition in this case is defined as the tendencies and/or behaviour that are directed toward maintaining one's intention and motivation to attain a specific goal despite encountering internal and external distractions (Corno & Kanfer, 1993; Deimann & Bastiaens, 2010; Garcia et al., 1998).

Volition however has been little researched in the distance education settings. A study undertaken by Deimann and Bastiaens (Deimann & Bastiaens, 2010) considered volition in distance education that can be found in the peer reviewed journal. This longitudinal study was aimed to assess volitional competence, and to obtain detailed information on students' volitional competence at a large Distance Education university and at numerous traditional universities in German-speaking countries. In terms of data collection, this study used an online survey by using the Volitional Persona Test as research instrument, and followed by semi-structured interviews at the FernUniversitat in Hagen. This study involved 15,559 participants recruited by direct communication (e-mail) or by indirect communication (invitations through newspaper, magazines, online portals, blogs etc.). The results of the study indicated that a confirmatory factor analysis outlined four important factors of volitional actions: 1) volitional self-efficacy; 2) consequence control;

3) emotion control; and 4) meta-cognition. Furthermore, an ANOVA calculation yielded an interesting pattern that distance education learners show higher volitional self-efficacy and lower emotion control compared to campus-based learners. In addition, an interesting pattern happened at the FernUniversitat that the learners scored highest both in volitional self-efficacy and in meta-cognition and lowest in emotion control. In this case, volitional self-efficacy refers to a post intentional construct assumed to be crucial for engagement in planning and for change in behaviour, for example one's strength to master the task or one's belief for his/her ability to solve the learning problem by using volitional strategies. Meanwhile, meta-cognition represents the ability to develop a personal learning plan and time management.

d. Self-Efficacy

Self-efficacy is a well-known concept revealed by Bandura (1997). Bandura's self-efficacy is a key construct within social cognitive theory and can be widely applied in learning and development situations (Fletcher, 2005). Bandura (1997) defined self-efficacy as "beliefs in one's capabilities to organise and execute the courses of action required to produce given attainment. Moreover, self-efficacy beliefs are constructed from four principal sources of information:

enactive mastery experiences that serve as indicators of capability; vicarious experiences that alter efficacy beliefs through transmission of competencies and comparison with the attainments of others; verbal persuasion and allied types of social influences that one possesses certain capabilities; and physiological and affective states from which people partly judge their capabilities, strength, and vulnerability to dysfunction (Bandura, 1997).

Although self-efficacy has been little researched in relation to student persistence in distance education, a study conducted by Holder (2007) shows that self-efficacy is a predictor of persistence for online learners. Holder (2007) used the web-based questionnaire as data collection method and recruited 209

persisters and 50 non-persisters in the Adult and Professional Studies online, degree-completion programmes of a growing university in the Midwest. In this study Holder (2007) found that self-efficacy is a significant predictor of student persistence in online programmes. A distance learner who has high self-efficacy for learning and performance is more likely to do well in the course programme, and in turn motivates the learner to persist.

2.5.2 Institution Related Factors

The reviewed studies on student persistence in the Open University context revealed that institutional factors covered 37% of all the factors considered. In these factors, the learning services has been the most frequently researched in the reviewed studies (50%, 7 factors) and other two sub-factors were student supports (43%, 6 factors) and interaction (7%, 1 factor).

Learning services encompass various aspects of students' learning, course design, quality of the course programme, tutors, and modules. The reviewed study presented seven determinant factors influencing students' decision to persist or withdraw in the Open Universities: number of registered courses or course load (Belawati, 1998), programme was too time consuming to study all the courses (Fozdar et al., 2006), difficulty in term-end examination (Fozdar et al., 2006), the lack of various media types used in the learning process (Ibrahim et al., 2007), quality of the instructors (Ibrahim et al., 2007), individual tutor development (Tait, 2004), and the lack of feedback on the students' work (Choi et al., 2013).

Meanwhile, the reviewed study explained also that providing excellent student supports would increase student persistence in Open Universities. Fozdar et al. (2006) identified five barriers that influenced student persistence: study centre too far from residence, insufficient academic support from study centre, difficulty in attending lab sessions due to distance, insufficient counselling sessions, and lack of responsiveness from study centre.

Table 2.2: Institutional factors in Open Universities

Institutional factors	Findings
Learning Services	<ul style="list-style-type: none"> • Number of registered courses - course load (Belawati, 1998) • The programme was too time consuming to study all the courses (Fozdar et al., 2006) • Difficulty in term-end examination (Fozdar et al., 2006) • Quality of the instructors (Ibrahim et al., 2007) • Lack of various media types used in the learning process (Ibrahim et al., 2007) • Individual tutor development (Tait, 2004) • The lack of feedback on the students' work (Choi et al., 2013)
Student supports	<ul style="list-style-type: none"> • Study centre too far from the residence (Fozdar et al., 2006) • Insufficient academic support from study center (Fozdar et al., 2006) • Difficulty in attending lab sessions due to distance (Fozdar et al., 2006) • Insufficient counselling sessions (Fozdar et al., 2006) • Lack of responsiveness from study centre (Fozdar et al., 2006) • Organisational supports (retention staff) to student retention (Tait, 2004)
Interaction	<ul style="list-style-type: none"> • Strong relationship amongst student, tutor, and the institution (Tait, 2004)

In the same way with different categories, a reviewed study on student dropout in online courses conducted by Lee & Choi (2011) used terminology of course/programme dropout factors to explaining institutional supports. This study found that course/programme dropout factors had an important role in improving student persistence in online courses, occupying 20% of all the identified factors (14 out of 69 factors). Lee & Choi (2011) classify institutional support into three sub-factors: course design, institutional supports, and interactions. Course design encompassed quality of course materials, interactivity of course contents, and relevance of courses with students'

careers (Bocchi, Eastman, & Swift, 2004; Ivankova & Stick, 2007; Perry, Care, & Park, 2008). Institutional supports referred to students' satisfaction pertinent to administrative structure, student support infrastructures, orientation, and tutorial attendance (Cheung & Kan, 2002; Clay, Rowland, & Packard, 2008; Frydenberg, 2007; Ivankova & Stick, 2007; Muilenburg & Berge, 2001). The final sub-factor was interactions. This sub-factor involved three types of interactions: student to student (peer interaction), student to teacher/faculty, and student to content. All of these interactions had significant impact on student persistence in online courses (Bocchi et al., 2004; Ivankova & Stick, 2007; Morris et al., 2005; Pigliapoco & Bogliolo, 2008; Tello, 2007).

Faculty role. Moreover, Barnett (2011) emphasised the faculty's role in student persistence decision. This issue was largely unstudied both in face-to-face universities and distance education institutions. Hence, Barnett (2011) conducted a study aimed at understanding relationship between faculty validation and academic integration and intent to persist. Faculty validation is defined as "interactions with students, initiated by faculty and others in the campus community, that engender feelings of self-worth and a belief in the students' ability to succeed in the college environment" (p. 197). The study was conducted in the spring of 2006 at Midwest College, a community college, and involved 333 students as the sample. The findings of the study found that faculty validation amongst community college students had significant influences on academic integration and in turn influences intent to persist. However, further research is needed to better understand the influence of validation on student experiences and outcomes, particularly in other settings and with other populations.

Consistent with Barnett (2011), the research conducted by Ivankova and Stick (2007) reinforced the significance of faculty's role on student persistence in online courses. In the quantitative analysis, student satisfaction toward instructors' accessibility and promptness of the feedback encouraged students to persist in their programme. In the meantime, the qualitative findings

revealed that student persistence had a positive relationship with the faculty's roles pertinent to the support and encouragement, the willingness to accommodate the students' needs, and the capability to deliver personal assistance.

Park & Choi (2009) conducted study to determine whether or not there were differences between dropouts and persistent learners in online courses in their individual characteristics, the perceptions of family support and organisational support, and the level of motivation (i.e., satisfaction and relevance). The findings showed that dropout had significant differences in perceptions of learner satisfaction and relevance from persistent learners. In other words, learners are less likely to dropout when they are satisfied with the courses, and when courses are relevant to their own lives. These results are in agreement with prior research (e.g., Levy, 2007; Doo & Kim, 2000), that learners' satisfaction with the online course and relevance to the learners' job, prior knowledge, and experiences are major factors affecting their decisions to dropout or persist. From this result, a course designer or instructor might gain insight into how to design the course better. In order to enhance satisfaction as a way to motivate online learners, rewards such as a completion certificate, praise, and promotion should be given to learners. By providing opportunities to apply newly acquired knowledge into real situations, learners can feel that the skills and knowledge obtained from the course are useful and satisfactory and thus they can be motivated to persist in the course. Relevance can be achieved by designing a course that contains learning materials and cases closely related to learners' interests, experiences, goals, and so forth. Keller (1987) suggested that relevance could be established by using learners' experiences, allowing learners to choose learning methods and strategies, and meeting learners' expectations and goals. Online learners can easily lose motivation unless the course is designed to stimulate their active participation and interaction and meet their expectations. Therefore, an online course needs

to be designed in ways to guarantee learners' satisfaction and be relevant to learners' needs.

In addition, according to Harrell & Bower (2011), GPA had an important impact on online persistence in community college. More students with higher GPAs tend to complete online courses relative to students with lower GPAs. Similarly, Dupin-Bryant (2004) reported that the cumulative grade point average was a significant factor to influencing student persistence in online learning. However, Shin & Kim (1999) reported in their study of learner progress in the Korean National Open University (KNOU) that GPA was not a potent predictor of persistence.

Peer Interaction. Rovai (2003), Kember (1995), and Tinto (1993) asserted the importance of interpersonal relationships between student and peers as one of student's needs to develop social integration and to increase persistence. Rovai (2003) explained how need is closely related to the sense of community and that it is important that a student does not view himself as outsiders. A strong sense of community will help students to increase their persistence through making connection with other learners (Rovai, 2002). Therefore, students who possess strong feelings of community are more likely to persist than those students who feel alienated and alone (Tinto, 1993).

Consistent with the previous studies, Morris et al. (2005) confirmed through their study about the importance of student engagement on student persistence. They reported the research findings in the context of online courses that students who actively participated in learning interactions, especially with teachers and course content, were more likely to complete successfully in online courses. The interaction between student and content was measured by the frequency and duration of students' use of online content. As a result, completers showed significantly higher participation in learning activities than withdrawers in three measurements: the number of discussion posts viewed, the number of content pages viewed, and the number of seconds spent viewing discussions. These findings also indicated that the

withdrawers and unsuccessful completers were not sufficiently motivated to engage meaningfully in online course activities.

Furthermore, Shin & Kim (1999) delineated that face-to-face activities had significant contribution to student persistence. Face-to-face activities consisted of interaction with the people within the university, such as faculty, tutors, and peer learners. However, their study found that interaction with people outside the university (family members, friends, and employers) have a negative impact on student persistence. Strong support received by students from family members and significant others has provided students a burden to satisfy their expectation by accomplishing their studies. Therefore, those students tend to avoid enrolling the following academic term due to feelings of pressure and lack of confidence to complete their studies.

2.5.3 External Factors

External factors or environmental factors are important predictors of student persistence in distance education (Rovai, 2003; Kember, 1995; Lee & Choi, 2011). According to Park (2007), many studies have portrayed that some external factors as having direct effect on dropout or persistence decision. Bean and Metzner (1985) revealed that environmental variables had a significant effect on persistence for non-traditional students. These variables consisted of finances, hours of employment, family responsibilities, and outside encouragement. Rovai (2003) outlined in his composite persistence model that external factors had important contribution to student persistence decision. In explaining those external factors, Rovai (2003) heavily grounded on Bean and Metzner's model and added a variable of life crises from Tinto's model, for example, sickness, divorce, and loss of a job.

The reviewed study on student persistence in Open University contexts highlighted that external factors occupied 24% of all the factors considered (9 out of 38 factors). All the factors in the external category can be classified into

two sub-categories: work environment (44%, 4 factors) and supporting environment (56%, 5 factors). Work environments were significant predictors of persistence because most of students in Open Universities were in full time or part time employment. Therefore, their success in learning will depend on their ability to manage their time and energy between work and study (Kemp, 2002; Perry et al., 2008; Vergidis & Panagiotakopoulos, 2002). Moreover, the reviewed study revealed also that students were more likely to withdraw when encountered changes in work responsibilities and environments (Perry et al., 2008; Pierrakeas et al., 2004).

Table 2.3: External factors in contributing student persistence in Open University

External Factors	Findings
Work environment	<ul style="list-style-type: none"> • Changes in work responsibilities and environments (Pierrakeas et al., 2004; Perry, 2008) • Work commitments (Kemp, 2002; Perry, 2008; Vergidis, 2002) • The heavy workloads demanded in students' workplaces (Choi et al., 2013) • Employment status (Belawati, 1998)
Supporting environment	<ul style="list-style-type: none"> • Life circumstances (Pierrakeas et al., 2004) • Life challenger (Castle, 2004) • Support from family, work, and friends (Castle, 2004) • Family obligations (Vergidis, 2002) • Supporting environments allowing study time (Shin & Kim, 1999)

Similarly, Lee & Choi (2011) reviewed 35 empirical studies in peer-reviewed journals and found that many students who dropped out of online courses attributed their decision to environmental factors, including work commitments, various family and social responsibility and insufficient supports from family, friends, or colleagues. All reviewed empirical studies on topic environmental factors can be classified into two sub-categories: work

commitment and supportive study environment. Work commitment is an important contribution to affect the students' decision to drop out. Adult distance learners are generally full-time workers who have to manage their time and energy to meet both work and study obligations, such as full-time employee status, increasing pressure to work additional hours, or changes in work responsibilities (Lee & Choi, 2011). Work is, then, the greatest competitor for time with study (Kember, 1995).

Kember (1995) explained that environmental factors (work, home, and social) determine the success of students in achieving the social integration (the degree to which a student is able to integrate the study process with work, family and social life). There are three sub-components of social integration: (1) enrolment encouragement: the extent to which the employer, family and friends supported the student's decision to enrol in the course. Such initial support has an important bearing upon goal commitment. (2) Study encouragement: the degree of cooperation and moral support the student receives when actually studying. (3) The family environment: to determine whether a warm supporting environment exists within the family unit. In Kember's model, social integration will lead to academic integration and in turn will influence students' decisions to persist in the courses.

Moreover, environmental factors usually become the most frequent reasons why the student finds difficulty to achieve social integration (Kember, 1995). When a student fails to integrate study with the environmental pressures, a student will achieve negative social integration or external attribution. The external attribution is divided into three sub-components, namely (1) insufficient time: the most common reason given for dropout in the autopsy report and indicates a failure to come to terms with competing priorities. (2) Distraction attributes lack of application to study tasks to competing demands from family, employers and friends. It is indicative of a lack of social integration between academic demands and daily life. (3) Events hinder study

examines the way in which happenings not foreseen at the time of enrolment influence the cost-benefit analysis between continuing and ceasing study.

Positive employment conditions can provide motivation and stimulation to progress in a course. The student who gets support from his employer will find it easier to balance between time spent study and work obligations than who does not. Therefore, time at work had a direct relationship with time to study. Likewise, students with higher salaries tend to have greater responsibilities and obligations (Kember, 1995). In line with this perspective, Packham et al. (2004) identified key factors influencing student withdrawal of e-learning programme in the E-College Wales BA Enterprise programme. The results of the study reported that working conditions were the most significant factor of withdrawal. The successful learners were typically not in employment. This result indicated that the students should have sufficient time to completing the course. However, the study conducted by Osborn (2001) did not support previous findings in which he found the at-risk students actually work fewer hours per week. Therefore, this outcome may indicate that time management, rather than the absolute amount of time for study, is a key variable in course completion.

Another important issue in the external factors is the link between financial aid and retention. Morris et al. (2005) found in their study of online retention that financial aid for students could increase student retention in online courses at the University System of Georgia. However, Kerkvliet & Nowell (2005) presented their findings of research at Weber State University (WSU), a commuter university, that financial aid made a weak contribution to retention.

Most previous studies on student persistence agreed that external factors have a significant effect on persistence. However, based on the study conducted by Ivankova and Stick (2007) on doctoral student persistence, external factors such as family and significant other, and employment had no statistical significance on student persistence in the doctoral programme. In addition, Ivankova and Stick (2007) also found from the qualitative study that different

participants had different sources of external support. For some it was family and employment, for others, family and pets, and for some there was no apparent support from external sources.

Cultural Orientation

A prior study reported that student persistence rates in the Indonesia Open University varied from island to island and from regional office to regional office. (Belawati, 1998). Therefore, it is importance to understand students' cultural factors in relation to their persistence (Belawati, 1998; Guiffrida, 2006; McQueen, 2009)

There were many definitions of human culture and this study viewed human culture as "a unique meaning and information system, shared by a group and transmitted across generations, that allows the group to meet basic needs of survival, pursue happiness and well-being, and derive meaning from life" (Matsumoto & Linda, 2013, p. 15). This definition suggests that culture is as much an individual, psychological construct as it is a social construct. In addition, culture may be understood as a response to the problem of adapting to our contexts in order to meet basic biological and social needs.

From the previous studies, the major dimension of cultural orientation that can be used to delineate intercultural differences in behaviour within the distance education setting is individualism-collectivism (IC) (Al Harthi, 2010; Guifrida, 2006). Individualism – collectivism (IC) refers to the degree to which a culture encourages, fosters, and facilitates the needs, wishes, desires, and values of an autonomous and unique self over those of a group (Triandis, 2001).

In a collectivist culture, society tends to view the self as interdependent with others, shared resources, goals tend to be compatible with in-group goals, duties and obligations as the determinants of social behaviour, and people tend to emphasise unconditional relatedness within groups. Meanwhile, individualist culture viewed the self as autonomous and independent of

groups; sharing of resources based on personal decision, individual goals tend not to be correlated with in-group goals; attitudes, values, beliefs, personal needs, and contract are their main social behaviour; and people tend to emphasise rationality (i.e., the careful calculation of the costs and benefits of relationships) (Harb & Smith, 2008; Markus & Kitayama, 1991; Miller, 1994; Schwartz, 2006; Triandis, 2001).

Individualism-collectivism (IC) differences should vary in different social contexts. People act differently depending on whom they are interacting with and the situation in which the interaction is occurring. A person could have collectivistic tendencies at home and with close friends and individualistic tendencies with strangers or at work. While individuals can be quite collectivist in an individualistic culture, individuals in a collectivist culture can be quite individualistic. Furthermore, Individualistic cultures tend to have more in-groups because individuals have more access to in-groups; however, members are not strongly attached to any single in-group. Members therefore tend to drop out of groups that are too demanding, and their relationships within their groups are marked by a high level of independence or detachment. In collectivist cultures, depending on the effective functioning of the group, a member's commitment to an in-group is greater. Collectivists keep stable relationships with their in-groups no matter what the cost and exhibit a high level of interdependence with members of their groups (Gunawardena, Wilson, & Nolla, 2003; Walsh, Gregory, Lake, & Gunawardena, 2003).

Gelfand et al. (2004) contended that empirical research on individualism and collectivism fall into three levels: the societal level, the organisational level, and the individual level. There has been a long tradition of research on individualism and collectivism at the societal level. For example, self-emphasis and collectivity (Parsons, 1949), *Gesellschaft* [society] and *Gemeinschaft* [community] (Toennies, 1957), mechanical and organic solidarity (Durkheim, 1933), individualism and collaterality (Kluckhohn & Strodtbeck, 1961), individualism versus collectivism by Hofstede (1980), and Triandis et al.

(1986). In contrast to the societal level, culture at the organisational level is construed as organisational members' shared beliefs and assumption. In general, organisations that have individualistic cultures would have members who consider themselves as largely independent of the organisation, while organisations that have collectivist cultures would have members who view themselves as highly interdependent with the organisation. The next level of analysis is the individual level that capitalises on intracultural variability and examines dimensions that are derived from individual differences. In more recent years, there has been an explosion of measures that have been developed to assess individualism and collectivism at the individual level. For instance, Realo et al. (1997) found that collectivism is higher in rural locations and individualism is higher in urban locations. Furthermore, Smith and Schwartz (1997) reported that individualism and collectivism have correlation with social backgrounds, such as age, education, and socioeconomic status. Particularly, younger and more educated individuals tend to be more individualistic than older and less educated individuals across numerous nations.

Oyserman, et al. (2002) conducted meta analyses of the literature comparing (European) Americans with others on individualism and collectivism (IND-COL). All three authors contended that the core element of individualism was the assumption that individuals are independent of one another, while for collectivism there was the assumption that groups bind and mutually obligate individuals. In the review of IND-COL scales of 83 empirical studies, the authors found that there was no single standard or common measure to assessing IND-COL. However, the authors delineated the three most common measurement tools for IND-COL: (a) the Independent-Interdependent (Self Construal Scale) scale (Singelis, 1994), used in 19 US and international studies, (b) the Horizontal-Vertical Collectivism-Individualism scale (Singelis, Triandis, Bhawuk, & Gelfand, 1995), used by 16 US and international studies, and (c) the INDCOL measure (Hui, 1988), which was applied in 10 international studies.

Moreover, Oyserman, et al. (2002) conducted content analysis of all IND-COL scales and succeeded to identifying seven IND scales and eight COL scales as the most major measure. The seven IND scales included personal independence, personal achievement, self-knowledge, uniqueness, privacy, clear communication, and competition. Meanwhile, the eight COL scales consisted of sense of duty to group, relatedness to others, seeking others' advice, harmony, working in group, contextual self, and valuing hierarchy. Furthermore, the authors agreed on that the core of IND scale was valuation of personal independence and for COL, the consensually agreed on element is sense of obligation and duty to the in-group.

Shulruf, et al. (2003) performed a study in order to establish a reliable and easy to use measurement tool for collectivism and individualism, which avoids weaknesses of previous tools. The study involved 206 undergraduate students who were studying education and visual art at the University of Auckland. The major finding from the factor analysis of 66 items was the presence of six interpretable factors, three relating to individualism (compete, unique, and responsibility), and three to collectivism (advice, harmony, and closeness).

With regard to empirical evidence in Open and Distance Learning (ODL), there seems to have been very little research on the effect of learner's cultural orientation on student progress in distance education settings. A study addressing cultural orientation and retention was conducted by Torres (2006) at commuter urban universities. This mixed methods study aimed to investigate the effect of cultural orientation on retention for Latino students in non-traditional commuter environment. In the qualitative phase, the study revealed three themes emerging from the interviews and developed the initial conceptualised model for retention. The three themes were "come to class and leave", "unsure I could make it", and "show me the way". By using social cognitive theory (Bandura, 1986) as theoretical lens, the author connected the emergent themes to aspects of social cognitive theory. Accordingly, the themes of "come to class and leave" and "unsure I could make it" illustrated the

environmental influences that students had to develop in order to persist. The theme, “come to class and leave,” illustrated the influence of family responsibility and family status. The theme, “unsure I could make it” illustrated some of the aspects of academic difficulty and satisfaction with faculty and interplays with the comfort level students feel within their environment (cultural affinity). These environmental influences were considered the exogenous variables that influenced the latent variables: (a) family status—representing parents’ level of education, (b) family responsibilities—which considers obligations that may interfere with school work, (c) cultural affinity—which represents the presence of other Latino/as in the college environment, (d) satisfaction with faculty—which looks at students’ impression of the faculty as well as potential adult mentors, and (e) academic difficulties—which considers students’ self-perception of their cognitive abilities. Meanwhile, the theme “show me the way,” illustrated that the experiences students had while in the college environment focused on relational issues. Therefore, there were influential mentors, advisors, faculty, friends, and/or family that encouraged them to be in college.

The quantitative phase of the study explained the results of testing of conceptualised model by using SEM (Structural Equation Modelling). The results of quantitative analysis indicated that the hypothesised model had good overall data-model fit. This would indicate that the hypothesised model using a social cognitive theory lens is a plausible explanation of the influences on the intention to persist in college for Latino/a students. In considering the effects of the latent variables academic integration, institutional commitment, and encouragement on the variable intention to persist, only institutional commitment had a strong and significant direct effect on intention to persist. Meanwhile, the effects of academic integration and encouragement on intention to persist were not significant influences. The role of institutional commitment was interpreted in this study as the ability to reflect on the environment and to accept the college experience as an important part of the

students' life. Once students see college as an important aspect of their lives, they are better able to create symbols that help them conceptualise how to better manage their behaviour, the environment, and the personal and cognitive factors that impact their ability to succeed in college. Finally, there are two exogenous variables that have the largest influence on the endogenous variables: cultural affinity and satisfaction with faculty. Moreover, the analysis of the total effects yielded that largest total effect (the sum of direct and indirect effect components) occurred between cultural affinity and intention to persist, through both encouragement and institutional commitment. This total effect highlights the influence of having Latino/a culture represented within the environment and among faculty, staff, and students as an important and significant role in students' intention to persist (Torres, 2006).

Another study of cultural orientation in distance education was conducted by Al-Harthi (2010). This study aimed to address differences in self-regulation learning (planning, effort, self-efficacy, self-checking, help-seeking, and time and study environment management) between Arab and American distance learners; differences in cultural orientation (future time perspective and group interdependence) between Arab and American distance learners; and the best model (variance and covariance structure) to explain the relationship between learner self-regulation and cultural orientation. The findings of the study revealed that both Arab and American students realise that self-regulation had an important role in distance learning. In terms of group interdependence, Americans were found to be more group interdependent than Arabs. In contrast, it was found that future orientation among American learners was higher than Arab students. Moreover, this research confirmed only one link in the model: the link from future orientation to metacognition and motivation. Other cultural measures were either found to be insignificant (group interdependence) or unreliable and were not used in the model.

2.6 Conceptual Framework

Literature review on student persistence in distance education contexts highlighted the importance role of psychological, sociological, and cultural explanations in explaining student persistence. Moreover, prior studies of student persistence underlined 38 significant predictors that were classified into three major factors: individual (15), institutional (14), and external factors (9).

The conceptual framework used in this study involved 13 variables tailored to the Indonesia Open University context (figure 2.4). Those variables were classified into three groups: individual, institutional, and external factors. The individual factor consisted of student's background (age, gender, ethnicity, prior education, employment status, and family structure), intrinsic motivation, extrinsic motivation, self-efficacy, and volitional strategies. The institutional factor had three predictor variables: student support services, learning services, and interaction. Finally, the external factor contained five predictor variables: family, working environment, financial issues, individualism, and collectivism.

In following chapter, I explore a contextual background in order to provide description of distance education system applied in the Indonesia Open University.

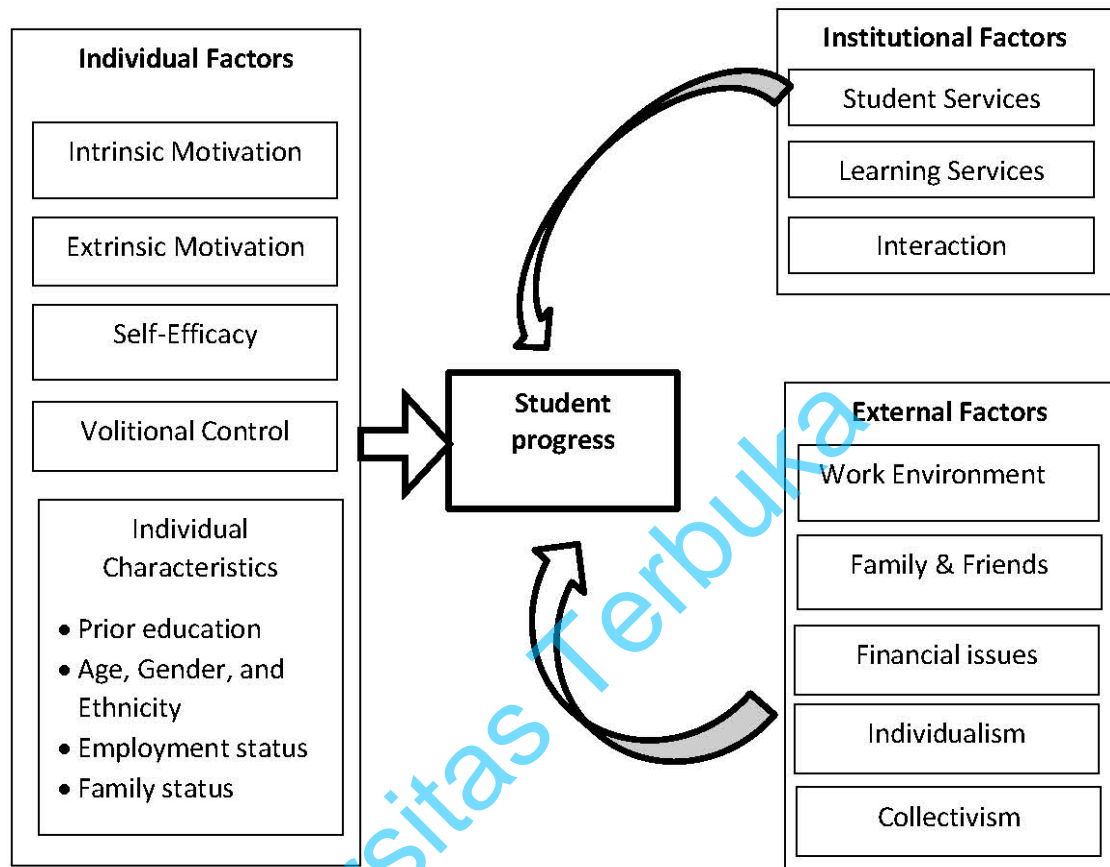


Figure 2.4: A conceptual framework of student progress

Chapter 3 Indonesia Open University: A Contextual Background

This chapter explains development of the Indonesia Open University from its establishment in 1984 until now as a mega university. After that, further description deals with student enrolment and registration system applied in the university. Course programmes and learning materials have the pivotal role in the learning processes and are described in the third section. Following this, learning support services are explained according to two types of services: academic administrative services and academic services. Meanwhile, examination system applied in the Indonesia Open University is described in the final section.

3.1 Establishment of the Indonesia Open University

The establishment of the Indonesia Open University (Universitas Terbuka) was intended to widen access and improve participation in higher education in Indonesia which had previously encountered low rates of participation (Setijadi, 2007). Therefore, established in September 1984, Universitas Terbuka has a primary mission of “making higher education open to all” (Universitas Terbuka, 2012). This mission is specified in the institutional strategic objectives: (1) to widen access to higher education, especially for high-school graduates, (2) to train increasing numbers of students in areas required for the country's economic and cultural development, and (3) to upgrade primary and secondary school teachers who graduated from short-term programmes, to enable them to obtain a full-scale teaching degree (Universitas Terbuka, 2012a).

Universitas Terbuka is a single mode distance education state university in Indonesia that teaches entirely by means of distance education. As an open

and distance education institution, Universitas Terbuka is intended to be a flexible and inexpensive university, focused on serving people who for various reasons, including lack of funding, rural isolation and full-time employment, do not have the opportunity to attend conventional face-to-face higher education institutions (Universitas Terbuka, 2012a).

Universitas Terbuka is organised into four Faculties: Faculty of Education and Teacher Training; Faculty of Mathematics and Natural Sciences; Faculty of Economics and Development Studies; and Faculty of Social and Political Sciences. Additionally, Universitas Terbuka offers also four postgraduate programmes at the Masters degrees: Public Administration in Administration Sciences, Management, Marine Sciences in Fisheries Management, and Mathematics Education. In 2013, the postgraduate programmes offered ASEAN (Association of Southeast Asian Nations) Studies, an international programme jointly developed with other open universities in ASEAN: the Open University of Malaysia, the Sukhothai Thammathirat Open University (Thailand), the Philippines Open University, and the Hanoi Open University (Universitas Terbuka, 2015a).

Universitas Terbuka currently has 38 regional offices throughout Indonesia and one overseas service centre. The regional offices' main functions are to support distance-learning activities and to provide student services. To carry out its functions, the regional offices work collaboratively with local governments, educational institutions, and other service organisations, such as public and private schools and universities, local radio and television stations, and mass media networks. This collaboration involves activities, such as student registration, conducting tutorials and examinations, recruitment of tutors, course writing, media broadcast, and delivery of learning materials (Ratnaningsih, 2013; Universitas Terbuka, 2012b, 2015e).

3.2 Student Enrolment and Registration System

Universitas Terbuka (UT) in 2014 enrolled around 426,503 students, residing in different parts of the country and some overseas locations (Universitas Terbuka, 2014b). Therefore, Universitas Terbuka is classified as a mega university, with over 100,000 students (Daniel, 1999). Over 90% of these students are working adults (Universitas Terbuka, 2014b). Moreover, since its foundation, Universitas Terbuka has enrolled over 1.4 million students and has produced over 700,000 alumni, working in various professional fields (Universitas Terbuka, 2014a, 2014b).

In terms of the registration system, Universitas Terbuka primarily has three registration phases within an integrated registration system: initial registration, course registration and final registration. The purpose of the initial registration is to record, manipulate and update data concerning the admission of new students. The next phase of registration maintains and updates active student records. While the final stage of registration classifies and determines student eligibility for final examinations (Universitas Terbuka, 2015b, 2015c).

As an open and distance institution, UT registration is open all year long, so that students are able to register any time during the period of registration from December to February for the first semester and from June to July for second semester. Students can obtain a registration package (containing a course registration form and the tuition fee form) from UT Regional Offices and other designated agencies in their local areas. Once they complete the forms and know how many courses to take, students have to transfer the tuition payment to the UT account. The completed registration form and proof of payment are then to be submitted to the nearest UT Regional offices (Universitas Terbuka, 2015b, 2015c).

Therefore, in order to be accepted as a UT student, the applicant needs to satisfy university entry requirements. A student's initial requirement is at least to possess a high school certificate or other relevant certificate that has been

verified by an authorised institution as equivalent to a high school certificate. In addition, a Faculty or Department may stipulate additional requirements. The applicant needs to produce a certified copy of his/her high school certificate or other documents upon admission. The initial registration package is available at the UT regional offices. For students applying under a cooperation scheme, the initial registration package is available in designated offices.

3.3 Course Programmes and Learning Materials

UT course programmes are differentiated into two main programmes: the primary teacher education programme and the non-primary teacher education programme. The primary teacher education programme (Pendas) delivers in-service training for nursery and primary education teachers. This programme offers undergraduate degrees in primary education and early childhood education, while the non-primary education programme offers programmes in Economics, Mathematics and Natural Sciences, and Social and Political Sciences (Universitas Terbuka, 2015b, 2015d).

Universitas Terbuka provides two types of learning materials: printed materials and non-printed materials. The printed materials are usually in the form of modularised workbooks, and the non-printed materials can be in the audio, video and computer formats. The audio formats may include audiocassettes and radio programmes. The video formats can be in videocassettes, television programmes and CD-ROMs. The computer formats are in terms of asynchronous (such as video interactive, web-based materials, internet-based learning support system) (Universitas Terbuka, 2015b, 2015d).

Printed materials. The printed materials serves as the major learning resource for distance students. These materials are devised as complete self-learning or self-contained learning materials, meaning that students primarily only need to study those materials required for them to achieve learning goals.

Furthermore, the printed materials are designed to be user-friendly for the learners' self-study and independent learning activities.

Non-printed Materials. Non-printed learning materials are designed either to complement the printed materials as the main learning resources or to address the diverse learning needs and styles of a very large number of students. UT employs a variety of media, printed as well as non-printed, to facilitate student learning, such as modularised instruction, web-based supplementary materials, audio-visual materials, and Computer-Assisted Instructional programmes. Much like the printed materials process, the development of non-printed material involves a team approach, comprising manuscript authors who write the content, content reviewers, media reviewers, and media production specialists.

3.4 Learning Support Services

Universitas Terbuka provides learning support services to the students starting with the enrolment process and then continuing through their learning, examination, through to completing the course programmes. In particular, the learning support services can be explained from two aspects: academic administration services and academic services (Universitas Terbuka, 2014a, 2015b).

3.4.1 Academic Administrative Services

Academic administration services are the student services delivered by regional offices and the student service unit at the central office to support learning process. These administration services contain first registration and course registration (including credit transfer both among the programmes within UT and from other educational institutions), as well as course omission and judgement deferral to increase a student's grade point average (GPA). Typically,

students can access the academic administration services through various communication channels, such as UT website/Online, letters, telephone calls, and the short message services (SMS) using mobile phones.

3.4.2 Academic Services

Academic services are learning support services which comprises of face-to-face tutorials, online tutorials, radio tutorials, and television tutorials. In addition, to complement these tutoring services, UT also provides supplementary course materials in the form of a web supplement in its UT Online website.

Face-to-Face Tutorial. Face-to-face tutorials are organised by the regional offices and provided based on students' requests. Face-to-face tutorials are conducted during the weekends to accommodate students' busy working schedules during workdays.

Tutorial by Radio. This type of tutorial is conducted by Universitas Terbuka in cooperation with the Radio Republic of Indonesia (Radio Republik Indonesia or RRI). The tutorials are broadcast two times a day (Monday – Saturday) for 25 minutes. Due to the limited scale, tutorials by radio are conducted as supplementary learning materials

Tutorial by Television. In line with tutorials by radio, tutorials by television are a limited supplementary media because producing TV programmes involves complicated steps, are expensive, and are time-consuming to develop. In running the tutorials, Universitas Terbuka interweaves cooperation with several TV stations.

Online Tutorial. Universitas Terbuka provides online tutorial as part of online support services for students. This online service is called “UT Online” and is intended to overcome the distance barriers amongst student, tutors, and institution. There are two types of online tutorials: course tutorial and final

assignment tutorial. Course tutorials are carried out for eight weeks and containing eight initiations (discussions) and three assignments. Meanwhile, the final assignment tutorial is provided for six weeks and contains six initiations and three assignments.

3.5 Examination System

Universitas Terbuka applies five types of assessment in measuring undergraduate student competency: tutorial assignments, teaching practice and practical work, final examinations, and written comprehensive assessment (oral thesis examinations for graduate programme) (Universitas Terbuka, 2012a, 2015b).

Tutorial assignments. These assignments are used to evaluate student progress in a course. The score of tutorial assignment is combined with the final course exam score at the examination centre at Universitas Terbuka. The tutors have responsibilities to develop tutorial assignments by using guidelines made by the course manager.

Teaching practice and practical Work. The assignments are applied for several courses that have learning objectives to provide competencies for students on how to apply concepts, principles, procedures, and skills in factual situation, or in a simulation such as a practicum or microteaching (for training teachers). Furthermore, the assessments are carried out through demonstrated teaching practice or practical works and are evaluated by tutors and/or supervisors.

Final Examination. The final exam is carried out to measure students' competencies within a course. There are two types of examination: the multiple choice and essay. All test items for both types of tests are written, reviewed, and validated by content experts either from Universitas Terbuka or other universities.

Written Comprehensive Assignments. This sort of assessment is a requirement for students to earn their degree after completing all courses in the programme. Academically, this assignment is used to assess students' ability to analyse cases with high cognitive levels.

3.6 Summary

Universitas Terbuka (UT) is a single mode distance education, established in September 1984, for primary mission of making higher education open to all. UT is organised into four Faculties, four Masters Programmes, and an international joint programme (ASEAN studies). Furthermore, UT has 38 regional offices throughout Indonesia and one overseas service centre.

Universitas Terbuka is classified as a mega university because it has enrolled over 100,000 students. UT admission is open all year long and the registration system primarily is classified into three phases: initial registration, course registration, and final registration. UT provides two main programmes: the primary teacher education programme and the non-primary teacher education programme, and two types of learning materials: printed and non-printed materials. Meanwhile, learning support services in UT can be classified into two services: academic administrative services and academic services. Additionally, UT implements five types of assessment including tutorial assignments, teaching practice and practical work, final examinations, and written comprehensive assessment (oral thesis examinations for graduate programme).

In subsequent chapter, research methodology is explored by explaining reasons of using a mixed methods approach and detailed of data collection methods from either quantitative method or qualitative method.

Chapter 4 Research Methodology

In this chapter, the reasons of selecting a mixed methods approach are outlined in the beginning section. After that, target population and sample of this study are examined. Following, research permissions and ethical considerations in conducting this study are explained in the third section. Data collection and analysis methods are elaborated separately and sequentially between quantitative and qualitative methods. For the phase I, I start by explaining quantitative method and then after that I explain qualitative method as the second phase of study. Finally, the reliability and validity for quantitative and qualitative approaches are considered.

4.1 Mixed Methods Research

This study employed a mixed methods research, which focused on collecting, analysing, and integrating both quantitative and qualitative data in a single study (Creswell & Clark, 2011; Hesse-Biber, 2010). The rationale for choosing a mixed methods research was mainly to obtain a deeper understanding about the phenomena of student progress in the context of Open University. Specifically, the research questions of this study were formulated to explain factors influencing student progress for undergraduate students of the Indonesia Open University, and to what extent individual, institutional, and external influence student progress, were better understood and allowed for a more complete analysis by utilising and integrating both quantitative and qualitative methods and data.

Furthermore, the selection of a mixed methods research also involved other reasons: First, there is a need to explain initial results (quantitative results) in great depth of understanding about student progress in the Open University

and a mixed methods research helps to capture a more complete picture of the phenomenon and details of a situation (Denscombe, 2008; Ivankova, 2006). Secondly, mixed methods research helps to understand the research problem and helps to develop or informing the other methods (Hesse-Biber, 2010). For instance, statistical findings from the first stage become a basis for developing interview questions in the subsequent qualitative phase. Thirdly, mixed methods tend to be “practical” for the researcher to employ all methods possible to address a research problem, combining inductive and deductive thinking, and using skills in observing people as well as recording behaviour (Creswell & Clark, 2011). Finally, mixed methods research may initiate a new study based on the questions or contradictions that require clarification (Hesse-Biber, 2010).

Ivankova and Stick (2007) suggested that a mixed methods study can provide for a more robust analysis of student persistence in the context of distance learning by taking advantage of the strengths of quantitative and qualitative methods. Both quantitative and qualitative data will give a more complete picture of the research problem. The quantitative data and results provide a general picture of the research problem, while the qualitative data and its analysis refine and explain those statistical results by exploring the participants’ view regarding the student’s persistence in more depth.

There are several definitions for mixed methods research, and this study uses “a definition of core characteristics of mixed methods research” which is proposed by Creswell and Clark (2011, p.5). This definition integrates many varied perspectives, including methods, a philosophy, and a research design orientation. According to Creswell and Clark (2011, p.5) therefore the researcher in mixed methods should:

- Collect and analyse persuasively and rigorously both qualitative and quantitative data (based on research questions);

- Mix (or integrate or link) the two forms of data concurrently by combining them (or merging them), sequentially by having one build on the other, or embedding one within the other;
- Give priority to one or to both forms of data (in terms of what the research emphasises);
- Use these procedures in a single study or in multiple phases of a programme of study
- Frame these procedures within philosophical worldviews and theoretical lens; and
- Combine the procedures into specific research designs that direct the plan for conducting the study.

This definition not only involves the philosophical assumptions that guide the direction of the collection in many phases of the research process but also focuses on collecting, analysing, and integrating both quantitative and qualitative data in a single study or series of studies and provides better understanding of research problems than just merely using a single approach (Creswell & Clark, 2011).

Johnson and Onwuegbuzie (2004) propose mixed method research as the third research paradigm in educational research beyond two dominant research paradigms (positivism and constructivism). A mixed methods research as the third research paradigm can help bridge the paradigmatic differences between quantitative and qualitative research. However, the goal of mixed methods research is not to replace either of quantitative and qualitative approaches but rather to draw from the strengths and minimise the weaknesses of both in single research studies and across studies. Accordingly, if one prefers to think categorically, mixed methods research sits in a new third chair, with qualitative research sitting on the left side and quantitative research sitting on the right side.

In a mixed methods research, researchers construct knowledge on pragmatist worldview that focuses on the consequences of research, on the primary

importance of the question asked rather than the methods, and on the use of multiple methods of data collection to inform the problems under study (Creswell & Clark, 2011). A major tenet of pragmatism is that quantitative and qualitative methods are compatible. Thus, both numerical and text data, collected sequentially or concurrently, can help better understand the research problem (Creswell & Clark, 2011; Johnson & Onwuegbuzie, 2004; Sue & Ritter, 2007).

In terms of a mixed methods design, this study used the explanatory sequential design in two distinct interactive phases (Creswell & Clark, 2011). This design started with the collection and analysis of quantitative data, which has the priority of addressing factors that influence student progress in the Indonesia Open University. The aim of the quantitative phase was to identify the potential predictive power of variables on student progress and to allow for purposefully selecting informants for the second phase. In this first phase, the quantitative data were collected by using a web-survey and was followed by the subsequent collection and analysis of qualitative data.

In the second phase, a multiple case study was employed to collect qualitative data through individual semi-structured interviews to help explain why student progress variables, explained in the quantitative phase, may contribute in influencing student progress in the context of Open University. In this qualitative phase, the qualitative results were used to explain the initial quantitative results. Qualitative data added an in-depth understanding of predictors of the student progress and illuminated the meaning of statistical results by adding a narrative understanding to quantitative research findings.

In this design, the greater priority was assigned to qualitative method because the qualitative research represents the major aspect of data collection and analysis (quan → QUAL). The quantitative and qualitative methods were integrated at the beginning of the qualitative phase while selecting the participants for multiple case study and developing the interview questions based on the statistical results. The results of the two phases were also

integrated into data elaboration, integration, and discussion of the findings of the study (see chapters 7 & 8).

Limitations of mixed methods research. There remain significant challenges to conducting mixed methods research. One challenge deals with an inability to implement quantitative and qualitative methods (methods experience gap). Using mixed methods requires training in and knowledge of both quantitative and qualitative methods, but most researchers have expertise with only one method. The uneven knowledge and application of methods can negatively affect the research process; and if the researcher is unable to use successfully both methods, the integrity of a mixed methods project may be compromised (Hesse-Biber, 2010).

Another challenge comes with attempting to deal with different epistemological and methodological standpoints. In this case, the researchers need to be aware of their own research standpoints at all stages of the research process and that in order to conduct mixed methods research, researchers need to step out of their comfort zones, both in terms of the methods they use and the view of nature and reality from which they are working. This brings up the need for reflexivity, prompting researchers to contemplate their particular agendas and how they can successfully cross disciplinary boundaries and mix methods (Hesse-Biber, 2010).

4.2 Target Population and Sample

The Indonesia Open University has two sorts of courses: undergraduate and postgraduate courses. Undergraduate courses are classified into four Faculties: Faculty of Education and Teacher Training; Faculty of Mathematics and Natural Sciences; Faculty of Economics and Development Studies; and Faculty of Social and Political Sciences. Meanwhile, postgraduate courses are organised into four Masters Programmes: Public Administration in Administration Sciences,

Management, Marine Sciences in Fisheries Management, and Mathematics Education (section 3.1).

The target population in this study was undergraduate students who enrolled from the registration periods of 2010.1 (year 2010 and term 1); 2010.2 (year 2010 and term 2); 2011.1 (year 2011 and term 1); and 2011.2 (year 2011 and term 2) in the Faculty of Social and Political Sciences at the Indonesia Open University. The criteria for selecting the participants consisted of: (1) undergraduate students of the Faculty of Social and political Sciences; (2) students who registered in the admission periods of 2010.1; 2010.2; 2011.1; and 2011.2 (3) either admitted as an active or inactive student. Therefore, there were a total of 7686 students who met the criteria.

The selection of students who enrolled from the registration term of 2010.1 was intended not only to capture inactive students, which who did not register in four consecutive semesters but also to understand the student's retention patterns within eight consecutive semesters. According to the University regulation (Universitas Terbuka, 2015b), students may graduate from their studies if they are able to manage their studies within eight consecutive semesters.

In the quantitative phase, this study used a convenience sampling due to the limited number of students who reported their email addresses to the regional offices. Out of 7,686 students who registered in the admission period of 2010.1; 2010.2; 2011.1; and 2011.2 only a total of 6,095 students who were recorded as having email addresses in the University database. Considering the low response rate of online survey and estimated responses on average in online survey was about 30 per cent of sampling size (Dillman, 2007; Sue & Ritter, 2007; Vaus, 2002), all of the 6,095 students who had email addresses were invited to participate in the online survey.

In terms of qualitative phase of the study, purposeful sampling was used to purposefully selecting individuals who voluntarily participated in the qualitative

phase (Creswell, 2012; Hatch, 2002; Maykut & Morehouse, 1994). Furthermore, in the survey informed consent form, the participants had been informed that several participants would be selected for the follow up voluntary individual interviews.

There were 69 participants who had agreed to be invited to participate in the next phase of the study, but only 13 participants from responding students agreed to participate. However, these 13 participants represented the sampling variation needed in the study, such as active and inactive students, gender, and ethnicity.

4.3 Research Permission and Ethical Considerations

Research permission for the each phase of the study was approved by the Research Governance Office of Southampton University on 18 April 2013 through the Ethics and Research Governance Online (ERGO). The application process required online submitting of forms and research documents. The main application form contained a description of the researcher, the project, the rationale, study aims, the design of the study, the research participants, and how to deal with the research ethics, such as how to obtain the consent of participants, and to maintain participant anonymity and confidentiality. Furthermore, it was required to submit debriefing statements, consent forms, participant information sheets, and risk assessment forms. Meanwhile, the research documents included in the application contain questionnaire and interview guide.

There were separated participant information and consent forms for each phase of the study (quantitative and qualitative). In the quantitative phase, the consent of participants for the online survey was obtained within two procedures. In the first procedure, the email invitation was sent to eligible participants to participate in the web-survey. An invitation email informed the participants regarding the aim of the study, the significance of their

participation, the voluntary participation in the study, the confidentiality, and that there was no risk to participate in the study. If the participants agree to participate, the participants might to click the available link in the email to accessing the online survey. The second procedure, in the introduction of the survey, the participants were informed about the aims and significance of the study, and given the same information as in the invitation letter. At the end of the page, they were required to give their consent by ticking the box provided before going on to answer the questions (see appendix 1a-b).

In the qualitative phase, the selected participants were sent an invitation email for interview. For the participants who agreed to participate, they were required to sign the informed consent form, and send it back through email, or agreed to give a recorded consent before interviewing process. Only after receiving informed consent from the participants, the interviews would be scheduled (see appendix 1c-d).

The anonymity in the quantitative phase was protected by removing the “name question” in the questionnaire and each completed questionnaire will be automatically coded as “respondent1, respondent2, , respondent50”. The summary data of the survey were reported only as group responses of all data collected. By contrast, in the qualitative phase, the participants were assigned pseudonyms for use in their description and reporting the results, and keeping the responses confidential. In addition, the participants’ privacy is protected in all publications and presentations.

4.4 Phase I: Quantitative

4.4.1 Data Collection

In the quantitative phase, the study focused on explaining factors that influence student progress. The cross-sectional survey design was employed in this study that data was collected at one point of time (Vaus, 2002). The online

survey was undertaken via a virtual platform, iSurvey-Soton (www.isurvey.soton.ac.uk). The survey link was sent to 6,095 students by email invitations via survey-Soton website. The link for the survey was uniquely tied to each individual student. Therefore, it is very convenient to send the second and the final third emails to students who do not participate in the first and second survey, accordingly.

The invitation emails were sent to participants from the sampling frames consisted of students' e-mail addresses. A unique identifier (participant's ID) to each participant was assigned for preventing or identifying duplicate responses (Sue & Ritter, 2007). Follow-up emails were used to increase the response rate for participants who have not yet responded. The participants were divided into three groups. All groups received the survey link on Day 1, and they were asked to complete the survey within 30 days. The participants who have completed the questionnaire were assigned as Group 1 and did not receive a follow-up reminder email. The participants who have not yet responded were categorised as Group 2 and they were sent a follow-up reminders accompanied by the survey link on Day 30. Group 3 consisted of those participants who still had not responded or completed the questionnaire and these were be sent follow up reminders with the survey link attached on Day 60.

4.4.2 Instrumentation

The survey instrument used in this study was adapted from several previous researches with sub-scales demonstrating acceptable validity and reliability and modified them in order to fit with the Open University contexts. The survey instrument used in this study consisted of nine sections: student's academic profile, academic motivation, learning services, self-efficacy, volitional strategies, peer interaction, cultural orientations, external factors, demographic information, and additional information.

The first section of the survey-explored information related to the academic profiles of students enrolled in Faculty of Social and Political Sciences, the Indonesia Open University. This section focused on course programme, enrolment status of students, reason of non-enrolment, and the main barriers for students.

The next sections were related to the attitudes and perceptions of individuals pertaining to academic motivation, self-efficacy, volitional strategies, peer interaction, student support services, learning services, cultural orientations, support of families and friends, working environment, and financial problem. The students were asked to respond to items using a five-point Likert scale (strongly agree; agree; neither agree nor disagree; disagree; strongly disagree).

1. Student factors:
 - a. Student background
 - b. Academic motivation
 - 1) Intrinsic motivation
 - 2) Extrinsic motivation
 - c. Self-efficacy
 - d. Volition strategies
2. Institutional factors included students' perception toward:
 - a. Student support services
 - b. Learning services
 - c. Interaction
3. External factors dealt with:
 - a. Family and significant others
 - b. Working environment
 - c. Financial issues
 - d. Cultural orientation factors:
 - 1) Individualism
 - 2) Collectivism

The instrument consisted of 48 questions. The connection between the constructs and corresponding items on the instrument is outlined in the table below.

Table 4.1: Instrumentation

No	Questions	Variables measured
I	Individual factors	
a	Motivation	
	Intrinsic Motivation	
Q1	I experience pleasure and satisfaction while learning new things	Intrinsic motivation – to know
Q2	Study at the University allows me to continue to learn about many things that interest me	Intrinsic motivation – to know
Q3	Study at the University allows me to communicate my own ideas to others	Intrinsic motivation – to experience stimulation
Q4	I would have a personal satisfaction when I am able to accomplish my study within eight semesters	Intrinsic motivation – toward accomplishment
	Extrinsic Motivation	
Q5	I think that having an education at the university level will help me better prepare for the career I have chosen	Extrinsic motivation – identified regulation
Q6	In order to have a better salary later on	Extrinsic motivation – external regulation
Q7	It will help me to get social prestige in the community	Extrinsic motivation – external regulation
b	Self-Efficacy	
Q8	I am certain I can understand the most difficult material presented in the modules for this degree programme	To understand modules
Q9	I am confident that I can do an excellent job on the assessments in this programme	To accomplish assessments
Q10	I am confident that I am able to study independently	Independent learning
Q11	I am confident in my academic ability	Academic ability
c	Volitional Strategies	
Q12	I remind myself that I can accomplish my study within eight semesters when I am always enrolled as an active student	Self-efficacy enhancement
Q13	I think of interesting or different ways to make studying more fun or challenging for me	Stress reduction
Q14	I think about how disappointed others (family/friends) will be if I do poorly	Negative-based incentives
Q15	I think about the sacrifices that I have made (financial and time) while studying in university	Self-encouragement

II	Institutional Factor	
a	Student Support Services	
Q16	The registration process is convenient and responsive	Student support services - registration services
Q17	I have access to library resources	Student support services -library resources
Q18	The regional office has helped me to overcome some of my academic problems	Student support services – academic problem
Q19	I am satisfied with the final examination services	Student support services – final exams
b	Learning Services	
Q20	The course materials are relevant to my academic need	Faculty roles - the quality of course programme
Q21	My expectations of the quality of the programme were met	Faculty roles - the quality of course programme
Q22	The offered courses in the programme have been useful to my career plans	Faculty roles - the quality of course programme
Q23	I received promptly feedback and help from tutors when I needed	Faculty roles - the quality of tutors and supervision
Q24	I get advising regularly while to be active student	Faculty roles - the quality of tutors and supervision
Q25	I feel that participation in online tutorial has a positive influence on my study	Faculty roles - the quality of tutorial
Q26	I feel that attending face to face tutorial has a useful impact on my study	Faculty roles - the quality of tutorial
c	Interaction	
Q27	My fellow-students helped to create a supportive learning environment	Interaction
Q28	I feel that participating in a learning community has a positive influence on my study	Interaction
III	External Factors	
a	Family and Significant Others	
Q29	My family members support my efforts to pursue the degree in the distance learning environment	Family and significant others
Q30	My partner has become annoyed because I spent so much time studying	Family and significant others
Q31	My domestic duties in the house have distracted me from my studies	Family and significant others
Q32	My friends encouraged me in my study efforts	Family and significant others
b	Work Environment	

Q33	My employer has encouraged me to pursue the degree	Employment
Q34	My job responsibilities become the main barrier to complete my study	Employment
Q35	My colleagues has supported me to complete my study	Colleague
d	Cultural Orientations	
1	Individualism	
Q36	I tend to do my own thing	Individualism - Independent
Q37	My family encouraged me to be independent in many respects	Individualism - Independent
Q38	When faced with a difficult personal problem, it is better to decide for myself than follow the advice of others	Individualism - Independent
Q39	It is important to me that I perform better than others on a task	Individualism - Personal competition and winning
Q40	Being able to take care of myself is important for me for me	Individualism - Responsibility of self
Q41	I enjoy working in situations involving competition with others	Individualism - Personal competition and winning
Q42	I enjoy being unique and different from others	Individualism - uniqueness
2	Collectivism	
Q43	I always respect decisions made by the group or organisation	Collectivism - harmony
Q44	I always sacrifice my self-interest for the benefit of my group or organisation	Collectivism - harmony
Q45	Before making a decision, I always consult with others	Collectivism - advice from others
Q46	I always consult with my family members on work or study related matters	Collectivism - advice from others
Q47	I have feeling that my relationships with others are more important than my own accomplishment	Collectivism - closeness
Q48	I would help, within my means, if my relatives are in financial difficulty	Collectivism - duty

The last section explained student characteristics, focusing on personal and home situation (age, gender, marital status, children, and ethnicity); professional (years of work experience, job title, and length of work-hours); educational background (highest educational level); and additional information about computer experience and learning style.

The majority of the items were selected from previously validated instruments and reworded from the original items in order to fit the questions with the students' characteristics of the Indonesia Open University. Academic motivation scale was devised from the Academic Motivation Scale (AMS) developed by Vallerand et al. (1992). The AMS consisted of three subscales: intrinsic motivation, extrinsic motivation, and a-motivation and contained 28 items originally. Wilkesman, et al. (2012) utilized the academic motivation scale developed by Vallerand et al., to non-traditional students at three German Universities (TU Dortmund University, University-Essen, and University Oldenburg). The non-traditional student refers to three characteristics: Being older than 30 years, university entry path through a second-chance education, and work more than 20 hours a week in a job additionally to university studies. Wilkesman, et al. (2012) used 18 items out of 28 items originally and reported based on the principal factor analysis that all subscales have Cronbachs Alpha values above 0.7 (intrinsic motivation = 0.847; introjected motivation = 0.771; extrinsic motivation = 0.745; and a-motivation = 0.798).

Volition scale was adopted from the Academic Volitional Strategy Inventory (AVSI) modified by Maccan and Garcia (1999). The AVSI is a self-report instrument designed to assess the management of emotion and motivation by college students during the goal-striving process. The AVSI was developed to capture strategic method used by students to regulate their emotions and motivations if faced with distractions which threaten ongoing goal activity. Deimann and Bastiaens (2010) delineate that volition is important for learning at a distance. A distance education learner is challenged by multiple and conflicting responsibilities (e.g., family, job), which may endanger his/her motivation to learn. In order to manage decreased motivation, volitional strategies, such as controlling negative emotions triggered by a heavy workload or by family stress, could be applied. Maccan and Garcia (1999) performed two pilot studies and produced finally three factorial structures comprising self-efficacy enhancement (Cronbach Alpha = 0.82), stress reduction (Cronbach Alpha = 0.69), and negative-based incentives (Cronbach

Alpha = 0.73). The AVSI contained 25 items originally but were reduced into six items due to suitability with the distance learner characteristics and considering the extensive amount of items of the whole questionnaire.

Self-efficacy scale was adopted and reworded from the Motivated Strategies for Learning Questionnaire (MSLQ) developed originally by Pintrich and McKeachie. It had been utilised throughout the world and had the 15 scales with acceptable internal consistency from 0.68 to above (Duncan & McKeachie, 2005). Holder (2007) employed the MSLQ in his study "An investigation of hope, academics, environment, and motivation as predictors of persistence in higher education online programs" and selected from scales with the least Cronbach Alphas of 0.68. In terms of self-efficacy scale, Holder selected four items and the Cronbach Alpha for this scale was 0.58.

Institutional and external factor scales (student support services, academic process, family and significant others, employment, and financial issue) were modified from Ivankova's study about student persistence in a distributed doctoral programme in educational leadership in the University of Nebraska – Lincoln, United states of America (Ivankova & Stick, 2007). The internal reliability values for all these scales were reported as having considerable variation. The items for variables within the institutional factor group (student support services and academic process scales) were generated from the selected items that had high internal consistency ranging from Cronbach Alpha of 0.824 to 0.918. Meanwhile, the items aimed to measure the external factors had lower values of Cronbach Alpha (family and significant others = 0.5829, employment = 0.5289, and financial issue = 0.2045). Therefore, some efforts were made before applying the selected items in the study, such as the wording of items and adding additional items per subscale.

In the meantime, the cultural orientations scale was selected from the study conducted by Shulruf, et al. (2003) with the title "Development of a new measurement tool for individualism and collectivism". The aim of this study was to establish a reliable and easy to use measurement tool for collectivism

and individualism, which avoided the weaknesses of previous tools. The major finding from factor analysis was the presence of six clearly interpretable factors, three relating to individualism (competence, uniqueness and responsibility), and the other three factors to collectivism (advice, harmony, and closeness). The reliability of subscales was reported ranging from 0.62 or above. The Cronbach Alpha for each scale was 0.77 for advice, 0.71 for harmony, 0.62 for closeness, 0.78 for competence, 0.76 for uniqueness, and 0.73 for responsibility.

The survey-questionnaire was developed as a web-based survey and used iSurvey-Soton (<https://www.isurvey.soton.ac.uk>) as web-based survey host. An informed consent form was posted on the web as an opening page of the survey and participants can express their compliance to participate in the study by clicking on the button, saying "I agree to complete this survey", and thus complete the survey.

Web based surveys have already been extensively used for surveying with very large target populations and have advantages, such as a reduction in time and cost for data collection, reduction in transcription error, and the possibility of more sophisticated interactions (Dillman, 2007; Gaiser & Schreiner, 2009; Sue & Ritter, 2007). Another advantage of using a web-based survey is that participants' responses can be automatically computed in a database and can be easily transformed into numeric data in Statistical Package for Social Sciences (SPSS) and Microsoft Excel files or other software for more complex data analysis (Sue & Ritter, 2007).

4.4.3 Pilot Study

In order to establish stability and internal consistency reliability, face and content validity of the questionnaire, the survey instrument was pilot tested on the ten selected participants representing students who enrolled in 2010.1 at Faculty of Social and Political Sciences, Universitas Terbuka. Invitation emails were sent to the 15 selected students explaining the aim of the study and

requesting their willingness to participate in the pilot study. Ten students agreed to participate and they were provided the survey link. The goal of the pilot study is to validate the instrument, to test its reliability and to find out error testing (Brace, 2008). The participants in pilot test were excluded from the subsequent major study.

Internal consistency reliability was performed by examining the corrected item-total correlations, coefficient alpha for each subscale, and alpha if item deleted for each item on the subscale. On the intrinsic motivation scale, the scale alpha coefficient was 0.969 from four items. There was an item having the alpha-if-item deleted index that was higher than the scale alpha coefficient. The four items were kept with the refinement of one item: University allows me to communicate my ideas with my peer friends or classmates.

On the extrinsic motivation scale, there were four items and the scale alpha coefficient was 0.906. There were no items that had the alpha-if-item deleted indices that were lower than the scale alpha coefficient. Therefore, all items were retained.

The self-efficacy scale consisted of four items and had the scale alpha coefficient of 0.761. The alpha-if-item deleted indices of all items were lower than the scale alpha coefficient. On the volitional strategies scale, there were five items with the scale alpha coefficient of 0.619. There was an item having the alpha-if-item deleted index that was higher than the scale alpha coefficient. Therefore, the item was removed in order to increase the scale alpha coefficient (0.730). After removing the item, there were only two items having the alpha-if-item deleted indices that were higher than the scale alpha coefficient. These items were kept in an edited form to make them simpler.

On the scale of peer interaction, there were three items and the scale alpha coefficient was 0.607. There was an item having the alpha-if-item deleted index that was higher than the scale alpha coefficient. This item asked about the feeling of isolation as a distance learner. After deleting this item, the scale alpha coefficient increased to 0.804.

On the scale of student support services, initially there were four items with the scale alpha coefficient of 0.546. There were three items having the alpha-if-item deleted indices that were higher than the scale alpha coefficient. One item related to face-to-face tutorial had been deleted, while two other items related to registration services and satisfaction of services in the regional offices were retained and reworded.

On the scale of the learning services, there were nine items and had the scale alpha coefficient of 0.629. There were three items having the alpha-if-item deleted indices that were higher than the scale alpha coefficient. An item related to the satisfaction of the quality programme was kept and re-worded. Meanwhile, two items related to the relevancy of content's modules for academic need and career had been decided to remove it. After deleting such items, the scale alpha coefficient increased to 0.714.

4.4.4 Data Analysis

In this section, data analysis was divided into two steps. First, this study used descriptive statistics to describe, summarise, and explain students' characteristics. Frequency distribution or one-way tables and cross-tabulation were used to build a basic attribute of each item. Cross-tabulation was used to examine frequencies of observations that belong to specific categories on more than one variable and can be used to identify relationships between the cross-tabulated variables based on the cell values. Cross-tabulation is the easiest way of summarising data (Singh, 2007). The results of descriptive statistics were displayed in the form of tables, charts and graphs.

In the second step of data analysis, inferential statistical analysis was performed with particular statistical techniques based on the research questions:

1. What do the factors influence student progress?

Logistic Regression analysis was utilised in determining the significant predictors of student progress.

2. To what extent do three identified factors (individual, institutional, and external factors) influence student progress?

Logistic regression was used to explain relationships between three identified factors and student progress. Moreover, Spearman's correlations coefficient was used to explain inter-correlations among variables, and independent-samples t-test was employed to compare the mean scores of two different groups of students (active and inactive students groups).

Meanwhile, coefficients of determination (r) were used to determine the proportion of variance that was shared between the dependent variables and each of the independent variables.

4.4.5 Data Screening

In this section, assumptions of parametric data are described. The parametric assumptions are needed to perform logistic regression in order to get a precise reflection of reality (Field, 2009; Pallant, 2005; Tabachnick & Fidell, 2007).

Data screening assessed the normality and linearity of data, homoscedasticity, outliers, and missing data. The data screening had been conducted on 11 predictor variables: intrinsic motivation, extrinsic motivation, self-efficacy, volitional strategies, student support services, learning services, interaction, individualism, collectivism, family and friends, and work environment.

Descriptive statistics. Statistics data for all composite variables did not reveal unreasonable means or values (see Table 4.2). Only one variable, "extrinsic motivation", did not reach normality in the univariate normal, as its kurtosis was greater than two (Tabachnick & Fidell, 2007). Therefore, transformation procedure of square root was performed to get univariate normal on variable "extrinsic motivation".

Linearity. The examination of the scatterplots for all of these 11 variables showed that the relationships were found to be linear. Likewise, collinearity diagnostics also revealed that all of the bivariate correlations were below .90, which implied no variables were redundant (Pallant, 2005; Tabachnick & Fidell, 2007).

Table 4.2: Descriptive statistics

Descriptive Statistics							
	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Intrinsic Motivation	109	4.57	.516	-.487	.231	-1.295	.459
Extrinsic Motivation	100	4.34	.768	-1.353	.241	2.854	.478
Self-efficacy	115	4.16	.523	.182	.226	.320	.447
Volitional strategies	111	4.31	.569	-.095	.229	-.579	.455
Interaction	105	3.89	.655	-.089	.236	-.139	.467
Individualism	68	4.29	.548	.049	.291	-.525	.574
Collectivism	72	4.40	.548	-.129	.283	-.970	.559
Student Support	104	4.06	.680	-.449	.237	.485	.469
Learning services	93	4.20	.582	-.388	.250	1.428	.495
Family and friends	114	4.19	.593	-.079	.226	-.339	.449
Work environment	115	4.04	.730	-.480	.226	.170	.447
Valid N (listwise)	50						

Homoscedasticity. Homogeneity of variance was assessed through Box's M test. The result of test reported a non-significant M ($P > 0.05$) that indicated the data had a similarity and lack of significant differences.

4.4.6 Reliability and Validity

The reliability and validity are two elements that determine the quality of the measurement instrument. The reliability of a measure concerns its ability to produce similar results when repeated measurements are made under identical conditions. Reliability refers to the extent to which the measurement is free of

measurement error (Bordens & Abbott, 2011; Muijs, 2004). Furthermore, reliability is a prerequisite for validity and puts a ceiling on how high validity can be (Bordens & Abbott, 2011). On the other hand, validity focuses on ensuring the degree to which a study accurately reflects or assesses the specific concept that the researcher is attempting to measure (Bordens & Abbott, 2011; Mitchell & Jolley, 2010; Muijs, 2004). In other words, validity indicates the instrument's accuracy.

This study used internal consistency reliability for assessing the instrument's reliability. Internal consistency refers to consistency within the instrument. The question addressed is whether the measure is consistently measuring the same trait or ability across all items on the test (Lodico, Spaulding, & Voegtle, 2006). An approach used to establish internal consistency of a measure is to examine the correlations between each item and the overall score on the instrument. The inter - item correlation was assessed by using Cronbach's coefficient alpha of over 0.7 (Lodico et al., 2006; Muijs, 2004). The analysis provides information on which items need rewording or even need removal from the scale.

Table 4.3: Cronbach's alpha

Subscales	Cronbach's alpha
Intrinsic Motivation	0.726
Extrinsic motivation	0.745
Self-efficacy	0.758
Volitional strategies	0.519
Student Support Services	0.743
Learning services	0.789
Interaction	0.593
Family and friends	0.663
Working environment	0.814
Individualism	0.693
Collectivism	0.690

The validity of a measure is the extent to which it measures what we intend it to measure. In this study, content, criterion-related, and construct validity were established in assessing the validity of the research instrument of student

progress. In the questionnaire, content validity assessed whether or not the content of the manifest variables (indicators) was right to measure the 11 variables of student progress. According to Muijs (2004), researchers should make sure the content validity of instruments by looking at its accordance to a theory of how the concept works and what it is (Muijs, 2004).

Criterion-related validity involves the examination of a test and its relationship with a second measure. It reflects the degree to which two scores on two different measures are correlated (Lodico et al., 2006). A form of predictive validity was used to demonstrate the accuracy of the student progress instrument by comparing it with another measurement, which had been demonstrated to be valid. For this purpose, some studies of student persistence in the educational context became benchmarks for the consistency of the result. If the correlation was high between the existing instruments and previous studies, then the existing instruments were considered to have criterion-related validity in predicting student progress.

Construct validity involves a search for evidence that an instrument is accurately measuring an abstract trait or ability. In other words, construct validity will be assessed by clarifying the relationship between the internal structure of the instruments and theoretical knowledge of student progress. To do this, confirmatory factor analysis was used to ensure whether each item measured the subscale it was supposed to measure and not any other. Factor loadings for survey items helped to show a correlation between the item and the overall factor (Muijs, 2004).

4.5 Phase II: Qualitative

4.5.1 Data Collection

In this qualitative phase, the study attempted to elaborate the results of the quantitative phase obtained in the first phase. The multiple case study design was employed in collecting and analysing the qualitative data.

Case study has been defined in many ways, according to philosophical, methodological, and epistemological preferences. In this study, case study is defined based on Simon's definition:

Case study is an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project, policy, institutions, programme or system in a 'real life' context. It is research-based, inclusive of different methods and is evidence-led. The primary purpose is to generate in-depth understanding of a specific topic (as in a thesis), programme, policy, institution or system to generate knowledge and/or inform policy development, professional practice and civil or community action (Simons, 2009, p. 21)

This definition is appropriate to the purpose of this study in which was to discover through detailed or in-depth data collection and analysis the extent to which and in what ways the identified factors (individual, institutional, and external) contribute to student progress in the Indonesia Open University.

Purposeful sampling was employed in this case study design by drawing samples from volunteered participants through the quantitative survey. There were 69 participants who volunteered to participate in the interview by providing their email addresses and phone numbers. Considering a representation of diverse cases, a sampling strategy of maximum variation was used to represent enrolment status and gender across the cases (Creswell, 2007). However, of 69 participants who had been contacted through email and telephone, only 13 participants volunteered to participate in the interviews.

Table 4.4: Number of participants by registration period, enrolment status, and gender

Registration Period	Interview Type	Active Students		Inactive Students		Total
		Male	Female	Male	Female	
2010.1	Telephone		1			4
	Email	3				
2010.2	Telephone	2		1	1	4
	Email					
2011.1	Telephone	1				1
	Email					
2011.2	Telephone	2	1	1		4
	Email					
Total		8	2	2	1	13

The primary data collection strategy in this qualitative phase was in-depth semi-structured interviews. Online interviews through telephone and email were selected because of busywork and long distances among selected participants. Most of the participants had been residing in different cities and regions and it would be highly time and cost consuming to visit them to conduct face-to-face interviews. Whenever possible, synchronous interviews through telephone were conducted; however, several participants requested for e-mail interviews due to their busywork and the limited telephone signals.

Table 4.5: Interview type

Interview Type	Active Students		Inactive Students		Total
	Male	Female	Male	Female	
Telephone	Haril	Ina	Amri	Devi	10
	Hasan	Wati	Fahri		
	Danu				
	Santoso				
	Indra				
Email	Wawan				3
	Zulki				
	Rama				

The interview protocol encompassed twelve open-ended questions and the contents of the protocol questions were grounded in the results of the quantitative phase. The questions focused on individual, institutional, and

external factors in relation to student progress in the Indonesia Open University. The protocol was pilot tested on a student selected from the same target population, but then excluded from the study. Furthermore, the participants had been informed that the interviews were transcribed verbatim and they had an opportunity to review and, if necessary, correct the contents of the interview after it had been transcribed.

Table 4.6 Characteristics of participants

Registration Period	Typical	Active Students				Inactive Students		Total
		Male		Female		Male	Female	
2010.1	Age	43	36	31	26			4
	Job	FT	FT	SE	FT			
	Family structure	Mc	Mc	S	S			
	Ethnicity	MJ	Jv		Jv			
2010.2	Age	43				32		4
	Job	FT				FT	FT	
	Family structure	Mc				Mc	Mc	
	Ethnicity	My				My		
2011.1	Age	32						1
	Job	FT						
	Family structure	Mc						
	Ethnicity	My						
2011.2	Age	32	37		28	45		4
	Job	FT	PT		SE	PT		
	Family structure	S	Mc		S	Mc		
	Ethnicity	Jv	Dy		Jv	Sd		
Total								13

FT: Full time job
 PT: Part time job
 Mc: Married and has children
 S: Single/not married

Ethnicity
 Jv: Javanese
 Sd: Sundanese
 MJ: Mix of Javanese & Malay
 My: Malay
 Dy: Dayak

4.5.2 Data Analysis

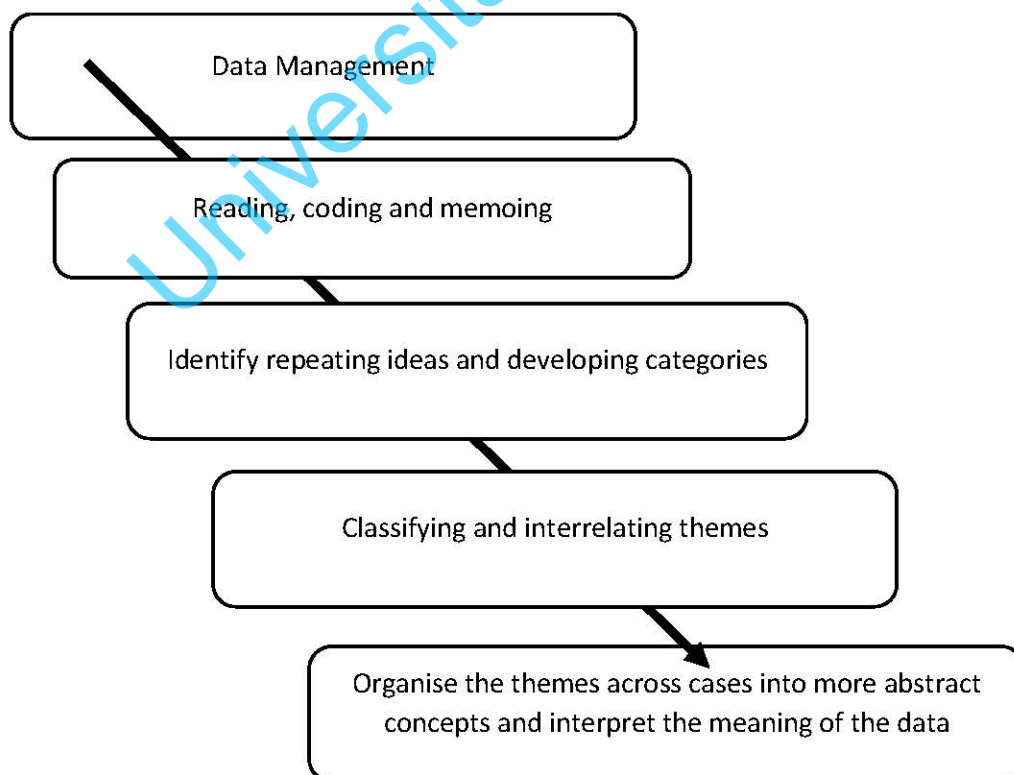
The process of data collection and data analysis are interrelated and often go on simultaneously in the qualitative research. The general process of qualitative data analysis consists of three strategies: preparing and organising the data (text data and image data) for analysis, then reducing the data into themes through the process of coding and condensing the codes, and finally representing the data in figures, tables, or a discussion (Creswell, 2007).

The procedures of qualitative data analysis in this study encompassed: 1). Data management. Data were organized into file folders or computer files. Computer programme (NVIVO Software) was used in this phase of analysis (Creswell, 2007). 2). Reading, coding, and memoing. After organising the data, analysis continued by reading through the transcripts (raw texts) and constructing list of relevant texts (coding) related to research concerns. In this step, the researcher started to write memos of how the texts were selected (Auerbach & Silverstein, 2003; Creswell, 2007). In this phase, around 205 codes (relevant texts) had been identified from the interview transcripts. 3). Identifying repeating ideas and developing categories. In this phase, two levels of analysis were conducted: within each case and cross-case analysis (Yin, 2003). The repeating ideas were initially identified within case from the selected relevant texts. After that, the next step was to develop categories by finding groups of repeating ideas that have something in common into coherent categories. At the cross-case analysis level, the researcher sought to look for patterns and relationships amongst the categories across cases (Auerbach & Silverstein, 2003; Creswell, 2007; Hatch, 2002). 4). Classifying and interrelating themes. In this phase, the researcher organised and analysed the themes within each individual case. The next step was to classify and compare the identified themes from individual cases into larger cases (across cases) (Auerbach & Silverstein, 2003; Creswell, 2007; Hatch, 2002). The analysis of the themes across cases was performed to investigate the extent to which the selected factors had similar or different impacts on

participants' progress. In this phase, there were nine themes identified within each case and across the cases: intrinsic motivation; extrinsic motivation; volitional strategies; quality of academic services; quality of administration services; interaction; support from family members; support from colleagues; and support from employers. 5). Finally, the last step was to organise the identified themes into more abstract concepts and interpret the meaning of data (Auerbach & Silverstein, 2003; Creswell, 2007). In this phase, the nine themes were organised into five major themes: self-motivation; volitional strategies; quality of institutional services; interaction; and supporting environment.

In terms of this multiple case study design, data analysis consisted of making detailed description of the case and its setting. Furthermore, the analysis of qualitative data was performed at two levels: within each case and across the cases (Stake, 1995). Analysis of this data was performed as a holistic analysis of the entire case or as an embedded analysis of a specific aspect of the cases (Yin, 2003).

Figure 4. 1 Model of Multiple Case Study Analysis



4.5.3 Validation and Reliability in Qualitative Research

Many qualitative researchers disagree with the epistemological assumptions underlying the notion of validity and reliability. They argue for a new vocabulary and rhetoric with which to discuss the validity and reliability (Seidman, 2006). Accordingly, there are several terms used in judging the quality of qualitative research. Lincoln and Guba (1985), for example, substitute the notion of validity with “authenticity”, “trustworthiness”, “credibility” (replacing the quantitative concepts of internal validity), “transferability” (replacing the quantitative concept of external validity), “dependability” (replacing the quantitative concept of reliability), and “confirmability” (replacing the quantitative concept of objectivity) (Cohen, Manion, & Morrison, 2011).

In this qualitative phase, “validation” was emphasised as a process rather than “verification” and as a distinct strength of qualitative research in that the account made through extensive time spent in the field, the detailed thick description, and the closeness of the researcher to participants in the study all add to the value or accuracy of a study. In this study, several strategies were employed to validate the “accuracy” of the study: 1) prolonged engagement and building trust with the participants, learning the culture, and checking for misinformation that stems from distortions introduced by the researcher or participants; 2) in triangulation, multiple and different sources, methods, investigators, and theories were used to provide supporting evidence; 3) bias was clarified from the outset of the study. In this clarification, comments were provided on past experiences, biases, prejudices, and orientations that likely shape the interpretation and approach to the study; 4) In member checking, the researcher solicits participants’ views of the credibility of the findings and interpretations; 5) Rich or thick description (Creswell, 2007).

Reliability in qualitative research refers to the stability of response to multiple coders of data set (Creswell, 2007). Therefore, in this study, reliability is

enhanced by obtaining detailed field notes and developing an inter-coder agreement process with two steps: 1) to develop a codebook of codes that will be stable and represent the coding analysis of independent coders; 2) read through several transcripts independently and coded each manuscript.

4.6 Summary

This study used a mixed methods approach in order to better understand student progress in the Indonesia Open University. An explanatory sequential design was used by applying quantitative method in the first phase and followed by qualitative method. In the first phase, online survey was used to collect quantitative data and a multiple case study analysis was employed to investigate quantitative results. Both quantitative and qualitative findings were integrated and discussed in chapters 7 and 8. However, this study provided more priority to qualitative research due to it represented the major aspect of data collection and analysis.

In the upcoming chapter, quantitative analysis is presented by including descriptive statistics results and inferential statistics results.

Chapter 5 Quantitative Results

In this chapter, the quantitative results are reported descriptively by analysing and presenting survey data including student characteristics, student academic profile, descriptive analyses of scales, independent-samples t-test, and logistic regression analysis.

5.1 Demographic Information

In this section, the participant characteristics are described from the self-report of demographic questionnaires about age, gender, ethnicity, previous education, employment, and family status.

5.1.1 Age

The age of participants in this study fell into seven age categories: (1) 19 – 24, (2) 25 – 29, (3) 30 – 34, (4) 35 – 39, (5) 40 – 44, (6) 45 – 49, (7) >50. The most typical age group of participants was between 25 – 29 (29%). Meanwhile, age category of 35 – 39 was the ranked second (21.4%) and 30 – 34 was the third highest (19.3%). The age categories of over 45 were the smallest category both in the active and inactive student groups.

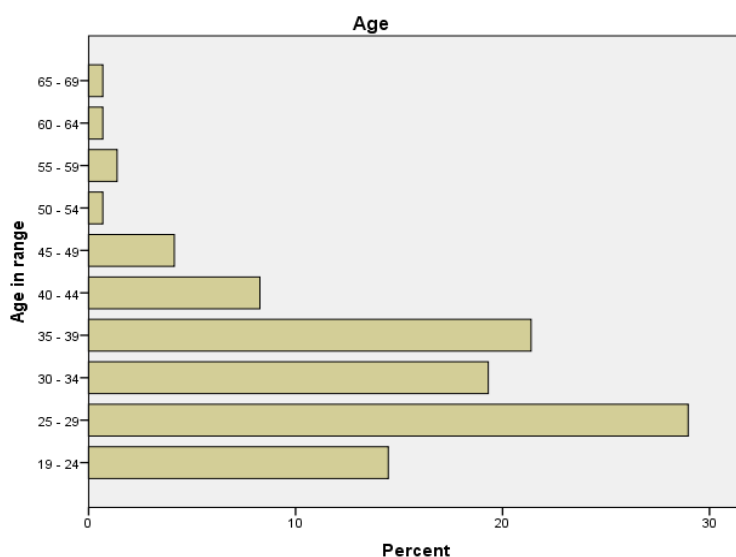
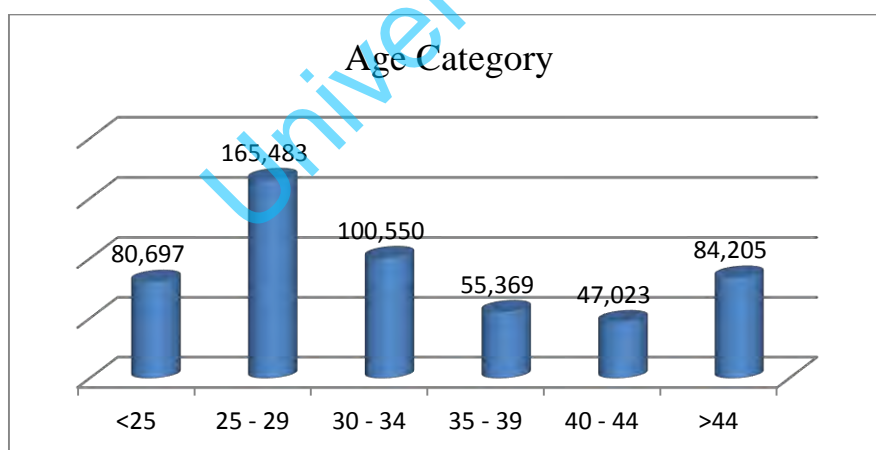


Figure 5.1: Age categories of students

The age categories represented in this study mirrored the statistical data of student age category released by the Indonesia Open University (per 30 April 2013). The most typical student age ($N=533.327$) was between 25 – 29 (31.03%) and 30 – 34 (18.85%) ranked second. The smallest age category was represented by age category between 40 – 44 (8.82%).



Source: <http://www.ut.ac.id/tentang-ut/ut-dalam-angka.html#umur>

Figure 5.2: Age category in the Indonesia Open University

5.1.2 Gender

The majority of participants in this study were male, at 62.3%, while 37.7% were female. While the data was split into the active and inactive group, male participants dominated within both groups. In the active group, there were considerably more male (61.1%) than female participants (38.9%). Meanwhile, the male participants (75%) from inactive group were threefold higher than the female participants (25%).

5.1.3 Ethnicity

Most of the participants could be identified with Javanese ethnic group (42.4%). Malay (14.4%) and Sundanese (13.6%) ethnic groups occupied the second and the third ranks of ethnic group in this study. Meanwhile, when the data was split into active and inactive groups, the Javanese ethnic group was still the dominant group (42% and 38.1%).

Table 5.1: Ethnic composition of students

Race	Frequency	Percent
<i>Active Students</i>		
Javanese	42	42.0
Malay	15	15.0
Sundanese	13	13.0
Aceh	05	5.0
Chinese	01	2.3
Mixed race	08	8.0
Balinese	01	1.0
Batak	02	2.3
Dayak	03	3.0
Makassar	05	5.0
Madura	02	2.0
Banjar	02	2.0
Sasak	01	1.0
<i>Inactive Students</i>		
Javanese	08	38.1
Mixed race	02	9.5
Malay	03	14.3
Sundanese	04	19.0
Batak	02	9.5
Chinese	01	4.8
Acehnese	01	4.8
N = 132		

5.1.4 Previous Education

More than half of the participants in this study graduated from Senior High Schools (73.2%). The second largest group of participants were those students who had the Diploma degree (18.1%) and then 7.4% of participants had the Bachelor degree. Finally, the smallest group was the Master's degree (1.3%).

According to enrolment status, most of the participants in the active students group (75.9%) and inactive students group (54.2%) had previously completed secondary school programme.

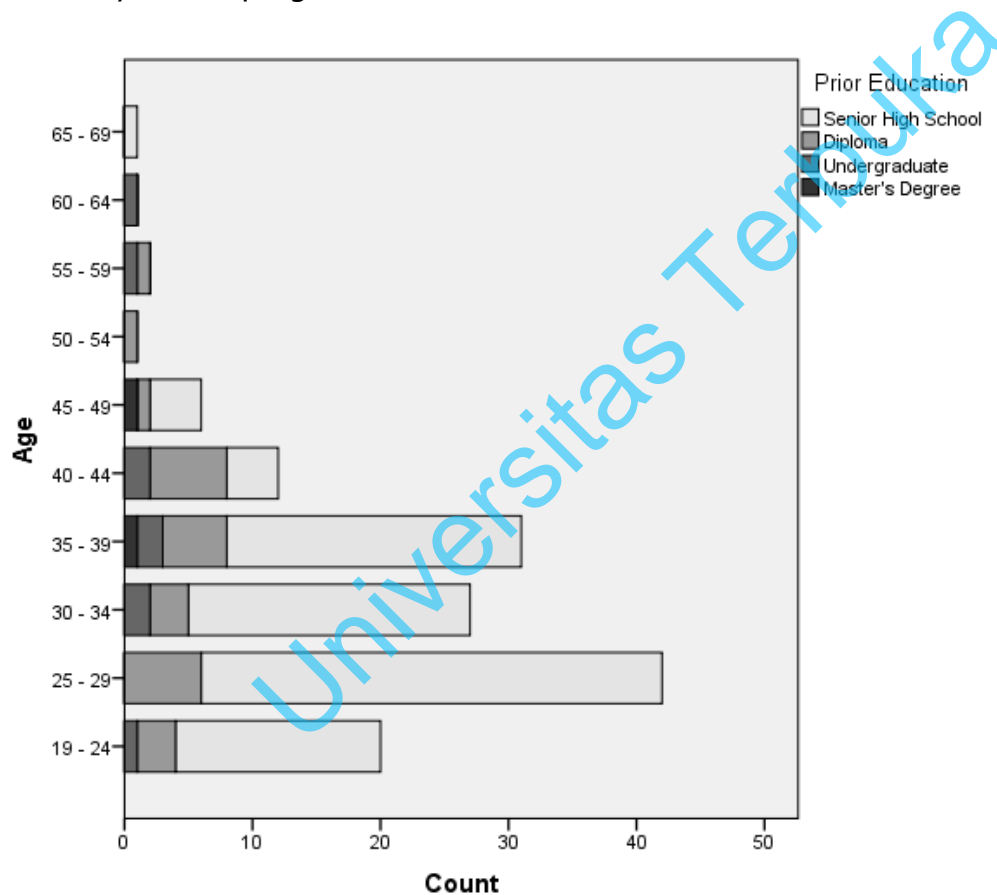


Figure 5.3: Students' prior education by age category

Likewise, as illustrated in the Figure 5.3, most of younger students (<39) were graduated from Senior High School (secondary school). Table 5.2 presented the

data that the majority of male and female students (76.4% and 67.8%) were graduated from Senior High School. Similarly, as shown in the table 5.2, most of the students who graduated from Senior High School could be identified as Javanese people (74.5%).

Table 5.2: Previous education by gender and ethnicity

Category	Senior High School	Diploma Degree	Bachelor Degree	Master's Degree
<i>Gender</i>				
Male	71 (76.4%)*	15 (16.2%)	5 (5.3%)	2 (2.1%)
Female	38 (67.8%)	12 (21.5%)	6 (10.7%)	-
<i>Race</i>				
Javanese	41 (74.5%)*	10 (21.4%)	4 (4.8%)	-
Malay	17 (89.5%)	2 (10.5%)	-	-
Sundanese	12 (70.6%)	4 (23.5%)	-	1 (5.9%)
Mixed race	6 (60%)	1 (10%)	2 (20%)	1 (10%)
Aceh	5 (83.3%)	1 (16.7%)	-	-

*% within gender and ethnicity

5.1.5 Employment

More than 50% of the participants were employed full-time (54%), 25.3% of the participants were employed part-time, 12% of the participants were self-employed, and 8.7% of the participants were unemployed.

The equal proportion of employment status was found in the active and inactive students groups. In the active group, most of the participants were employed full-time (55.8%), 23.9% of participants were employed part-time, 11.5% of the participants were self-employed, and 8.8% of the participants were unemployed. While In the inactive group, 50% of the participants were employed full-time, 29.2% of the participants were employed part-time, 8.3% of the participants were self-employed, and 12.5% of participants were unemployed.

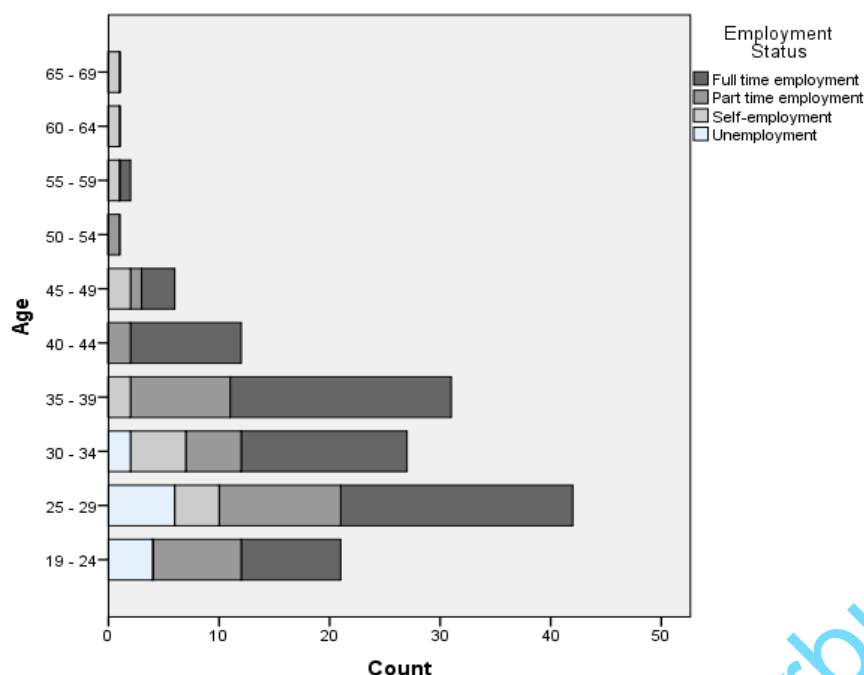


Figure 5.4: Students' employment status by age characteristics

Figure 5.4 shows that the majority of students was employed full-time in almost every age category. Furthermore, it was observed from the Figure 5.4 that the proportion of unemployed in younger student group (<34) were bigger than older students group (35+).

At the same time, Table 5.3 presents information that the majority of male and female students were employed full-time. Meanwhile, 11.4% of male participants and 11.6% of male participants were unemployed students.

Table 5.3: Students' employment status by enrolment status and gender

Category	Full Time Employment	Part Time Employment	Self-Employment	Unemployment
<i>Enrolment Status</i>				
Active students	63 (55.8%)*	27 (23.9%)	13 (11.5%)	10 (8.8%)
Inactive students	12 (50%)	7 (29.2%)	2 (8.3%)	3 (12.5%)
<i>Gender</i>				
Male	51 (54.3%)*	24 (25.5%)	11 (11.7%)	8 (8.5%)
Female	30 (53.6%)	14 (25.0%)	7 (12.5%)	5 (8.9%)

*% within enrolment status and gender.

5.1.6 Family Structure

The majority of the participants were married and had children under 18 years old (53%) and 6.0% of the participants were married and had children over 18 years old. Furthermore, there were 37.7% of the participants reporting as a single person (not married). 1.3% of all participants were single parents with children under 18 and 2.0% of all participants were divorced or widowed participants.

In the active student group, there were more participants classified as married and had children under 18 (53.1%), and then followed by participants who stated as a single person, not married (37.2%). 5.3% of all participants were married and had children over 18. Meanwhile, there were only 1.8% for single parent with children under 18 and 2.7% for divorced or widowed person. At the same time, in the inactive group, the participants classified as married and had children under 18 having an equal proportion (45.8%) with another group (single person, not married). Meanwhile, only 8.3% of the participants were married and had children over 18.

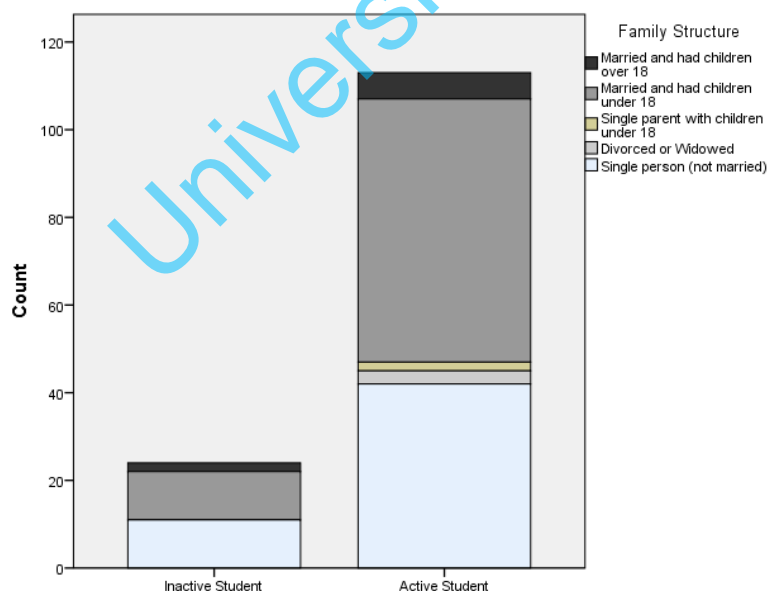


Figure 5.5: Students' family structure by enrolment status

5.2 Academic Profiles

This section describes students' academic profiles including course programme, regional offices, enrolment status, and reasons for non-enrolment.

5.2.1 Course Programme

The majority of the participants stemmed from two course programmes: School of English for Translation (29.7%) and Government Science (29.7%). The second rank was occupied by students of State Administration Science (25.0%). 11.5% of all participants were students of Sociology (13.39%) and the least represented groups were students of Business Administration (2.0%) and Communication Science (2.0%).

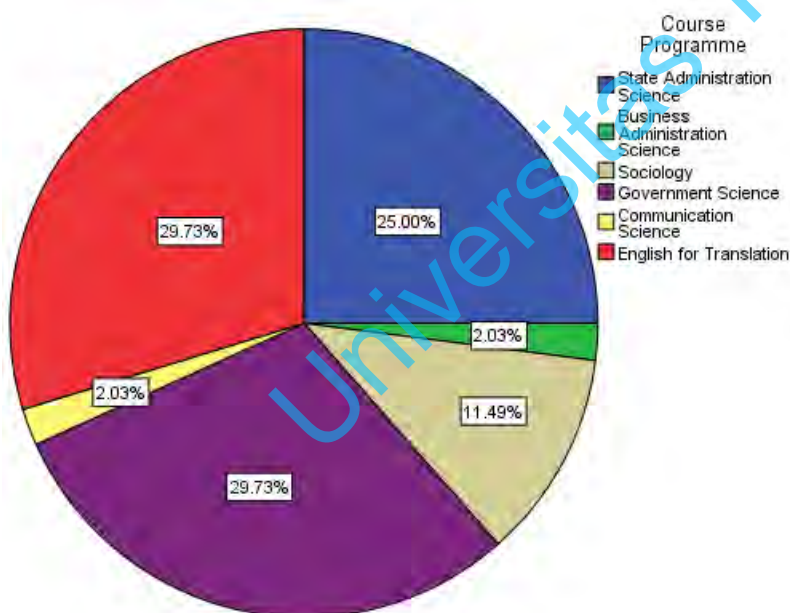


Figure 5.6: Selected course programmes by participants

In the active group, most of the participants were enrolled as students of Government Science (30.4%) and then followed by students of State

Administration Science (29.5%) and School of English for Translation (27.7% respectively). Students of Sociology had proportion of 8.0% and the smallest representation of student group was students of Communication Science (1.8%).

In the meantime, the inactive group had contrasting representation relative to the active group. There were 41.7% of participants choosing School of English for Translation as a course programme and then followed by Sociology (29.2%). Students of Government Science had a percentage of 20.8%, while the smallest group was students of State Administration Science (2.03%).

5.2.2 Regional Offices

Most of the participants in this study were registered as students of the Indonesia Open University in the regional office in Jakarta (30.2%). 8.1% of the participants were registered in the regional office of Batam and more than 50% of participants were distributed across other 25 regional offices (See appendix 2d.2).

5.2.3 Enrolment Status

The majority of participants were the active students (75.2%/N=115) and then followed by the inactive students (15.7%/N=24). There was 9.2% (N=14) of the participants not reporting their enrolment status.

Furthermore, there were the participants who did not enrol between the registration period of 2010.2 to 2013.2 for one registration period or more. However, as long as the participants still enrolled within four consecutive periods would be classified as active students.

In terms of the reasons of non-enrolment, most of the participants did not enrol in one or more registration periods due to having heavy workloads (42.9%). The next reason was lack of support from the University (20.4%), financial problem (14.3%), delivering or caring for babies (8.2%), family

problem (4.1%), time management (4.1%), health issues (2%), and other reasons (2%). These findings indicated that the majority of participants had difficulty to allocate their time for studies and they needed support from their employers during their studies.

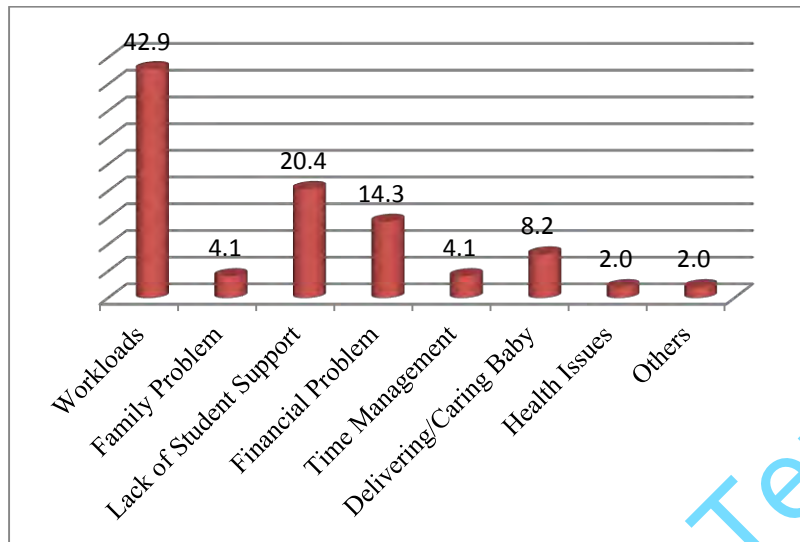


Figure 5.7: Reasons of non-enrolment

These reasons were consistent with prior research which showed that the main reasons for non-re-enrolment in the Korea National University were the heavy workloads demanded in students' jobs, the lack of feedback on the students' work and a dislike of distance learning (Choi et al., 2013)

5.3 Descriptive Analysis of Scales

This section reports the findings of the descriptive frequency analysis of the items on the three survey scales: individual factors, institutional factors, and external factors.

5.3.1 Individual Factors

The individual factors consist of four variables, including self-motivation, self-efficacy, and volitional strategies. The items in each scale are measured on a five-point Likert scale from “Strongly disagree” to “Strongly agree”.

Self-Motivation

Self-motivation scale encompasses two scales: intrinsic motivation (four items) and extrinsic motivation (three items).

Intrinsic motivation

Intrinsic motivation scale consisted of four items and the results of the research indicated that the majority of participants from both active and inactive student groups had positive responses to all items. Furthermore, the median scores of data for both active and inactive student group were 4.0. These findings indicated that both active and inactive student group had high intrinsic motivation to study at the university.

In terms of Likert item analysis, the majority of active students had positive responses to learning new things in the University. They agreed (49.6%) and strongly agreed (47.8%) that they experienced pleasure and satisfaction while learning new things. Likewise, 92.8% of active students and 95.7% of inactive students responded positively that studying at the university would encourage them to learn about many things that interest them. At the same time, more than half of the active and inactive students (73%) considered positively that studying at the university helped them to communicate their ideas to other people. Finally, more than 93% of the participants across the groups provided positive responses that they would get self-satisfaction if they could complete their Bachelor degrees within eight semesters.

For the first item, 47.8% of the participants in the active student group strongly agreed and 49.6% of participants agreed with the item “I experience pleasure and satisfaction while learning new things”. 2.6% of participants remained

unsure about their feelings. Meanwhile, in the inactive student group, 34.8% of participants strongly agreed with the statement and 60% of participants agreed with the statement.

Similarly, responses to the second item (Study at the University allows me to continue to learn about many things that interesting for me) were consistent with the first item. In the active student group, 49.6% of participants strongly agreed with the statement, 45.2% participants agreed with the statement, and 5.2% of participants neither agreed nor disagreed with the statement (in the 'unsure' option). On the other hand, in the inactive student group, 52.2% of participants strongly agreed with the statement and 40% of participants agreed with the statement. In addition, only 4.3% of participants selected the option of unsure.

In the third item (study at the University allows me to communicate my own ideas to others, particularly to my classmates), the responses were slightly different from the other questions. There were negative responses from the active and inactive groups. In the active student group, 18.0% of participants strongly agreed with the statement, 55.0% of participants agreed with the statement, 21.6% of participants were unsure with the statement, and 5.4% of participants disagreed with the statement. Meanwhile, in the inactive student group, 31.8% of participants strongly agreed with the statement, 54.5% of participants agreed with the statement, 9.1% of participants were unsure with the statement, and 4.5% of participants disagreed with the statement.

The last item in the scale asked about self-satisfaction when completing the study within eight semesters (Study at the University allows me to experience a personal satisfaction with my quest for completing my study within eight semesters). There were no negative responses from the active and inactive student groups. Meanwhile, 52.7 % of participants strongly agreed with the statement, 42.0% of participants stated that they agreed with the statement, 3.6% of participants were unsure, and 1.8% of participants disagreed with the statement. In addition, 34.8% of participants in the inactive student group

strongly agreed with the statement, 43.5% of participants agreed with the statement, 17.4% of participants were unsure, and 4.3% of participants disagreed with the statement.

Extrinsic motivation

Extrinsic motivation scale had three items measuring external motivation to go to University. The results of the study delineated that the median scores of extrinsic motivation scale were 4.0 for both active and inactive student groups. These results indicated that the majority of active and inactive students had high extrinsic motivation to study at the Indonesian Open University.

The first item emphasises the extrinsic motivation to obtain a more respectable career in the future by studying at the University (I think that the University level of education will help me better prepare for a career that I have chosen). In the active student group, the majority of participants, 54.9%, strongly agreed with the statement and 36.3% of participants agreed with the statement. Meanwhile, 6.2% of participants were unsure about the statement and 0.9% of participants disagreed with the statement. In the inactive student group, 59.1% of participants strongly agreed with the statement, 36.4% of participants agreed with the statement, and 4.5% of participants disagreed with the statement.

For the second item (in order to have a better salary later on), there were negative responses from the active group and the inactive group. In the active student group, 21.1% of participants strongly agreed with the statement, 44.3% of participants agreed with the statement, 17.4% of participants were unsure with the statement, 11.0% of participants disagreed with the statement, and 6.4% of participants strongly disagreed with the statement. Meanwhile, in the inactive group, 28.6% of participants strongly agreed with the statement, 47.6% of participants agreed with the statement, 19% of participants disagreed, and 4.8% of participants disagreed with the statement.

The last item on the scale reported on extrinsic motivation to attain social prestige in the community. The response to this item was slightly similar to

prior item (extrinsic motivation to have a better salary later on). There were negative response from the active group and the inactive group. In the active group, 29.1% of participants strongly agreed with the statement, 45.5% of participants agreed with the statement, 11.8% of participants who unsure with the statement, 9.1% of participants disagreed with the statement, and 4.5% of participants strongly disagreed with the statement. In the inactive group, 30.8% of participants strongly agreed with the statement, 38.5% of participants agreed with the statement, 15.4% of participants were unsure with the statement, and 15.4% of participants disagreed with the statement.

Self-efficacy

The self-efficacy scale contained four items and was measured on a 5-point Likert type scale from “strongly disagree” to “strongly agree”. The majority of participants had positive responses to the four items and there were very few negative responses to the items. Both active and inactive group shared equal median scores (4.0). These median scores indicated that both active and inactive groups had high self-efficacy.

The first item of self-efficacy scale was “I am certain I can understand the most difficult material presented in the modules for this degree programme”. Few participants in the active group (4.5%) and the inactive group (12.5%) strongly agreed with this statement. However, the number of participants that agreed with the statement increased sharply both in the active group (46.4%) and in the inactive group (50.0%). There was a high number of participants that were unsure about the statement from both the active group (37.5%) and the inactive group (20.8%). Moreover, few participants provided negative responses to this item. In the active group, 9.8% of participants disagreed and 1.8% of participants strongly disagreed with the statement. Meanwhile, 16.7% of participants in the inactive group stated that they disagreed with the statement.

The next item focused on the self-confidence to do an excellent job on the final assessments in every academic term. The highest number of participants was the participants that agreed with the statement either in the active group (61.9%) or in the inactive group (62.5%). The results indicated that the majority of participants from both groups had a high level of self-confidence to do an excellent job on the final assessments. Furthermore, 8.0% of participants from the active group and 8.3% of participants from the inactive group strongly agreed that they had the self-confidence to do an excellent job on the final assessments in every academic term. However, the number of participants that were unsure about their confidence levels was still high from both the active group (27.4%) and the inactive group (25.0%). On the other side, there a few participants provided negative responses to this item. The number of participants that had a low level of self-confidence (disagree) among the inactive group (4.2%) was slightly higher than the active group (2.7%).

Regarding the third item (I am confident that I am able to study independently), the majority of participants from both the active group (71.7%) and the inactive group (50%) had high self-confidence that they are able to study independently. The proportion of the active group (17.7%) that strongly agreed with the statement was lower than the inactive group (25%). In contrast with this, the number of participants from the inactive group that were unsure about their self-efficacy (20.8%) was higher than the active group (8.0%). Similarly, the negative responses from the inactive group that had low self-efficacy (4.2%) were higher than the active group (2.7%).

The last item was a statement of self-confidence toward the academic ability (I am confident with my academic ability). Overall, more than 50% of participants from both the active group and the inactive group had high levels of confidence in their academic abilities. In the active group, 69 % of participants had a high self-confidence rating and 23.9% of participants had very high self-efficacy. In contrast, 37.5% of participants from the inactive group had very high levels of self-confidence and 54.2% of participants reported high levels. There were a few participants unsure about their self-efficacy from both the active group (6.2%) and the inactive group (4.2%). Moreover, a slight number of

active (0.9%) and inactive (4.2%) students groups were not confident with their academic ability.

Volitional Strategies

There were four items in the volitional strategies scale. The results of the study revealed that the median scores of the scale were 4.0 for both the active student group and the inactive student group. These results indicated that the majority of participants had high volitional strategies during their studies at the Indonesia Open University.

The first item stated about “I remind myself that I can accomplish my study within the recommended terms when I am always to be an active student”. In the active group, the highest proportion of participants was the participants that agreed with the statement (50.0%) and another 30.4% of participants strongly agreed with the statement. In the inactive group, the results were not much different. In line with the active group, the proportion of inactive students that agreed with the statement (45.8%) was higher than the proportion of those who strongly agreed (25.0%). The results indicated that most of the participants from both groups had high self-awareness about the progressive enrolment as the requirement in completing their study within eight semesters. However, the number of participants unsure about the statement was still high among the active group (17.0%) but they were still smaller than in the inactive group (29.2%). Additionally, there were few negative responses to this statement from the active group (2.7%).

Students’ self-motivation to study could be kept at the highest level by students taking some personal efforts. One of them is to make studying more fun or challenging for the students. The majority of participants from both the active group (68.1%) and the inactive group (50.0%) agreed with the statement “I think of interesting or different ways to make studying more fun or challenging for me”. Furthermore, 25.7% of participants from the active group and 33.3% of participants from the inactive group strongly agreed with the

statement. On the other side, a few participants were unsure about the statement from both the active group (5.3%) and the inactive group (16.7%). Only 0.9% of participants disagreed with the statement from the active student group.

Overall, the majority of participants from both the active group (41.1%) and the inactive group (54.2%) agreed with the third item (I think about how disappointed others (family/friends) will be if I do poorly). However, there was a significant gap between the active group (35.5%) and the inactive group (4.2%) regarding participants' preference to choose an option of "strongly agree". Meanwhile, the number of participants who were unsure about the statement was differed greatly between the active group (6.5%) and the inactive group (25.0%). Few participants from the active group disagreed with (12.1%) and strongly disagreed with (4.7%) the statement. Only 16.7% of the inactive students disagreed with the statement.

The last item focused on a statement of "I think about the sacrifices that I have made (financial and time) while being in college". The majority of participants from both the active group (49.5%) and the inactive group (60.9%) realised about the sacrifices that should be made while being in the university and therefore they agreed with the statement. Furthermore, the number of participants that strongly agreed with the statement from both groups (the active group: 36.9% and the inactive group: 21.7%) was still high. In contrast, only a few participants were unsure about the statement from both the active group (6.1%) and the inactive group 13.0%). Only 6.3% of active students disagreed with the statement and 4.3% of inactive students disagreed with the statement. Moreover, only 2.7% of inactive students strongly disagreed with the statement.

Summary

The majority of the participants in either the active or inactive student groups had high intrinsic and extrinsic motivation. These patterns were also consistent with other two scales: self-efficacy and volitional strategies, that most of the

participants either active or inactive groups had high self-efficacy and volitional control during their studies at the Indonesia Open University.

5.3.2 Institutional factors

Institutional factor contains three variables: student support services, learning services, and peer interactions. These scales are measured on a 5-point Likert scale from “strongly disagree” to “strongly agree”.

Student support services

Student support services scale contained four items and was measured on a 5-point Likert scale from “strongly disagree” to “strongly agree”. Overall, the median scores for the active and inactive student groups were 4.0 respectively. The median scores indicated that the majority of participants within both groups were satisfied with the student support services provided by the Indonesia Open University.

The first item asked about the registration services in the regional offices of the Indonesia Open University. In general, the majority of participants from both the active group (60.9%) and the inactive group (62.5%) were satisfied with the registration services and they assessed that the registration process was convenient, efficient and responsive. Furthermore, 18.3 % of participants from the active student group had high satisfaction and the proportion of participants was higher than in the inactive group (8.3%). On the other side, there was a high number of participants from the active group (17.4%) that were unsure about the quality of the registration services. Meanwhile, only 16.7% of participants from the inactive group were unsure about the services. Similarly, only few participants from both the active group (0.9%) and the inactive group (12.5%) were not satisfied with the registration services.

In terms of access to the library resources, there were different opinion from the active group and the inactive group. In the active group, there were equal

proportions between positive and negative responses. In the positive side, 33.7% of participants agreed that they had access to the library resources and 8.2% of participants strongly agreed with the statement. The negative responses were slightly consistent with the positive responses. The results reported that 31.6% of participants disagreed and 4.1% of participants strongly disagreed with the ease of access to library resources. Meanwhile, the proportion of undecided participants remained high (22.4%). In the inactive group, the majority of participants agreed (45.5%) and 9.1% of participants strongly agreed that they had access to the library resources. However, 27.3% of participants were unsure whether they had access or not and 18.2% of participants disagreed that they had access to the library resources.

The third item focused on the role of student support centre in the regional offices to help students overcoming the academic problems. To compare responses between both active and inactive groups, the active group had the highest number of positive responses (60.4%). However, the number of undecided participants about the role of student centre remained high (27.9%). Only 09.0% of participants disagreed and 2.7% of participants strongly disagreed with the role of students centre. In the inactive group, most of the participants provided positive answers to the role of student centre (47.6%) even though the number of undecided participants remained high (47.6%). Meanwhile, only 4.8% of participants disagreed with the role of student support centre.

The last item focused on the satisfaction with the final examination services. The majority of participants from both the active group (62.4%) and the inactive group (36.4%) were satisfied with the final examination services. Furthermore, 18.3% of participants from the active group and 18.2% of participants from the inactive group had high satisfaction with the final examination services. However, there were negative responses to the item from both groups. In the active group, there were 2.8% of unsatisfied participants and only 1.8% of participants had the lowest satisfaction level toward the final examination services. Meanwhile, 14.7% of participants from the active student group were unsure about the final examination services. In

the inactive group, the proportion of the least satisfied participants (4.5%) was smaller than the unsatisfied participants (9.1%). In the meantime, 31.8% of the inactive group were unsure about the services.

Learning Services

The learning services scale encompassed 7 items and was measured with a 5-point Likert scale from “strongly disagree” to “strongly agree”. The median scores for active and inactive student group were 4.0 respectively. These scores indicated that the majority of participants across groups were satisfied with the learning services during their studies.

The first item investigated the students’ expectation of the quality of the course programme. Most of the participants from the active group (62.8%) agreed that their expectations of the quality of the programme were met. Moreover, 28% of participants strongly agreed with the quality of the course programme. Few participants decided to be neutral (9.7%) or disagreed with the statement (2.7%) that the expectations of the quality of the programme were met. Meanwhile, there was a similar description of the inactive group. The majority of participants agreed (37.5%) that their expectations of the quality of the programme were met and 25.0% of participants strongly agreed with the statement. On the other side, 33.3% of participants were unsure about their expectations and only 4.2% of participants disagreed with the statement.

The second item focused on the relevancy of the course materials to the students’ academic needs. The results of the study revealed that most of the participants from both the active group (72.8%) and the inactive group (47.8%) agreed that the course materials were relevant to their academic needs. Moreover, 9.6% of participants from the active group and 21.7% of participants from the inactive group strongly agreed with the statement. Meanwhile, 13.2% of the active group and 21.7% of the inactive group were unsure about the statement. Finally, 4.4% of the active group and 8.7% of the inactive group disagreed with the statement.

The next item explained about the relevancy of the offered courses to the career plans. The majority of participants from both the active group (53.3%) and the inactive group (52.2%) agreed that the course materials had been useful for their career plans. Furthermore, 25.2% of the active group and 18.2% of the inactive group strongly agreed with the statement. In contrast, few participants provided negative answers to the item from both groups. Only 3.6% of the active group and 4.3% of the inactive group disagreed with the statement. Meanwhile, 0.9% of the active group and 4.3% of the inactive group strongly disagreed with the statement. In addition, 17.1% of participants from the active group and 13% of participants from the inactive group were unsure about the statement.

Regarding the feedback from the tutors, the proportion of undecided participants was high from both the active group (41.1%) and the inactive group (50.0%). On the other side, 41.1% of participants from the active group and 18.2% of participants from the inactive group were satisfied with the tutors. Only 9.3% of participants from the active group and 9.1% of participants from the inactive group were very satisfied with the tutors. Furthermore, the proportion of unsatisfied participants from the active group was 7.5% and the inactive group was 13.6%. Meanwhile, 0.9% of participants from the active group and 9.1% of participants from the inactive group were unsatisfied with the quality of feedback.

Furthermore, there were different views on the academic supervision between the active group and the inactive group. The majority of participants from the active group (50.5%) agreed and about 6.5% of participants from the active group strongly agreed that they obtained regular academic supervision during their studies. In the inactive group, only 19.0% of participants agreed and 9.5% of participants strongly agreed with the statement. Meanwhile, a high number of participants from the active group (29.9%) and the inactive group (47.6%) reported that were unsure about the academic supervision. Likewise, 11.2% of participants from the active group and 14.3% of participants from the inactive group disagreed with the statement. Only 1.9% of participants from the active

group and 9.5% of participants from the inactive group strongly disagreed with the statement.

The next item focused on the participation in online tutorials. The majority of participants from both the active group (56.3%) and the inactive group (47.6%) agreed that the participation in online tutorials had positive impact on their studies. In line with this, 27.7% of the active group and 28.6% of the inactive group strongly agreed about the positive impact of online tutorials. Only few participants from the active group disagreed (3.6%) and strongly disagreed (1.8%) with the statement. Meanwhile, 10.7% of the active group and 23.8% of the inactive group were unsure about the influence of online tutorials.

The last item investigated the influence of participation in the face-to-face tutorials and the results of the study were slightly consistent with the online tutorials. Most of the participants from both the active group (43.6%) and the inactive group (52.4%) agreed with the positive influences of face-to-face tutorials on their studies. Furthermore, 29.7% of the active group and 23.8% of the inactive group strongly agreed about its positive impacts. However, there were negative responses from both the active group and the inactive group. The findings reported that 3.0% of the active group disagreed (3.0%) and strongly disagreed (1.0%) with the statement. For the inactive group, 4.8% of participants disagreed with the statement. Likewise, the proportions of participants from the active group (22.8%) and the inactive group (19.0%) were unsure about the positive effect of face-to-face tutorials remaining high.

Interaction

The interaction scale contained two items and was measured with a 5-point Likert type scale from “strongly disagree” to “strongly agree”. The findings reported that the median score for the active student group was 4.0. Most of the participants from the active student group agreed with the significance of interaction roles in contributing to student progress. Meanwhile, the majority

of participants the inactive were unsure about the significance of interaction (3.0).

For the first item "my fellow-students helped to create a supportive learning environment", there were 45.8% the active group who agreed with the statement and 8.4% of participants who strongly agreed with the statement. In the inactive group, 17.4% of participants agreed with the statement and only 13.0% of participants strongly agreed with the statement. However, the number of participants who were unsure about the statement remained high from both the active group (31.8%) and the inactive group (47.8%). Moreover, the number of participants providing negative responses from the inactive group (21.7%) was higher than the active group (14%).

Regarding the second item (I feel that participating in a learning community has a positive influence on my study), the majority of participants in the active group, 59.5%, agreed with the statement and 18.9% of participants strongly agreed with the statement. Furthermore, 20.3% of participants were unsure about the statement and only 1.4% of participants disagreed with the statement. Meanwhile, a high number of participants from the inactive group (50.0%) were unsure about the statement. Furthermore, 27.3% of the inactive group disagreed and strongly disagreed (22.7%) with the statement.

Summary

The majority of participants from active and inactive student groups had positive experiences regarding student support services and learning services in the Indonesia Open University. However, for some issues, most of the participants from the inactive student group were unsure about their experiences toward the role of regional offices in solving academic problems, feedback from tutors, and academic supervision.

In the meantime, there was a different experience between active and inactive student groups on peer interaction in the Indonesia Open University. The majority of participants from the active student group had positive experiences on the effects of peer interaction for their student progress. For inactive

student group, most of them were unsure about the positive effect of interaction on their student progress.

5.3.3 External factors

External factors consist of four variables: family and friends, work environment, individualism, and collectivism. These scales are measured on a five-point Likert scale from “strongly disagree” to “strongly agree”.

Family and Friends

Family and friend scale contained four items. Three items focused on the support of family members and one item dealt with the support from the significant others. The median scores for both the active and inactive student group were 4.0. These results indicated that the majority of participants provided positive responses about the contribution of support from family and friends to student progress.

The first item dealt with the support of the family members and friends to complete the student at the Indonesia Open University. The majority of participants, both the active group (52.6%) and the inactive group (41.7%) received support from their family members for completing their studies at the Indonesia Open University. Moreover, 37.7% of the active group and 37.5% of the inactive group strongly agreed that they got support from the family members. Only few participants from both the active group (2.7%) and the inactive group (8.3%) did not get the support. At the same time, 7.0% of the active group and 12.5% of the inactive group were unsure about receiving support from family and friends.

The second item asked put to participants regarded the statement: “My partner has become annoyed because I spent so much time studying”. The majority of participants from both the active group (44.2%) and the inactive group (45.8%) disagreed that their partners become annoyed when they spent so much time

studying. At the same time, 41.6% of the active group and 37.5% of the inactive group strongly disagreed that they encountered the similar situation at home. However, around 2.7% of the active group and 4.2% of the inactive group agreed with the statement. Only 2.7% of the active group strongly agreed with the statement. Meanwhile, 12.2% of the active group and 12.5% of the inactive group were unsure about the statement.

In terms of the third item (I find difficulty to manage my time between my domestic duties and learning activities), most of the participants from the active group (42.1%) and inactive group (16.7%) disagreed that they had difficulty managing their time between the domestic duties and learning activities. Even, 14.9% of the active group and 20.8% of the inactive group strongly disagreed with the statement. However, the percentages of participants who were unsure and providing positive responses remained high. The results reported that 16.7% of participants from both the active and inactive groups were unsure about the statement. Similarly, 20.2% of participants from the active group and 37.5% of participants from the inactive group agreed with the statement. Finally, 6.1% of participants from the active group and 8.3% of participants from the inactive group strongly agreed with the statement.

The last item focused on the support from the significant others, particularly from friends. In the active group, 62.3% of participants agreed and 18.4% of participants strongly agreed that they received support from their friends regarding their study at the Indonesia Open University. In line with this, most of the participants in the inactive group agreed (41.7%) and 8.3% of participants strongly agreed that they got support. However, the number of undecided participants from both the active group (16.9%) and the inactive group (33.3%) were still high. Furthermore, there were negative answers from both groups. Only 3.5% of the active group and 8.3% of the inactive group disagreed with the statement. In the meantime, 0.9% of the active group and 8.3% of the inactive group strongly disagreed with the statement.

Work Environment

The job environment scale had three items. Overall, the median scores of both the active group and the inactive group were 4.0 respectively. These scores indicated that the majority of participants had a supporting working environment in order to help them completing their studies.

The first item revealed about the statement “my employer has encouraged me to pursue the degree”. The majority of participants from both the active group (54.4%) and the inactive group (33.3%) had much support from their employers to accomplish their studies as soon as possible. Even, 22.8% of the active group and 25.0% of the inactive group strongly agreed about this statement. Meanwhile, few participants disagreed and strongly disagreed with the statement from both the active group (6.2%) and the inactive group (25%). However, 18.1% of participants from the active group and 16.7% of participants from the inactive group were unsure with the statement.

The second item dealt with the workloads as the main barriers to complete the study. Most of the participants from the active group disagreed (41.2%) and strongly disagreed (21.1%) that the workloads became the main barriers for them in accomplishing the study. Only 10.5% of participants from the active group agreed with the statement and 9.6% of participants from the active group strongly agreed with the statement. Meanwhile, 17.5% of the active group were unsure about the statement. In the inactive student group, 29.2% of participants were unsure about the statement. Further, 20.8% of the inactive group agreed and strongly agreed (12.5%) with the statement. Similarly, 20.8% of the inactive group disagreed and 16.7% of them strongly disagreed with the statement.

Individual Cultural Orientation

Cultural orientation consists of two scales: individualism and collectivism. Individualism includes seven items and collectivism encompasses six items.

Individualism

The majority of participants from both the active (65.8%) and the inactive group (62.5%) agreed with the statement (I tend to do my own thing). 22.8% of the active group and 29.2% of the inactive group strongly agreed with the statement. 10.5 % of the active group and 8.3% of the inactive group were unsure with the statement. Furthermore, 0.9% of the active group disagreed with the statement.

The next statement focused on the encouragement from the family members. Most of the participants from both the active (58.4%) and the inactive group (63.2%) agreed that their family members encouraged them to be independent people in many respects. 34.8% of participants from the active group and 15.8% of participants from the inactive group strongly agreed with the statement. Meanwhile, 6.7% of the active group and 10.5% of the inactive group were unsure about the statement. Finally, 10.5% of the inactive group disagreed with the statement.

The third item revealed about decision making pertinent to personal problems. The majority of participants from both active and inactive groups (44.0% and 62.5%) agreed that they tend to make their own decisions when they encountered difficult personal problems. Moreover, 13.1% of the active group and 6.3% of the inactive group strongly agreed about their decision-making abilities. Meanwhile, 20.2% of participants from the active student group and 25.0% of participants from the inactive group were unsure about such decision-making. At the same time, 21.4% of participants from the active group and 6.3% of participants from the inactive group disagreed with the statement. Meanwhile, 1.2% of the active group strongly disagreed with the statement.

The fourth item reported on the willingness to perform better than others on academic assignments. The findings revealed that most of the participants from the active group (60.5%) and just under half of the inactive group (47.8%) agreed with the statement. 28.1% of active group and 26.1% of the inactive group strongly agreed with the statement. Meanwhile, 7.0% of the active group

and 4.3% of the inactive group were unsure about the statement. Finally, 4.4% of the active group and 4.3% of the inactive group disagreed with the statement.

The fifth item talked about the importance of ability to take care of themselves. 57.4% of participants from the active student group and 50.0% of participants from the inactive group agreed with the statement. 39.1% of participants from the active group and 45.8% of participants from the inactive group strongly agreed with the statement. Meanwhile, only 2.6% of participants from the active group and 4.2% of participants from the inactive group were unsure with the statement. Finally, 0.9% of active group strongly disagreed with the statement.

The next item, 51.2% of participants from the active student group and 41.2% of participants from the inactive student group agreed that they were able to enjoy participating in competitive circumstances. 29.8% of participants from the active group and 11.8% of participants from the inactive group strongly agreed with the statement. In the meantime, 10.7% of participants from the active group and 35.3% of participants from the inactive group were unsure about the statement. 7.1% of participants from the active group and 5.9% of participants from the inactive student disagreed with the statement. Only, 1.2% of participants from the active group and 5.9% of participants from the inactive group strongly disagreed with the statement.

The final item talked about the personal uniqueness. 45.5% of participants from the active group and 50.0% of participants from the inactive group agreed with the statement. 20.0% of participants from the active group and 18.2% of participants from the inactive group strongly agreed with the statement. Meanwhile, 17.3% of participants from the active group and 22.7% of inactive group were unsure with the statement. 13.6% of participants from the active group and 9.1% of the inactive group disagreed with the statement. Finally, only 3.6% of participants from the active group strongly disagreed with the statement.

Collectivism

This scale encompassed six items measuring collectivism from both active and inactive student groups. Overall, the median scores for both active and inactive student groups were 4.0 respectively. These findings indicated that the majority of participants had high collectivism in their social life.

In terms of the first item, most participants from both the active and the inactive groups (60.5% and 58.3%) agreed that they always respect decisions made by the group or organization. Furthermore, 34.2% of the active group and 29.2% of the inactive group strongly agreed about the willingness to respect decisions made by the group or organisation. Meanwhile, only 4.4% of active group and 12.5% of inactive group were unsure about the statement. Moreover, only 0.9% of active group disagreed with the statement.

The second item reported that 55.4% of the active group and 50% of the inactive group agreed that they always sacrifice their self-interests for the benefit of the group. 14.5% of the active group and 12.5% of the inactive group strongly agreed with the statement. Meanwhile, 21.7% of the active group and 31.3% of the inactive group were unsure with the statement. Finally, only 8.4% of the active group and 6.3% of the inactive group disagreed with the statement.

The third item dealt with decision-making. More than 50% of participants from the active and inactive student groups (54.8% and 59.1%) agreed that they always need consultation with the others before making decision. 26.1% of participants from the active group and 22.7% of participants from the inactive group strongly agreed with the statement. In the meantime, there were small proportions of undecided participants from the active group (9.6%) and the inactive group (18.2%). Moreover, only 9.6% of participants from the active group disagreed with the statement.

The fourth item talked about consultation of working and academic matters with the family members. 45.9% of participants from the active group and 37.5% of the inactive group agreed that they always consult the working and

academic matters with the family members. 18.8% of the active group and 6.3% of the inactive group strongly agreed with the statement. However, there were high numbers of undecided participants from the active group (21.2%) and the inactive group (31.3%). In the meantime, 12.9% of the active group and 25.0% of the inactive group disagreed, and only 1.2% of the active group strongly disagreed with the statement.

The fifth item revealed that 47.4% of participants from the active group and 52.2% of the inactive group agreed that the relationship with others were more important than their self-interests. 20.2% of the active group and 13.0% of the inactive group strongly agreed with the statement. Meanwhile, 18.4% of the active group and 8.7% of the inactive group were unsure about the statement. 10.5% of the active group and 26.1% of the inactive group disagreed with the statement. Finally, only 3.5% of the active group strongly disagreed with the statement.

The final item talked about the generosity. 48.7% of the active group and 56.5% of the inactive group agreed that they would give financial aid for their relative. 46.1% of active group and 39.1% of the inactive group strongly agreed with the statement. Meanwhile, only 3.5% of active group and 4.3% of the inactive group provided unsure response. 0.9% of active group disagreed with the statement. Lastly, only 0.9% of the active group strongly disagreed with the statement.

Summary

The majority of participants from the active and inactive student groups were supported by their families and friends. They also obtained much support from their bosses and colleagues in their workplaces to pursue the Bachelor degree at the Indonesia Open University.

In terms of cultural orientations, more than 50% of participants had positive responses to both individualism and collectivism. Moreover, the majority of

participants was statistically indicated to have both individualism and collectivism in their cultural orientations.

5.4 Independent – Samples *t*-test

An independent-samples *t*-test was performed to assess whether the variance between active students and inactive students differed on the scales of 11 composite variables: “intrinsic motivation”, “extrinsic motivation”, “self-efficacy”, “volitional strategies”, “student support services”, “learning services”, “interaction”, “work environment”, “individualism”, “collectivism”, and “family & friends”.

The Levene’s Test for Equality of Variances indicated that all tests are not significant ($p > 0.05$) unless for “self-efficacy”. These results pointed out that there were equal variances between the active and inactive student groups in ten variables. Furthermore, the actual *t*-test statistics also revealed that out of 11 composite variables there were only three variables: individualism ($t = 2.193$, $df = 87$, $p < 0.05$), family & friend ($t = 2.564$, $df = 131$, $p < 0.05$) and work environment ($t = 3.800$, $df = 132$, $p < 0.05$) that showed the difference between the active students and the inactive students. Meanwhile, no significant differences in scores were found for the active and inactive student groups on the following variables: the intrinsic motivation, extrinsic motivation, self-efficacy, volitional strategies, student support services, learning services, interaction, individualism, and collectivism.

Table 5.4: Independent-samples *t* test

Variables	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)
Intrinsic motivation	.035	.852	-.016	125	.987
Extrinsic motivation	.843	.361	.216	119	.829
Self-efficacy	6.912	.010	-.038	22.238	.970
Volitional Strategies	1.409	.237	-1.861	123	.065
Interaction	3.482	.064	-1.309	119	.193
Individualism	.000	.987	-2.193	87	.031
Collectivism	.182	.670	-1.512	91	.134
Student Support Services	1.854	.176	-.497	107	.620
Learning Services	3.861	.052	-1.379	107	.171
Family and Friends	.061	.805	-2.564	131	.011
Work Environment	2.733	.101	-3.800	132	.000

5.5 Logistic Regression Analysis

Logistic regression analysis was performed to answer the research question: "What factors influence student progress in the Indonesia Open University? The logistic regression analysis was used because the dependent variable (progress/non-progress) is classified as a discrete variable (Pallant, 2005; Tabachnick & Fidell, 2007). Moreover, the logistic regression analysis is more flexible than the other techniques regarding the predictors, linearity, and distributional requirements for predictors. The logistic regression could predict a discrete outcome from any mix of continuous, discrete, and dichotomous variables. Logistic regression makes no assumption about the distributions of the predictor variables and linearity requirements for predictors (Tabachnick & Fidell, 2007).

The independent variables (predictor variables) in this study consisted of three composite factors which contained composite variables: individual factors, institutional factors, and external factors. The individual factors consisted of

six variables concentrating on student's background (age, gender, ethnicity, prior education, employment status, and family structure), and four psychological variables: intrinsic motivation, extrinsic motivation, self-efficacy, and volitional strategies. The institutional factors had three variables: student support services, learning services, and interaction. Finally, the external factors encompassed five variables: family, working environment, financial problem, individualism, and collectivism.

In this analysis, the study employed a forced entry method. The forced entry method is the default method of conducting logistic regression analysis. This method is carried out by putting all of the variables into the regression model in one block simultaneously, and parameter estimates are calculated for each block. Some researchers believe that this method is the only appropriate method for theory testing (Field, 2009; Pallant, 2005). An alternative method is to use stepwise methods. This method is not intended for theory testing due to strongly influenced by random variation in the data and sometimes does not provide replicable results if the model is retested (Field, 2009).

The analysis was performed through SPSS 22 by entering six demographic variables (age, gender, ethnicity, prior education, employment status, and family structure) and 12 composite variables (intrinsic motivation, extrinsic motivation, self-efficacy, volitional strategies, student support services, learning services, interaction, family and friends, working environment, financial issues, individualism, and collectivism) into the initial model. However, the results reported that the model with all predictor variables included did not fit with the observed data. This initial model was retested by removing several predictors as explained in the next paragraph.

In the next step, several predictor variables were removed from the initial model and re-tested it on how well the model fitted with the data. After running several statistical tests to the several models and deleting four cases with ZResid values above two (outliers >2), the final model removed three demographic variables (ethnicity, employment status, and family structure), financial issues, individualism, and collectivism. Therefore, the final model

tested in the logistic regression analysis consisted of three demographic variables (age, gender, prior education) and nine predictor variables (intrinsic motivation, extrinsic motivation, self-efficacy, volitional strategies, student services, learning services, interaction, family and friends, and work environment).

After getting the final model, the logistic regression analysis was performed to predict student progress as the dependent variable by using 12 predictor variables: age, gender, prior education, intrinsic motivation, extrinsic motivation, self-efficacy, volitional strategies, student services, learning services, interaction, family and friends and work environment.

The results of the SPSS analysis reported that in the classification table (table 5.5), which comprises the constant value only; the overall percentage of correctly classified cases was 86.1% for the active students. The SPSS predicted that all cases were the active students, which resulted in 0% accuracy for the inactive students and 100% accuracy for the active students.

Table 5.5: Classification table

Classification Table ^{a,b}					
Observed			Predicted		
			Are you an active student or inactive student?		Percentage Correct
			Inactive Student	Active Student	
Step 0	Are you an active student or inactive student?	Inactive Student	0	11	.0
		Active Student	0	68	100.0
	Overall Percentage				86.1

a. Constant is included in the model.

b. The cut value is .500

In the next table (5.6), the Omnibus Tests of Model Coefficients revealed that the Sig. value was .000 ($P < .05$) and this value indicated that the model (with 12 variables) fitted with the observed data. In other words, the model could be

able to predict membership of two students group (the active and inactive students groups). In addition, the chi-square value in this test was 36.819 with 12 degrees of freedom.

The Hosmer and Lemeshow Test (Table 5.7) also confirmed the Goodness of Fit for the model. The test showed that the significance value (p-value) was greater than .05 (.997) which indicated support for the model. For the Hosmer-Lemeshow Test, the significance value should be interpreted differently from the omnibus test. Rejection of the model is indicated by a p -value less than .05 (Pallant, 2005).

Table 5.6: Omnibus test of model coefficient

		Chi-square	df	Sig.
Step 1	Step	36.819	12	.000
	Block	36.819	12	.000
	Model	36.819	12	.000

Table 5.7: Hosmer - Lemeshow test

Step	Chi-square	df	Sig.
1	1.107	8	.997

Another test offered information about the usefulness of the model. The Cox & Snell R Square and the Nagelkerke R Square in the table headed "Model Summary" presented an indication of the amount of variation in the dependent variable explained by the model (from 0 to 1). In this case, there were two values: .373 and .673. These values indicated that the set of predictor variables might explain between 37.3% and 67.3% of the variability in the dependent variable (student progress/non-progress).

Table 5.8: Model summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	26.947 ^a	.373	.673

- a. Estimation terminated at iteration number 9 because parameter estimates changed by less than .001.

Meanwhile, the Classification table provides an indication of how well the model is able to predict the correct category (the active and inactive student for each case) when the predictor variables are included in the model (Field, 2009; Pallant, 2005). Eventually, the results reported that the model correctly classified 92.4% of cases overall (table 5.9). This overall percentage was higher than the 86.1% in the previous classification table (table 5.5).

Table 5.9: Classification table

Classification table ^a					
Observed			Predicted		
			Are you an active student or inactive student?		Percentage Correct
			Inactive Student	Active Student	
Step 1	Are you an active student or inactive student?	Inactive Student	6	5	54.5
		Active Student	1	67	98.4
	Overall Percentage				92.4

- a. The cut value is .500

Furthermore, information about the contribution or importance of each predictor variables was provided by the Wald test in the table headed variables in the Equation. The Wald test (appendix 2d.7) indicated four predictor variables (volitional strategies= .047, learning services = .036, working environment = .036, and prior education = .027) had significant contribution to

the predictive ability of the model. The Wald test indicated that the four variables had p -value less than .05. ($P > .05$).

5.6 Summary of Quantitative Results

The most typical age of participants was between 25 and 29 and the majority of them were men. Moreover, their ethnicity was predominantly identified as Javanese; they were mostly graduated from Senior High School; they were employed full-time; and they were primarily married and had children under 18.

The majority of participants undertook the course programme of English for Translation, followed then by Government Science. They were predominantly registered in the regional office of Jakarta and were identified as the active students. Furthermore, the most cited reason of non-enrolment for at least one registration period or more was workloads.

The frequency analysis revealed some findings of self-perception on individual, institutional, and external factors. In the individual factors, the majority of the participants had high intrinsic and extrinsic motivation to study at the university level, high self-efficacy, and high volitional strategies.

In the institutional factors, the majority of participants had positive experiences pertinent to student support and learning services. However, apparently most of participants were unsure about their experiences for several issues, such as the role of regional offices in solving academic problems, feedback from tutors, and academic supervision. Meanwhile, there was a different experience between the active and inactive student groups on peer interaction. The majority of the active student group had positive experiences on positive effect of peer interaction for their student progress. For the inactive student group, most of them were unsure about the positive effect of interaction on their student progress.

In the external factors, the majority of participants received support from their families and friends, employers, and colleagues in their workplaces. In terms of cultural orientations, most of the participants had positive responses for both independent and interdependent cultural orientations and they were indicated to have both independent and interdependent orientations.

The independent *t*-test reported that out of 11 composite variables, only 3 variables: independent cultural orientation ($t = 2.193$, $df = 87$, $p < 0.05$), family & friend ($t = 2.564$, $df = 131$, $p < 0.05$) and work environment ($t = 3.800$, $df = 132$, $p < 0.05$) that showed the significant difference in scores for the active and inactive students.

The logistic regression analysis produced the model that was useful to predict the student progress in the Indonesia Open University (Figure 5.8). The model might be able to explain between 37.3 percent and 67.3 percent of the variability of student progress. The model consisted of 12 variables as described below:

1. Age
2. Gender
3. Prior education
4. Intrinsic motivation
5. Extrinsic motivation
6. Self-efficacy
7. Volitional strategies
8. Student support services
9. Learning services
10. Interaction
11. Work environment
12. Family & friends

Meanwhile, there were four predictor variables that had significant contributions to the predictive ability of the model: volitional strategies, learning services, work environment, and prior education.

In this chapter, I have set out the results of the quantitative phase. In the next chapter, I explore the findings of the qualitative phase by presenting multiple cases analysis and single case analysis.

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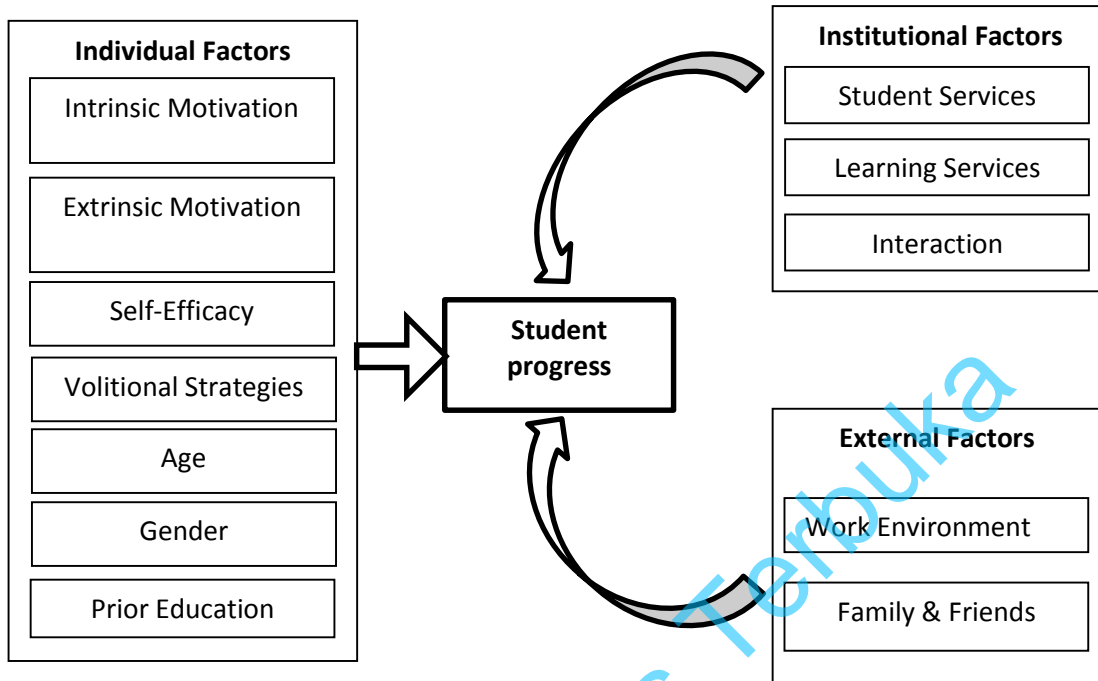


Figure 5.8: Model of student progress in the Indonesia Open University

Chapter 6 Qualitative Findings

The qualitative data was collected through semi-structured interviews with 13 participants consisted of ten enrolled students (active students) and three non-enrolled students (non-active students). The multiple case analysis revealed five major themes of participants' experiences pertinent to student progress in the Indonesia Open University: self-motivation, volitional strategies, quality of institutional services, interaction, and external support. The next two sub-chapters present the qualitative consisting of multiple case analysis and single case analysis. The multiple case analysis presented the five major themes from all the cases identified in the study. Meanwhile, out of 13 cases, five cases were selected from all cases (13 cases) and presented in the single case analysis. These five cases consisted of three enrolled students and two non-enrolled students.

6.1 Multiple Case Analysis

In this section, the five major themes across all cases were presented: self-motivation, volitional strategies, quality of institutional services, interaction, and supporting environment.

6.1.1 Self-Motivation

All the participants talked about intrinsic and extrinsic motivation related to their studies at the Indonesia Open University. Eight participants were primarily extrinsically motivated to get a better career after completing their studies. The career improvement was the dominant type of extrinsic motivation aside from the other two types: social prestige and helping other people. Meanwhile, five participants studying at the Indonesia Open University were driven by

intrinsic motivation to increase their knowledge or learn new things from the University. Both these intrinsic and extrinsic motivations co-existed together in influencing participants' decisions in studying at the Indonesia Open University.

Intrinsic motivation

Five out of ten participants from the active student group (Wati, Ina, Hasan, Zulki, and Rama) stated that the main source of their motivation was to learn new things or knowledge in the University. For Wati, study at the university was her future goal since she was at the Senior High School. However, she had to disregard her ambition because her parents could not afford the tuition fee of the university, but this matter did not turn stop her motivation to study at the University because she always was fascinated to learn new knowledge:

...actually I really wanted to study at the University after graduated from Senior High School...but my parents did not have enough money to send me to university, although at that time I had been offered to study at a state university in the Bandung city. However, whatever would be, I still wanted to study at the university, to learn, and to get new knowledge (Wati).

Ina, a student of the English Translation Programme, recounted another story. Initially, Ina took the management course programme at the Faculty of Economics in order to get a better job after completing the study. However, Ina was unhappy studying management, so she changed her course programme to English as this was a subject she interested in and rather than focusing on subject specifically for her future career. She only desired to study English translation skills and she was glad to learn such knowledge.

...I took a course programme that I liked. Therefore, I was just happy to do it and I did not think people would need it or not. I was basically happy and I wanted to explore deeply about English translation techniques...so it was not related to the future job. I had been studying just for my happiness (Ina).

Fascination to learn new knowledge was also a source of motivation for Hasan and Zulki. For Hasan, his involvement with political party development and political activities in Aceh made him interested in learning more about governance issues. Hasan decided to study governance issues and theories in the Indonesia Open University due to its flexibility for an employed person. Similarly, Zulki talked about his motivation to study at the university. Zulki was an English teacher at the Senior High School at Pangkalan Brandan, Medan. Zulki was already familiar with the Indonesia Open University since 2003 when he took a Diploma Course Programme in English Translation. In 2007, Zulki undertook the Bachelor degree in English Teaching and completed the programme in 2009. Zulki was always interested in acquiring new knowledge. When Indonesia Open University launched the Bachelor Degree of English Translation Programme in 2010, Zulki eagerly registered the course programme. Zulki said:

...I joined and studied at the Indonesia Open University because I liked to explore new knowledge... my motivation to keep learning made me always enrolled as an active student from the first commencement. Because I was used to learn, I felt like something was missing if I suspended my study at the Indonesia Open University (Zulki).

Meanwhile, for Rama his motivation to study at the university was to increase knowledge for better life in the future.

For these four participants, fascination to acquire new knowledge was the source of their intrinsic motivation to study at the Indonesia Open University. However, they admitted that being successful in their studies might help them to get a better job or career in the future. As Ina said: "...sometimes my friends asked me to help them to translate their documents...so perhaps I would create an English translation agency in the future...". Hasan also narrated: "...I could not deny that I had an interest to have a better career in the future, for example as a government employee".

Meanwhile, the participants from the non-active student group (Devi, Armi, and Dani) did not talk about intrinsic motivation. At the outset, all of them were

extrinsically motivated to study in the Indonesia Open University for promoting their career and social prestige.

Extrinsic Motivation

Five participants from an active student group described that their pursuit of the Bachelor degree were extrinsically motivated to promote their career after completing their studies. Wawan was an active student since 2010 at the Faculty of Social and Political Sciences with the subject area of State Administration Science. He had been working as a treasurer at the Public Order Agency office in Tegal regency, Centre of Java. As a government employee, Wawan realised that the level of education was an important instrument for career progression.

My main motivation to go to University was to develop my career. Because just having Secondary Degree, my maximum level in the career that I could reach was III/B level. Meanwhile, if I had a Bachelor degree, I would be able to get III/D level, even without holding structural position and I wish could retire from the job in the level of IV/A (Wawan).

In line with Wawan, Haril also indicated that his main motivation to go to university was to enhance his career. They each realised that the academic degree level would help them to improve their career prospects in the workplace.

...My main goal to study at the Indonesia Open University was for career improvement, so that if I could get a Bachelor degree, then at least I would get a higher level of career. It could not be denied (Haril).

Danu, Indra, and Santoso talked also about their sources of motivation for studying at the Indonesia Open University. For Danu, a government employee at the Bangka Regency, Bangka Province, his motivation to earn the Bachelor degree was related to his career. In Indra's case, his decision to study

communication science at the Indonesia Open University was motivated to support his job as a volunteer in the community organisation. He also expected to get a better career in the future after earning the Bachelor degree. Meanwhile, for Santoso, he decided to study at the Indonesia Open University due to its flexibility for an employed student. Santoso had been working as an administrative staff at the private company and studied state administrative science at the Faculty of Social and Political Sciences. He realised that his course programme was not quite relevant to his current job because his future goal was to apply a job at the government office after earning the Bachelor degree.

...now I am 32 years old and I have to earn the Bachelor degree as soon as possible. I have a plan to apply for civil service job at the local government and it is required to have age under 35 years old (Santoso).

Meanwhile, for the non-active student group, all three participants had different sources of extrinsic motivation. For Fahri, an administrative staff at the primary school, studying at the Indonesia Open University was related to the school principal's request to manage the school library. His school principal suggested taking a course programme which could provide him library management skills. Fahri, though, suspended his study due to having a financial problem. For Amri, he was initially motivated to study at the Indonesia Open University in order to acquire a better career. However, when Amri later discovered that his Head Office did not recognise his selected course programme, he lost his motivation to continue his study. Meanwhile, for Devi, her motivation to study at the Indonesia Open University in order to earn the undergraduate degree for getting social prestige within her community groups. Her extrinsic motivation was different from the other participants who had job positions as staff and for Devi, as the owner of a business company, the university degree was not for improving her career prospects but rather for achieving social prestige within the community.

6.1.2 Volitional Strategies

Volition is conceptually and functionally distinct from motivation in which it is necessary to set goals and select strategies appropriate for attaining them (Corno, 1993). Zimmerman (1989) defines volition as the process whereby students keep motivated and actively sustain cognition and behaviour toward attainment of their learning goals. Therefore, volition is necessary to protect against the abandonment of goals and functions to sustain effort and persistence when competing goals are present.

In the context of open university, volitional strategies are important for increasing student progress in the Indonesia Open University because in distance education the learner is challenged by multiple and conflicting responsibilities, such as study, family, and job, which may undermine his/her motivation to learn (Deimann & Bastiaens, 2010).

In this study, ten participants from the active student group talked about volitional strategies to maintain their motivation in pursuing the Bachelor degree. There were two types of volitional strategies utilized by ten participants in relation to their student progress at the Indonesia Open University: volitional self-efficacy and meta-cognition. Volitional self-efficacy in this case refers to perceived self-efficacy in a post-intentional stage and it has an important role in planning engagement and for change in behaviour (Deimann & Bastiaens, 2010; Schwarzer, 2008). For Rama, one factor contributed to his decision to be an enrolled student regularly in every semester was his belief to accomplish his study at the Indonesia Open University within the planned period. "I do belief in my ability that I will finish my study within four or five years".

Meanwhile, metacognition refers to higher order thinking which involves active control over the cognitive processes engaged in learning. To mention some metacognitive activities are planning how to approach a given learning task,

monitoring comprehension, and evaluating progress toward the completion of a task (Livingston, 1997). For instance, Wawan, an active student, realised that he would encounter conflicting responsibilities amongst job, family, and study. Therefore, he must had strategies or planning to maintain his motivation during his study at the Indonesia Open University. As Wawan said: "According to me, studying at the Indonesia Open University needs careful planning from the outset". His strategies encompassed a decision on the amount of courses should be taken in every academic term, set up the target of study completion, read the modules wherever he could, and initiated to form the learning group in the his office.

Table 6.1 summarises volitional statements across cases. Volitional statements from 1 – 5 represent volitional self-efficacy and 6 – 10 represent metacognition.

Table 6.1: Volitional statements

No	Volitional Statements
1	I want to quickly graduate from the university in order to get a better career
2	I want to quickly graduate from the university in order to gain new knowledge
3	I realise that studying at the Indonesia Open University requires independent learning
4	I choose the course programme that I am interested in
5	I believe in my ability to accomplish my study
6	According to me, studying at the Indonesia Open University needs careful planning from the outset.
7	I remind myself about my target to complete my study as soon as possible
8	I remind myself that study at the Indonesia Open University requires management of time between study, family, and work.
9	I always read the modules whenever I have free time
10	I always take a little amount of courses if I have a heavy workload

6.1.3 Quality of Institutional Services

All participants from active and non-active student groups (13 participants) talked about quality of institutional services positively and negatively. The participants' perceptions varied and most of the students were satisfied with the institutional services provided by the Indonesia Open University. The institutional services consisted of the quality of academic and administrative services. 'Quality of the academic services' encompassed services related to student services, modules, and tutors. Meanwhile, 'quality of administration services' included library access and registration services.

Quality of academic services

All participants from both active and inactive students groups talked about quality of academic services and its perceived relationship with their student progress in the Indonesia Open University.

Student support services. Student services in this context related to examination and student support provided by the Regional Offices. In the active students group, all participants cited that the student services provided by the Regional Offices were in general satisfactory. Meanwhile, nine out of 13 participants narrated that they had positive experiences regarding the services, such as timely response to students' complaints, accurate information, hospitality, and friendly interaction.

However, Haril and Ina reported negative experiences regarding student services provided by the Regional Offices. Haril mentioned that the service was not friendly to male students. He saw discrimination between male and female students in which female students received more priority in service than male students. As Haril said:

...when staff served female students, they were more proactive and with a warm-hearted. However, when turned to serve the male students, their services were not as good as when they served the female students, so there was favouritism in serving students (Haril).

For Ina and Wati, the registered students at the Regional Office of Malang, East Java, they found that the services at their Regional Offices were disappointing and did not ease student's needs.

...I initially had registered as a new student at the Regional Office of Malang, East Java. I found their services were complicated and uncomfortable, and then I decided to move to Surabaya city...for me, student services in the regional office did not provide complete information and I did not get information what I needed (Ina).

...I ever experienced several disappointments about services provided by the staff of the regional office. They provided less friendly services and could not provide information exactly about what I needed ...so this made me reluctant to communicate a lot with the staff except for registration purpose only (Wati).

In the non-active students group, Amri and Fahri mentioned that both were satisfied with the student services at the Regional Office. In contrast, Devi had low satisfaction regarding the registration services at the Regional Office. Devi witnessed that the registration service was not fully computerised process and some of the staff officers did not have the computer skills. This also contributed to Devi's decision to withdraw from her study.

According to me, the registration service was not a computerised process and then the staffs were looked too old ... some of them were not having computer skills and made the registration process little bit messy with many papers everywhere on the table....(Devi).

Modules. All participants from active and non-active student groups talked about the quality of modules. Eight out of ten participants from active students group were satisfied with the quality of modules in the Indonesia Open University. They were satisfied also with the easy online order and fast delivery of modules. However, Santoso mentioned that several modules needed revision promptly regarding the change of new rules. Zulki also revealed that some modules contained a lot of spelling mistakes, as he said:

....some modules had a lot of spelling mistakes and that seemed to lack of proofreading. Furthermore, some parts of modules were confusing and less communicative, and impressed that the writing had been done in a hurry to catch the publication deadline for the modules in order to achieve the target for launching the new course programmes (Zulki).

In the non-active students group, Devi commented on the content of modules that she had read. Devi found most of the modules only containing theoretical explanation and lack of implementation of theories in the form of cases analysis. In the meantime, another inactive student, Amri, had a dissenting opinion and stated that the modules had good qualities pertinent to its content and layout.

Tutors. Nine of 13 participants discussed the quality of tutors in online tutorials. Three participants from active student group (Ina, Rama, and Wati) viewed that tutors of online tutorials had provided prompt responses, but the other six participants (Zulki, Wawan, Indra, Santoso, Danu, and Haril) indicated that such tutors were less responsive in providing feedback or comments on students' questions and assignments. For instance, Zulki stated that tutors of online tutorials must provide timely feedback. Meanwhile, Wawan reported no feedback from the tutors in the discussion forum and on assignments.

....sometimes tutors only gave a case and allowed students to discuss without any feedback at all. Then another complaint was tutors assigned assignments to the students, but did not want to show the assignment markings to the students. Therefore, the students remained to wonder about the assignment results (Wawan).

In terms of the quality of tutors in the face-to-face tutorial, four participants (Indra, Santoso, Wati, Danu) who attended the face-to-face tutorials deemed that the tutorial was helpful in understanding the modules and contributed to final score of course programme. However, Santoso had a negative experience regarding he thought of as incompetent tutors, as he said:

There were several the selected tutors in the Regional Office of Semarang who did not master the subject field of teaching. The tutors

sometimes could not answer questions from the students. For example, it ever happened when I attended the course for preparing a final comprehensive assignment (Tutorial Akhir Program-TAP)....(Santoso).

Meanwhile, two of three participants from non-active student group did not mention the quality of tutors either in online or face-to-face tutorials services because they did not participate online tutorials regularly. Only Devi who attended the face-to-face tutorials several times and she believed that tutors had poor qualities and the university should recruit other more competent tutors. For Amri, less interaction with other students while studying at Indonesia Open University had contributed to his decision to suspend his study. Therefore, face-to-face tutorials perceived to have an important role to keep students motivated for persisting and completing their studies.

Quality of Registration Services

In this section, registration services refers to services that support academic process in the Indonesia Open University, including three phases of registration. The registration system at the Indonesia Open University is an integrated system consisting of three major phases: initial registration, course registration and final registration stage. Initial registration is designed to record, manipulate and update data concerning the admission of a new student; course registration is used to maintain and update active student records; and lastly final stage registration is designed to classify and determine student eligibility to take the final examinations.

Out of 13 participants, 12 participants both from active and inactive students groups talked about the good quality of registration services in the Indonesia Open University. Since the implementation of online registration, the majority of participants agreed that the registration service was easier and helpful. For Haril, an active student, online registration had helped him to keep enrolled in the University even he had no enough money to pay tuition fees.

Since online registration was available, it was easier for me ... I was able to register despite I did not have the cost of tuition fees. Therefore, this service was quite helpful ... in addition, when we did not have enough money to pay the tuition fees, we were still allowed to enrol in advance so we would not miss the registration deadline (Haril).

Meanwhile, Devi, an inactive student, criticised the complicated registration process in which she needed to register manually by visiting the regional office. Manual registration had contributed to her decision to suspend her study. However, what Devi mentioned about the registration process was understandable because it happened before online registration applied in the registration system in the Indonesia Open University.

6.1.4 Interaction

In this study, interaction included students' peer interaction and their level of involvement in learning communities. All participants from the active students group said that they did not feel lonely while studying at the Indonesia Open University because they found many ways to get interaction with other students. Furthermore, they realised that studying at the Indonesia Open University required independent learning. For Wawan, studying at the Indonesia Open University required learning strategies in order to obtain high Grade Point Average (GPA) and complete his study as soon as possible. In doing so, Wawan invited other colleagues in his office to create a learning group. This learning strategy not only helped him and other learning group members to achieve good achievement in the study but also helped them to keep motivated as active students in order to pursue the Bachelor degree as soon as possible.

One of the reasons I studied at the Indonesia Open University was because I did not need to attend class lecturing. According to me, the communication could happen without face-to-face interaction. I could utilize many means of communication to communicate with the academic community UT and the learning group members. I also could

utilize the online communication forum created by University, there was also a Facebook group that I could communicate with...I was also able to communicate with the Dean, the Vice Dean and other Faculty members via e-mail...these sorts of communication more less had helped me a lot in overcoming my study problems (Wawan).

For other participants, Zulki and Haril, from the beginning when decided to study at the Indonesia Open University, they understood that they would be required to be independent learners which helped them to keep motivated as active students. Meanwhile, for Rama, self-learning was not a big problem for him and he understood the consequence of learning in the distance learning system at the Indonesia Open University. Therefore, Rama actively interacted with other students through online media, thus preventing him from being alone during his study at the Indonesia Open University.

In the inactive student group, Amri stated that less interaction with other students and the institution had made him feeling lonely and it had contributed to his decision to suspend his study. "Personally, I felt lonely when I had been a student of the Open University". It would be nice if the university could facilitate us to get to know our colleagues within the course programme, rather than we had to find by our own". Meanwhile, for Devi, she was reluctant to join a learning group because she never found a good partner. Therefore, Devi only relied on her self-learning during studying at the Indonesia Open University. This lack of social presence probably decreased her motivation either to keep enrolled as an active student or to accomplish her study.

6.1.5 Supporting Environment

All participants from active and inactive student groups talked about external supports from family members and employers. In the active student group, for the married participants (Wawan, Zulki, Haril, Danu, Hasan, and Indra), they received support from their spouses during their studies. Meanwhile, for unmarried participants (Ina, Wati, Rama, and Santoso), their family members fully supported them in pursuing the Bachelor degree.

My wife's support for me was very big. I thought to suspend the course registration and my wife was angry when she knew it. Now I had been enrolled as an active student due to my wife's encouragement (Hasan).

Seven of the participants (Danu, Hasan, Wawan, Rama, Santoso, Haril, and Zulki) also received moral support from their bosses (employers) and colleagues in the workplace to pursue the Bachelor degree. They also stated that their selected course programmes were relevant with and functional in supporting their current jobs.

For the inactive student group, all participants (Devi, Amri, and Fahri) received full supports from their family members for pursuing the bachelor degree in the Indonesia Open University. Neither Devi, nor Amri talked about the support from their employers. Meanwhile, Amri mentioned that his employer recommended him to change his current course programme with the selected course programmes in order to comply with the latest rule for career promotion.

6.2 Single Case Study

In this part, five cases are presented as representation from 13 cases studied in this research. In this single case study, five themes were identified based on the analysis of the interviews with each case study: self-motivation, volitional strategies, quality of institutional services, interaction, and supporting environment.

6.2.1 Case study 1

Wawan

Wawan was 36 years old and had two daughters under 18 years old. He worked as a staff of the Public Order Agency (Satpol PP) for eight years in Tegal

regency, Central Java, Indonesia. His employer appointed him as a treasurer because of his computer skills and he was happy with this job position. "I had been appointed as a treasurer in my office because of my ability to operate some computer software". Wawan was graduated from Senior High School in Tegal regency and he was not able to continue his study promptly after completing his secondary level to college/university level because of financial problem.

Wawan registered as a student of Indonesia Open University since 2010.1 (year 2010; term 1). He selected Indonesia Open University due to its affordable tuition fees, flexibility, and no face-to-face class meeting. "Since becoming a state public staff, study at the Indonesia Open University was my prominent option because of its affordable cost, no need to leave my family, and particularly I did not need to attend face-to-face classes".

Wawan took the course programme of State Administration Science, School of Communication Science, Faculty of Social and Political Sciences. The selection of the course programme was not his own decision solely. Before applying his study permit, Wawan consulted with the staffing bureau regarding his study plan and they recommended taking 'State Administration Science' because this related to his duties in the workplace:

.... before applying a study permit in my office, I had to consult my study plan with the bureau staff. The result of this consultation, I had been recommended to take the course programme of the State Administration Science by considering my duties in the office.

Self-Motivation

Wawan's progress as an active student in four consecutive semesters was driven by high self-motivation. Wawan was motivated to complete his study by conducting certain learning strategies and overcoming barriers of the situation and time. Wawan realised studying in Indonesia Open University demanding learning autonomy and should be able to integrate study with family and employment.

When I decided to continue my study at the Indonesia Open University, I realised that I would encounter many difficulties in managing my time for employment, family, and study, and financial constraints. But studying in Indonesia Open University demanded our independence

Wawan's decision to continue his study at the university level was encouraged predominantly by extrinsic motivation to obtain a higher job position in his office. It was impossible for him to get a career promotion without having the Bachelor degree:

My main motivation to go to University was to develop my career. Because just having Secondary Degree, my maximum level in the career that I could reach was III/B level. Meanwhile, if I had a Bachelor degree, I would be able to get III/D level, even without holding structural position and I wish could retire from the job in the level of IV/A.

Furthermore, another extrinsic motivation that urged him to obtain the Bachelor degree was a recommendation from the employer for all staff to have a university degree and to prove to his colleagues that it is not difficult to get a Bachelor degree from Indonesia Open University. However, the progress was driven also by intrinsic motivation in order to accomplish his study within eight semesters (four years) and to learn about state administration issues: "... another motivation such as to learn knowledge ... and I wished to obtain a university degree within eight semesters".

In this case, intrinsic and extrinsic motivations did not stand in conflict with each other. Extrinsic motivation did not undermine intrinsic motivation, but both intrinsic and extrinsic motivations reinforced each other in encouraging Wawan to be an active student in four consecutive semesters.

At the same time, Wawan was motivated to self-manage in order to reach his learning goal, such as time management and learning assistance management (help seeking). In order to complete his study, Wawan had a study plan that helped him to manage the courses in every semester and set a target of when he should finish the study: "I think what should be prepared to study at the

Indonesia Open University is a comprehensive plan, and I have done such a thing when registered as a student. The first step I do is to split up the entire courses into a study plan for each semester so I can see and set targets when I can pass". Furthermore, Wawan tried to structure learning time effectively by obtaining printed learning materials before the schedule of online tutorials, so that he had sufficient time to learn learning materials before commencing online tutorials and more prepared for taking final assignments.

....then I tried to get learning modules ahead of time before online tutorial began with the hope that I had enough time to study the courses I took. I never allocated special time to learn, as long as there was a spare time then I used to read the modules.

Learning assistance management skills (help seeking) is the ability to know when help is needed, identify sources of help, attain help, evaluate the help received (Lynch & Dembo, 2004). Wawan realised that it was hard effort to master all course modules within short timeframes alongside his work duties and family life. Therefore, he initiated a learning group consisting of five working colleagues who had been taking the same programme. The main task for each colleague was to make summaries of certain course modules and this effort was deemed very helpful in learning many thick modules within shortly time. "... I formed a learning group consisting of five persons in which assigned duty for each person in the beginning of the semester was to sum up course modules. This task helped us to learn many thick modules".

Volitional Strategies

As an adult learner, Wawan certainly encountered multiple and conflicting roles, such as job obligations and looking after his family. These responsibilities could have challenged his motivation if he could not to maintain it.

Wawan understood these conflicting roles when he decided to continue to study at the Indonesia Open University. "I realise that I would encounter many difficulties in managing my time for employment, family, and study, and

financial constraints". Wawan therefore had a strategy to keep motivated in pursuing a Bachelor degree at the Indonesia Open University. "According to me, studying at the Indonesia Open University needed a careful planning from the outset". In doing so, Wawan made a careful plan by managing how many courses he took in every semester and set the target on the timeline when he will complete his study. Wawan also did other activities to maintain his motivation, such as to get the modules before starting of online tutorials, reading the modules whenever he has free time, and forming the learning group as a way to learn the modules together.

Quality of Institutional Services

Wawan had a satisfactory experience regarding prompt responses provided by faculty staffs to deal with students' complaints. Wawan's progress as an active student was influenced by his satisfactory experience as a student and did not undermine his commitment to complete his study as soon as possible. "In general, I have no complaint against the university's services and so far I do not have a problem...."

In terms of the quality of modules, Wawan assumed that the Indonesia Open University had high quality and up to date modules, and it met required standards as students' resources. Furthermore, students of the Indonesia Open University now had now been provided additional support to access learning materials digitally through a 'virtual reading room'. As Wawan stated: "...now many students do not need to buy learning modules anymore because the Indonesia Open University have now been providing the 'virtual reading room' to learn course materials". On the other hand, Wawan had been satisfied also with the delivery time of the modules, having received the modules less than five days from the payment confirmation date:

...I always ordered the modules ahead of time before the commencement date (possibly due to low transactions), therefore I could receive a prompt service from the university's online bookshop. I had received my orders less than five days from the online confirmation date.

However, Wawan had noticed some inadequate support from the Indonesia Open University, such as lack of online access to get the student achievement records and unresponsive tutors during online tutorials. Wawan confirmed that the tutors were less responsive in the online discussion forum and did not provide feedback on the discussion forum. Moreover, the tutors did not provide comments or feedback on the assignments.

....sometimes tutors only gave a case and allowed students to discuss without any feedback at all. Then another complaint was tutors assigned assignments to the students, but did not want to show the assignment markings to the students. Therefore, the students wondered about the assignment results.

At the same time, Wawan expected that students of the Indonesia Open University would be assigned academic advisors. Wawan assumed that an academic advisor would help students with structuring and managing their study every semester, and finally would motivate students to complete their studies:

In the conventional course we could find an academic advisor as a place for students to consult with, including consultation about course selection in every semester. This what I could not find in the Indonesia Open University, the students consequently did not have a structured course programme, I thought the Indonesia Open University should start to pioneer it, so that each student had an academic advisor during the study.

Interaction

As a student of the Indonesia Open University (IOU), Wawan did not feel lonely or isolated because he was able to interact with other IOU students in his office and the University's staff.

Wawan assumed that his progress was much influenced by the existence of learning group in his office. This learning group consisted of five IOU students who had been working in the Public Order Agency in Tegal regency. Wawan realised that he needed learning strategies to integrate study with working duties and family. Therefore, he offered his colleagues who had been studying in the Indonesia Open University to form the learning group.

... studying at Indonesia Open University demanded learning independence ... in order to master the learning modules, I had to read all those modules, but due to the lack of time to read those thick modules and even now my age was not young anymore, so I realised that I probably would not be able to absorb the learning materials properly if I learned all of the modules alone. On this basis, I offered my friends who continue their study at the Indonesia Open University to form the learning group and my offer was accepted. To my friends I emphasised one thing about shared commitment, we enrolled together and as much as possible we should pass together.

Wawan presumed that the learning group provided him and other members several advantages. For example, all of the members obtained a grade point average (GPA) in each semester above the minimum standard of GPA (2.0 of 4.0) and three out of five members succeeded to receive the scholarship from the Indonesia Open University for period of two years.

The main task of each person was to summarise the modules that would be used to prepare for final exams, those summaries of the modules should be already written before online tutorials started. We did not set a time to meet regularly, because we always met regularly due to having been working in the same office, we often gathered after online tutorials usually starting especially when we got tasks from tutors and in the last week of the tutorial schedule to discuss and exercise exam questions.

Supporting Environment

The Wawan's family provided full support for him to accomplish his study at the Indonesia Open University. "... my wife was very supportive to my intention to study at the university". Wawan also received support from his boss to continue his study. He said:

Head of the office was very supportive for the officers who will continue their study, and he strongly encouraged that the officers of SATPOL-PP (the Public Order Agency) must be graduated at least from the undergraduate level.

However, several colleagues in his office still questioned his ability to accomplish his study at the university level such as Indonesia Open University. As Wawan said:

Broadly speaking, there were two responses when I decided to study at the Indonesia Open University: colleagues who supported my study and the other doubted, and my job supervisor said to me that the high grade points that I have obtained were chancy.

6.2.2 Case study 2

Zulki

Zulki was an English teacher of the Islamic senior high school in the Pangkalan Brandan Regency, North Sumatera Province. Before joining senior high school as a teacher, Zulki had been an English teacher in a private English course institution since 1991. "I was a teacher of English subject at Islamic senior high school. Before that, I had been an informal teacher of the English course in my town from 1991 to the present. So I had been a teacher in the non-formal sector before moving to teach in the formal sector". Zulki was born in Pangkalan Brandan regency in mixed ethnic parents. His father came from West Sumatera and married to his mother who came from Java Island.

Zulki was initially enrolled as a student at the Indonesia Open University in 2003 by taking an English Translation course (Diploma 3) and was able to complete it within three years, after which Zulki continued his study to a Bachelor degree in English education for one year and finished in 2009. In 2010, Zulki undertook another Bachelor degree of English for translation in the Indonesia Open University.

Self-Motivation

Zulki' progress as an active student was influenced by his intrinsic motivation to learn new knowledge in the Indonesia Open University. "....my motivation to keep learning made me always enrolled as an active student from the first commencement. Because I was used to learn, I felt like something was missing if I suspended my study at the Indonesia Open University".

Zulki even though had a financial constraint; he had high motivation to pursue a Bachelor degree. As Zulki said:

After graduated from senior high school, I did not continue directly to university level, even though I really wanted to14 years later I was informed by my friend that the Indonesia Open University received admission of a course programme of English for translations for the senior high school graduate.....therefore I took the course programme at the Indonesia Open University because I liked exploring for new knowledge.

Zulki's intrinsic motivation encouraged him to manage his learning time. Zulki had special learning time at home in the night and took the modules in the workplace and allocated time to read when had spare time. "As I have stated before, I allocate special time to study at home, I also take the module so that I can read in between my activities on the course or at school. So I do not have time constraints in the learning management".

Volitional Strategies

Zulki's motivation for pursuing a Bachelor degree at the Indonesia Open University had been maintained by his curiosity to learn new things in the University. As Zulki said:

My motivation to pursue new knowledge at the Indonesia Open University has kept me enrolled regularly in each semester". Furthermore, support from family members also had a significant role in increasing Zulki's motivation in earning a Bachelor degree in the Indonesia Open University.

Beside the fascination to learn new knowledge as a source of his learning motivation. Zulki also developed learning strategies to manage the conflicting roles amongst study, family and job. His understanding about distance education system had helped him to adapt with the independent learning: "I realised that studying at the Indonesia Open University required independent learning...and I tried to read the modules whenever I had free time...and I invited all my friends to online forum to discuss the learning materials..."

Quality of Institutional Services

Zulki thought that academic and administrative services at the Indonesia Open University have been much improved and better than before: "From year to year, academic and administrative services at the Indonesia Open University (Universitas Terbuka) had been getting better and better. Now, everything had been more easily accessed than the first time I came to the university here in 2003..."

However, Zulki has recorded some complaints about institutional supports. Zulki noticed that the tutors of online tutorial should be more responsive in providing feedback, discussions, and answers of students' questions. The promptly responses will motivate students to persist in online tutorials. Otherwise, the lack of prompt responsiveness will undermine students' motivation to persist in online tutorials.

...for example, most of the tutors in the online Tutorials were slightly less responsive to students. There some students who had worked on the tutorial's assignment and did not get the feedback, such as scores or comments. So they assumed it's useless to participate in the online tutorials if there was no value for them.

Furthermore, Zulki was not satisfied with the quality of the modules. He found that some modules were not written properly and less communicative:

....some modules had a lot of spelling mistakes and that seemed to lack proofreading. Furthermore, some parts of modules were confusing and less communicative, and impressed that the writing had been done in a hurry to catch the publication deadline for the modules in order to achieve the target for launching the new course programmes.

Interaction

Zulki never felt alone during studying at the Indonesia Open University because he had already prepared to study through distance learning that required student's autonomy: "I knew that I was going to learn independently..... So I never felt isolated, yet still there were other communication channels to connect with other students through the UT online". Furthermore, Zulki ever had the learning group when he started his study at the Indonesia Open University. This learning group consisted of his colleagues who studied at the same course programme and much helped him to keep highly motivated and resolved the learning barriers.

In the first year when I joined the Indonesia Open University, I had a small learning group that consisted of my colleagues who had been taking the same course programme at UT. Indeed, learning together could motivate each other when we have difficulties or when our motivation was sagging. However, after we all graduated at that time and I continued to the next level, I was able to learn by myself without friends and learning group.

The online community of the Indonesia Open University helped Zulki to interact with other students. He enjoyed joining an online community and provided responses to many complaints uploaded by other students. Moreover, he sometimes interacted with other students to discuss the learning materials.

I joined with the UT online community since I first joined the Indonesia Open University and enjoyed all the facilities available there. Online community helped me to learn and responded other students' complaints. In addition, I could interact with other students to discuss any subject or problem, but by using private line through email, messengers, Facebook, or telephone as the communication medium.

Supporting Environment

The Family support played an important role in Zulki's progress as an active student since 2010. This support had helped him to manage his learning time during at home. "My family had been very encouraging to finish my study at

the Indonesia Open University. Study time at home also did not intervene in my family activities, as I usually learned at night”.

Zulki’s colleagues either in senior high school or private English courses provided him with support to study at the Indonesia Open University. His colleagues were also proud of him because studying at the Indonesia Open University required a high independence in learning: “My colleagues in the school were very supportive of my study at the Indonesia Open University and they were proud of me because they knew it was not easy to learn at the Indonesia Open University, it needed high independent learning”.

6.2.3 Case Study 3

Haril

Haril was born in Jakarta and his parents originally came from the province of West Sumatera, western part of Indonesia. Initially, Haril worked as a civil servant at the Radio Republic Indonesia (National Radio Station) and then he moved to the Indonesian Ministry of Fisheries and Marine in 2003 in the hope of getting a better career. Haril had been living in the Jakarta City for 14 years. He was married and had three children. The first son was 14 years old, the second son was 12 years old and the last daughter was 5 years old.

Haril had registered as a student of the Indonesia Open University in 2010. He had a Diploma degree in journalism before entering the Indonesia Open University. He decided to select the course programme of Communication Science because he was not allowed to transfer his previous courses into the Fisheries programme and should undertake all courses in the programme. Therefore, he decided to continue his study in the programme of Communication Science in order that he could transfer prior courses in the Diploma degree into the Bachelor degree and could pursue the degree within 2 years.

... Because now I had been working in the Ministry of Maritime Affairs and Fisheries then I was interested to enrol in the fisheries studies, but it was not accepted by the faculty because it did not fit with my Diploma degree. In addition, I was also required to take all courses from the beginning. For me it was impossible because it would take longer time for me to complete my study.

Self-motivation

Haril was motivated to study at the university level in order primarily to promote his career as a civil servant at the Ministry of Maritime Affairs and Fisheries. He realised that the academic degree level would help him to determine the better career prospect in the workplace.

....my main goal to study at the Indonesia Open University was for career improvement, so that if I could get a Bachelor degree, then at least I would get a higher level of career.

Initially, Haril was not concerned with the career promotion, but he was motivated to pursue a Bachelor degree when he saw many of his colleagues who had a Bachelor degree obtaining a better career in the future. Moreover, Haril believed that his study was relevant to his work and needed by his employer because there have been a public relations unit in the Ministry Office that needed a communication officer.

However, career improvement was not the only motivation to study at the Open University. Haril was also motivated to learn about communication knowledge by studying at the Indonesia Open University. He very much liked to read books and he admitted that by reading the modules would increase his knowledge.

....I was a fan of science. I really liked reading many books. Frankly speaking, the books (modules) from the Indonesia Open University obviously increased my knowledge and I could not find it from previous study at the Radio Republik Indonesia (National Radio Station).

Volitional Strategies

A Bachelor degree for Haril was very important as a requirement to get career promotion in his office. Therefore, Haril was motivated enrolled regularly as an active student in order to complete his study as soon as possible. "I always reminder myself that I am not allowed to dropout even though I am overwhelmed with workload". Haril had a strategy to maintain his learning motivation by managing the study load every semester. "... if I received heavy workload, I would take one or two courses per semester. I had tried to take five courses, but I failed to obtain passing grades for all courses...".

Furthermore, Haril also talked about his curiosity about new knowledge, so he indeed liked to read the modules when he had time. "I indeed liked to read the modules so I got much new knowledge from them". This curiosity contributed also to his student progress. The need to learn new knowledge had kept his learning motivation and then this motivated him to be an enrolled student in every semester.

Quality of Institutional Services

Haris was satisfied with the support of online registration. This support has helped him to manage registration without visiting the Regional Office. As an employed person, Haril was difficult to allocate time for visiting the Regional Office for face-to-face registration. Moreover, online registration has helped him to enrol within schedule and it did not require paying a tuition fee before enrolment. Therefore, since using online registration, Haril never been late to enrol even though having a financial problem.

Since online registration was available, it was easier for me. I never visited again the regional office because I could register through online registration. Moreover, I thanked for God, I was able to register despite I did not have the cost of tuition fees. Therefore, this service was quite helpful. I hoped the university could retain such this registration system. In addition, when we did not have enough money to pay the tuition fees, we were still allowed to enrol in advance so we would not miss the registration deadline.

In terms of quality of modules, Haril generally was satisfied with the contents and deliveries of modules. However, he asked to the University allowing the student to buy modules directly from the university shop when students needed modules immediately and could not wait for delivery. Besides, he found that some pages in the modules were missing and he expected the University to be concerned about this matter.

Haril provided concerns about student services in the Regional Office of Jakarta. According to him, the student services should not discriminate between male students and female students. He ever encountered an experience about this matter that the Regional Office staffs give more attention to female students than for male students. When he saw a male student asking academic or administrative services, the staff gave the service with less welcoming. Conversely, they served with very welcome to female students.

On one occasion, I was disappointed. When staff served female students, they were more proactive and with a warm-hearted. However, when turned to serve the male students, their services was not as good as when they served the female student, so there was favouritism in serving students.

Additionally, Haril observed that the student services in the Regional Office were disrupted due to occasions when staff were attending meetings. Haril asked the Regional Office to give more priority to the student services than staff meetings. He thought that the staff meetings should not be conducted in the service hours.

Haril was also satisfied with examination services. Haril thought that the examination was organised in a structured manner and now was better than before, for example the participants' names were already printed on the answering sheet.

Interaction

Haril revealed that he did not feel lonely during his study at the Indonesia Open University. From the outset, Haril had decided to undertake a Bachelor degree at the Open University and understood that he was required to learn independently and would encounter different and difficult situations compared to the face-to-face University. As he said:

I personally did not have the feeling of isolation when studying at the Indonesia Open University because it was my decision and if I decided to study at a conventional university, then I would be difficult to manage my time.

Actually, Haril was interested in joining a learning group, but he did not have much time to participate in learning group activities. Therefore, Haril obtained learning support only from the online and face-to-face tutorials and modules.

Supporting Environment

In pursuing his degree, Haril gained support from his boss and colleagues in the workplace. His Boss very encouraged him and all staffs in the office to pursue a Bachelor degree. Haril knew that the career promotion in his office was conducted based on the educational level starting from a Bachelor degree.

Therefore, according to him, the Head of Department always gave support to the staff that undertook the course programme, such as giving permission to go to the regional office or getting a day off from work on exam days. In addition, Haril sensed that his colleagues in the workplace provided him support to complete his study at the Indonesia Open University.

There was no problem with my colleagues in the office, all of them supported me. I had observed so far that the education was always more prioritised than other tasks. Although there was an urgent task, but if it conflicted with the exams or tutorials then the education would be given a more priority.

In terms of family support, Haril obtained the full support from his family members, and they urged him to complete the study as soon as possible.

“....my family indeed supported me and even encouraged me to finish my study as soon as possible”.

6.2.4 Case study 4

Devi

Devi was an inactive student at the Indonesia Open University. She was a manager of Consultant Company on property affairs at Jakarta, Indonesia. Devi enrolled as a student of the Indonesia Open University in the registration period of 2010.1 (year 2010; term 1) and she was enrolled as an active student for one semester. After that, she did not enrol since the registration period of 2010.2 (year 2010; term 2) to recent periods due to two major reasons: she was initially late to re-enrol and secondly because of her hectic business activities.

Before studying at the Indonesia Open University, Devi had ever studied at the face-to-face university, Mercu Buana University, for three semesters. The Mercu Buana University is a private university at Jakarta, Indonesia. After failing to re-enrol and pay a tuition fee within the timescale, Devi did not continue her study anymore at the Mercu Buana University. This condition led to Devi looking for another university to continue her study. Eventually, she opted to study at the Indonesia Open University because of its flexible approach to learning.

Self-Motivation

Studying at a university for Devi was driven by the extrinsic motivation to obtain a Bachelor degree and social prestige in her community. According to Devi, she had a lot of non-degree certificates pertinent to work skills from her company. Devi believed that by having a Bachelor degree probably would be beneficial to improve her social prestige and self-esteem. As she said:

... I actually received many training programmes from my company, but they were non-degree programmes. Therefore, I decided to look for a Bachelor degree by self-effort ...

Devi selected “public relation” as her course programme based not because the course programme was relevant to her job but instead she selected the course programme arbitrarily, without giving it deep thought. Therefore, getting a Bachelor degree was the only main goal for her study. “I actually took Mass Communication as my course programme. However, I felt afterward that I had chosen the incorrect course programme”.

Quality of Institutional Services

Being an active student for a semester, Devi had a low satisfaction regarding the registration services at the regional office of Jakarta. Devi assessed that the registration service was not a fully computerised process and some of the older officers had no computer skills. This condition made the registration process was not effective and time consuming process.

According to me, the registration service was not a computerized process and then the staffs were looked very old....some of them were not having computer skills and made the registration process little bit messy with many papers everywhere on the table....

As a manager of company, Devi found it difficult to manage the course registration manually by visiting the regional office. Therefore, she expected that the Indonesia Open University had an online registration service. Devi believed that an online service would help her to manage her time for registration amid her busy activities. Furthermore, Devi expected to get a reminder from the Indonesia Open University regarding the deadline of registration period. This expectation was raised based on her experience that she failed to continue the study because of her unawareness to the deadline of the registration process. In this case, registration service had a pivotal role in contributing her student progress.

... then I had an experience that made me discontinue my study at the Indonesia Open University ... at that point, I asked my assistant to put the registration deadline into the list of events but she forgot to remind me ... I had finally passed the deadline of registration, I tried to register on the day after the closing date, but the system rejected my payment; eventually it really annoyed me. However, this was my fault anyway, why I must rely on somebody else to remind me. Secondly, I was disappointed because I must wait for another academic term, to wait for next six months ... so it was not effective for me and finally I decided to dropout ...

Devi also disclosed the lack of information regarding the registration procedures at the Regional Office of Jakarta. This lack of information made it difficult for her to know how and where to register. Ideally, according to Devi, the Regional Office of Jakarta provided the information of registration procedures and time of services, as she discovered at the immigration office when she applied for getting a passport.

.... there was no registration procedures and at that time I saw a bit complicated to registerit was not like the information from one point to other points as we found when applied for a passport ... now we did not apply by using a broker or an agent ... and I found a standby man to help people and answered the questions ... now we could apply a passport either through the online system or came to the immigration office..... I ever came at 6am and got a passport at 10am. Therefore, I imagined the Indonesia Open University had such online service....

For Devi, the high quality of student services would motivate students to continue and accomplish their study. "According to me, the student service was very important and I found that every university had a different quality of service". Devi also expected that the Indonesia Open University treated the students as customers and used the customer-oriented services.

....actually, we went to the university as customers so that we must get comprehensive services. Then, the orientation should lead to the customer services and the staff should be ready to do it....

6.2.5 Case Study 5

Amri

Amri was an inactive student since the registration period of 2012.1. Amri was 33 years old and had been working as a civil servant of Technical Implementation Unit at the local government of Lampung city, Indonesia. He was married, and had two children; one daughter and one son.

Self-Motivation

Amri just had a secondary degree when he started to work and he needed a higher degree to boost his career. Amri therefore was motivated to pursue the Bachelor degree in order to promote his career. Regarding this intention, Amri started to research a suitable university. Several his colleagues recommended him to pursue the Bachelor degree at the Indonesia Open University due to its flexibility for employed persons. Finally, Amri was interested in this feature and selected the Indonesia Open University. As he said:

Initially what motivated me to study at the Indonesia Open University (IOU) was to improve my career at the office. I selected IOU because some friends told me that study at IOU was not too difficult and flexible. Therefore, I was interested in.

Amri chose the Government Science as course programme because he liked it and it supported his job. However, his motivation suddenly declined and he decided to suspend his study when he received information from his employer that his selected course programme could not be used to promote his career.

At first, I chose a course programme that supported my job but there was a letter from headquarters stating that my course programme was not included in the list of courses that could be used for career promotion. That letter led me to withdraw from the Indonesia Open University.

Quality of Institutional Services

As a freshman, Amri was confused about how to be an independent learner as required by the university. Distance learning system was a new experience for Amri and he needed much support from the university on how to integrate between study and job. For example, Amri found difficulty in participating in the learning community located nearby his house due to high workload in the office. He said:

When started to study at the Indonesia Open University, I knew that I was required to be an independent learner ... but when I had been following the learning at IOU from the beginning, I became confused because I could not actively involved in the learning group due to my heavy workload ...

Amri found also that he received less academic supervision during his learning. This situation had a pivotal impact for his decision to suspend his study. "As a student, I found difficulty to consult with the tutors regarding my learning. So, in this situation, I was like the missing person".

Amri was concerned also about the quality of learning in the Indonesia Open University. According to him, learning at the Indonesia Open University needed more challenges with more assignments. These assignments would make the students busier in the study and increased their motivation in pursuing a Bachelor degree.

In terms of registration services, Amri did not have any trouble about the registration service. Amri found the process of registration was straightforward and helpful. "I thought that the registration and payment services were satisfactory". Furthermore, Amri stated that he always received information through email about the registration and examination services.

Interaction

Amri also talked about the role of interaction in contributing his decision to suspend his study. According to him, as a freshman, Amri felt lonely and needed interaction with other students as happened in the conventional (face-to-face) university. Therefore, Amri expected the University to provide the student support for the freshman in order to involve with the face-face tutorial activities. This kind of involvement probably would increase student motivation to continue his or her study.

Personally, I felt lonely when I was a student of Indonesia Open University. It would be nice therefore if the university could facilitated us to know our friends in the course programme, so that we could establish communication among us, and it is easier than we had to find out by ourselves.

Supporting Environment

Amri received a huge support from his wife to pursue the Bachelor degree from the Indonesia Open University. Amri also received much support from his colleagues in the office to earn the Bachelor degree as soon as possible. "My colleagues were very supportive of me to study at the Indonesia Open University because they knew that I had just graduated from senior high school".

6.3 Summary of Qualitative Findings

The multiple case study analysis reported five major themes within case and across cases regarding factors influencing student progress in the Indonesia Open University.

Self-motivation. There were two types of motivation coming up from multiple case analysis: intrinsic motivation and extrinsic motivation. Both these intrinsic

and extrinsic motivation did not stand in conflict each other in influencing student progress.

The main source of intrinsic motivation was motivation to learn new knowledge. Meanwhile, the source of extrinsic motivation was mainly to get a better career prospects. However, it was also identified from the findings that social prestige was also another source of motivation.

Volitional strategies. Multiple case analysis revealed that the participants from the active student group had volitional strategies to maintain their motivation during studying in the Indonesia Open University. According to ten participants, their volitional strategies could be classified into two categories: volitional efficacy and metacognition.

Quality of institutional services. The majority of participants were satisfied with the institutional services provided by the Indonesia Open University. However, negative perception of the quality of services was also revealed by several participants from both active and non-active student groups.

The institutional services were classified into two categories: academic services and registration services. Academic services consisted of student support services, modules, and tutors. In this qualitative study, student support services related to examination and student supports provided by the Regional Offices. Meanwhile, registration services included three phase registration to support academic process.

In terms of quality of academic services, nine out of 13 participants were satisfied with the quality of student support services. In the meantime, four participants revealed their negative experiences, such as discrimination in providing services between male and female students, the services did not satisfy student's needs, lack of computer skills, and the registration service was not fully computerised process.

In line with this, eight out of ten participants from active students group were satisfied with the quality of modules, the easy online order and fast delivery of modules. However, three participants criticised the quality of modules and suggested improvement in the areas of content updating with the latest rules; spelling mistakes; and theoretical implementation.

For the quality of tutors, three participants were satisfied with the fast responses provided by tutors of online tutorials. Other two participants criticised the tutors about their low responses and lack of feedback on assignments.

In relation to quality of registration services, 11 participants were satisfied with the registration services and they felt that the implementation of online registration was more helpful than the manual registration. Meanwhile, only one participant supposed that the registration service was complicated and she suggested the implementation of online registration.

Supporting environment.

Supporting environment dealt with support from family members, employers, and colleagues. Nine married participants stated that they received support from their spouses to pursue the Bachelor degree at the Indonesia Open University. Similarly, four unmarried participants revealed that they also received support from their family members.

In the meantime, seven participants from active student group felt that they received support from their employers and colleagues. In contrast, all participants from non-active student group did not talk about the support from their employers.

In the forthcoming chapter, all findings from this qualitative phase are integrated with the quantitative results and both data are discussed in line with the research questions.

Chapter 7 Data Elaboration and Integration of Results

Student attrition is indeed a complex phenomenon, particularly in the field of open and distance learning. It is complex because it involves human behaviour, it is complex because it involves so many types of withdrawal, and it is complex because it varies over time. (Woodley et al., 2001, p. 130)

In this chapter, the quantitative and qualitative findings are integrated, interpreted, and discussed with the related literature. This study has investigated the factors influencing student progress in the Indonesia Open University and the extent to which the identified factors influence student progress by employing a quantitative method with survey design which was subsequently followed up by obtaining qualitative data from semi-structured interviews. Student progress in this study was defined as the continuation of enrolment within four consecutive semesters. In this study, an active student refers to an enrolled student within four consecutive semesters. Conversely, a student who fails to re-enrol within four consecutive semesters is classified as an inactive student.

Data elaboration and integration of quantitative and qualitative findings in this study are guided by the following four research questions:

1. What factors influence student progress in the Indonesia Open University?
2. To what extent do individual factors influence student progress?
3. To what extent do institutional factors influence student progress?
4. To what extent do external factors influence student progress?

The study employed a mixed methods approach with a sequential explanatory design (section 4.1). The quantitative method was conducted in the first phase and then followed by the qualitative method in order to investigate in-depth

the identified factors (individual, institutional, and external factors) raised in phase one. In the first phase, quantitative data was collected using a web-based survey. This survey used a convenience sampling method by inviting 6,095 students of the Faculty of Social and Political Sciences who had email addresses to participate in the survey. A total of 153 students completed the web survey: 115 participants reported as being active students, 24 participants as being inactive students, and 14 participants did not report their enrolment status. Therefore, the overall response rates for the research study was about 2.5% (see section 4.2).

The quantitative findings revealed that the most typical age of participants was between 25 and 29 years (29%) and the majority of participants (62.3%) were men. Moreover, their ethnicity was predominantly identified as Javanese (42.4%), the largest ethnic group in Indonesia; they were mostly graduated from Senior High School (73.2%); 54 per cent of participants were employed full-time; and they were primarily married and had children under 18 years old (53%).

Meanwhile, the qualitative phase focused on understanding the extent to which internal, institutional and external factors influencing student progress at the Indonesia Open University. In this phase, multiple case study analysis (see section 4.5) was used to collect data from 13 participants: ten participants were identified as active students and three participants were identified as inactive students.

This chapter provides a more in-depth discussion of both quantitative and qualitative findings based on the research questions. The discussion is provided by presenting the quantitative results and then followed by the qualitative results. Finally, the interpretations are discussed in relation to the related literature on the topic.

7.1 Research Question 1

What factors influence student progress in the Indonesia Open University?

This question was answered by quantitative and qualitative findings, and then discussed them in relation to the literature.

Quantitative phase. Based on the quantitative phase of the study, this study reported that 12 predictor variables had important contributions to the student progress in the Indonesia Open University context. Logistic regression analysis indicated that these 12 variables as a logistic regression model statistically could be able to explain between 37.3 percent and 67.3 percent of the variability of student progress. These 12 predictors included: 1) Age; 2) Gender; 3) Prior education; 4) Intrinsic motivation; 5) Extrinsic motivation; 6) Self-efficacy; 7) Volitional strategies; 8) Student services; 9) Learning services; 10) Interaction; 11) Family & friends; and 12) Work environment. This predictive model of student progress had a goodness of fit of the observed data.

In terms of the individual contribution of predictors to the model, four predictors had been found statistically as having the most contributions to the model: volitional strategies (.047) learning services (.036), working environment (.036), and prior education (0.027). The Wald test in the regression analysis indicated that the four variables had p -value less than .05. ($P > .05$).

These 12 variables can be classified into three factors: individual, institutional, and external factors. The individual factor consists of personal characteristics and psychological attributes. The institutional factor explains students' perception and satisfaction on learning services, student support services, and peer interaction. Finally, the external factor encompasses support from family, friends, and employers.

These quantitative findings demonstrated clearly that student progress in the Indonesia Open University was influenced by the interplay of various variables.

The interplay of these factors indicated that process of student progress was a process of interactions amongst the individual, institutional, and external factors.

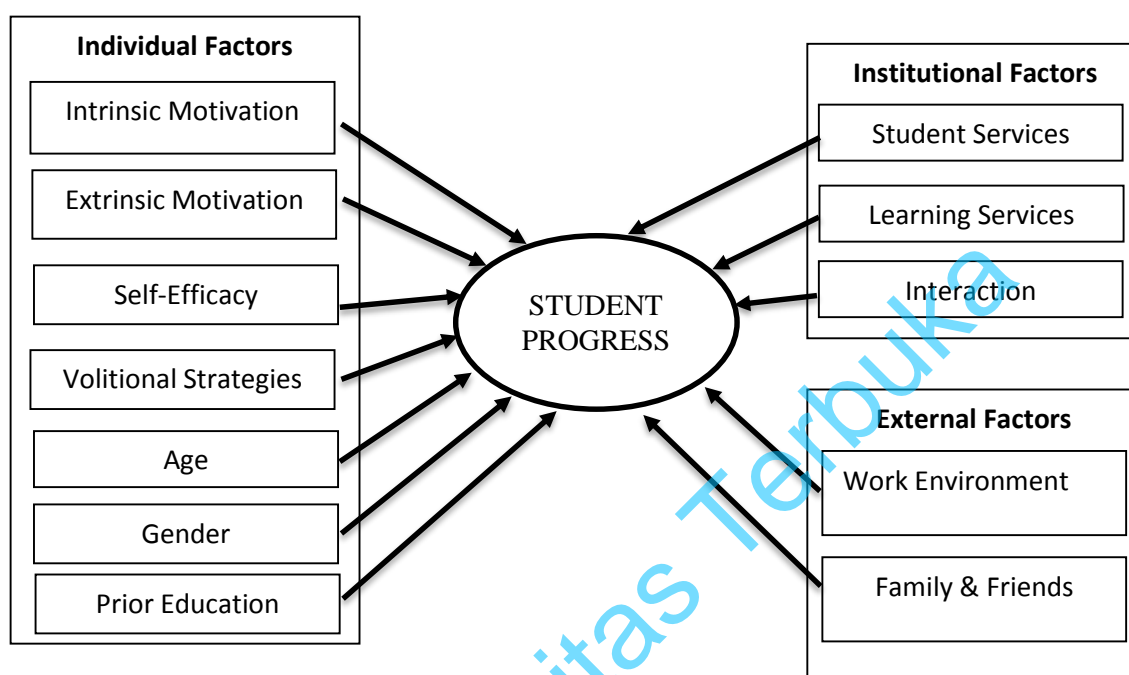


Figure 7. 1 A predictive model of student progress in the Indonesia Open University

The lack of integration amongst these three factors could lead a distance learner becoming a vulnerable student. Lack of support from employers, for example, could prevent student progress, while support from employers proved a very important factor for helping a distance learner to integrate study with employment. Employers may provide days off, bursaries, and the prospect of career promotion. These supports possibly provide motivation for student to keep enrolled continuously in order to earn a university degree.

Moreover, the statistical findings in this study demonstrated that heavy workloads and the lack of supports from institution were the most prominent reasons of non-enrolment (see section 5.2.3). These findings also supported prior research in the Korea National University that the main reasons of non-re-

enrolment were the heavy workloads demanded in students' jobs, the lack of feedback on the students' work and a dislike of distance learning amongst students (Choi et al., 2013).

Qualitative phase. The qualitative phase focused on understanding the quantitative findings about the extent to which individual, institutional and external factors influencing student progress in the Indonesia Open University. In this qualitative phase, a case study analysis was employed to collect data from 13 participants. Based on the multiple case study analysis, the study found five major themes that have significant contribution to the student progress: self-motivation, volitional strategies, quality of institutional services, interaction, and supporting environment.

The qualitative findings supported the quantitative findings in terms of the way to explain student progress in the Indonesia Open University. The qualitative findings reinforced the quantitative findings that the process of student progress was based largely on the degree of fit amongst the individual, institutional, and external factors.

Furthermore, the qualitative findings also indicated that intrinsic and extrinsic motivation co-existed together in contributing student progress. These findings build on Kember's model of student progress in relation to the learning motivational concept in the context of distance education. In the Kember's model (1995), intrinsic and extrinsic motivation are contradictory each other. Whilst intrinsic motivation is the key element in the academic integration, extrinsic motivation is one of variables making up a key construct of academic incompatibility that leads to dropout decision.

Discussion. The findings in this mixed methods study explain student progress in the Open University contexts by looking at individual, institutional, and external factors. The findings of this study also address the psychological attributes (intrinsic and extrinsic motivation, volitional strategies, and self-efficacy) as the prominent factors in affecting student progress in the Indonesia Open University context.

The interplay of individual, institutional, and external factors in influencing student progress was consistent with the integration theory proposed by Tinto (1975; 1993) and Kember (1995). Tinto's integration theory, though, derived from research and practice in face-to-face education, but the theory was still particularly helpful in explaining student progress in open and distance education contexts (Simpson, 2003; Woodley et al., 2001). Meanwhile, Kember's theory of student progress (1995) focused solely on distance learners in online, open, and distance learning. Both these theories argued that the students' level of social and academic integration determine student persistence (section 2.2).

In the Indonesia Open University setting, in which there is a quasi-permanent separation of teacher and learner throughout the length of the learning process, interaction with peers and tutors, in most cases, occurred in the academic settings (online tutorials, face-face tutorials, and learning groups). Therefore, through these learning characteristics, student involvement in the academic settings can lead to the academic and social integration. In this context, the more they are involved academically, they more likely they are to be motivated in continuing their studies. As Tinto (1975; 1993) said, the social involvement through the educational activities may promote students' commitment to their institution and educational goals, and in turn will increase the levels of social and academic integration. As a result, the greater the students' levels of social and academic integration, the more likely the students are to persist.

At the same time, student progress in the Indonesia Open University was also depended upon the success of participants to integrate their studies with employment, family, and friends. These findings reflected the basic principles of Kember's (1995) model of student progress that student persistence in the distance learning is affected by the extent to which students are able to integrate study with the employment, social life, and family. Moreover, the pivotal role of student support services, learning services, interaction, and

quality of institutional services in contributing student progress supported the principle idea of academic integration as embracing all aspects of a distance education course and other elements including both academic and administrative support systems, the learning materials, and all forms of contact between an institution and the students (Ivankova & Stick, 2007; Kember, 1995; Woodley et al., 2001).

In addition, the important role of student characteristics (age, gender, and prior education) in affecting student progress in this study fully supported Rovai's composite model (2003) which revealed that student characteristics prior to admission influence student persistence including age, ethnicity, gender, intellectual development, and academic performance and preparation prior to college (section 2.2.3).

In summary, the qualitative findings clearly supported the quantitative findings. The results of this study extend the very limited body of research on student progress in the Open University by addressing individual, institutional, and external factors as the conceptual framework to explain student progress. Moreover, this study is also able to demonstrate the significant contribution of psychological attributes (intrinsic and extrinsic motivation, volitional strategies, and self-efficacy) on student progress.

7.2 Research Question 2

To what extent do individual factors influence student progress?

In this study, individual factors refers to all personal and biographical details encompassing student's characteristics, academic background, relevant experiences, skills, and psychological attributes (Diaz & Cartnal, 2006; Kember, 1995; Lee & Choi, 2011; Rovai, 2003; Tinto, 1993). The quantitative results indicated seven predictors classified as individual factors contributing to the predictive model of student progress in the Indonesia Open University: "age", "gender", "prior education", "intrinsic motivation", "extrinsic motivation", "self-efficacy", and "volitional strategies". Furthermore, in terms of the

individual contribution of predictors, the Wald test reported that out of seven predictors, two predictors, “volitional strategies” and “prior education”, had stronger contribution to the model of student progress.

Student characteristics. In terms of prior education, all participants in this study had prior formal education and 73.2% of them graduated from Senior High School (section 5.1.4). In the context of Indonesia Open University, previous formal education is one of the university entry requirements. A student’s initial requirement is at least to possess a high school certificate or other relevant certificate that has been verified by an authorised institution as equivalent to a high school certificate (section 3.2). In relation to student progress, prior educational experiences probably helped participants to increase their confidence to study at the Open University and this self-confidence (self-efficacy) in turn contributed to their enhanced academic integration, which had a positive effect on student progress. This explanation is also reinforced by the quantitative findings that prior education had statistically positive correlation with self-efficacy (appendix 2d.6).

Simpson (2003) also revealed the pivotal role of prior education experience in promoting academic integration which in turn will have an effect on student retention in the context of distance education. Therefore, Simpson (2003) suggested the Open University should provide preparatory, pre-degree courses, in which may encompasses packages of written and audio-visual materials. These preparatory courses may be designed as an introduction to distance study.

In another open university context, the effect of educational background on non-enrolment decision had been acknowledged by Choi et al. (2013) from their research on reasons of non-enrolment in National Korea Open University. This study revealed that educational background had important influence on non-enrolment mediated by the socio-economic related variable.

Meanwhile, the quantitative findings demonstrated that age was included in the model of student progress because it contributed to a goodness of fit of the model. However, the Wald test indicated that age was not the major factor contributing to student progress. This minor contribution probably because the effect of age on student progress was mediated by other related variables. The quantitative phase reported that the most typical age of participants was between 25 – 29 years (29%). Age category of 35 – 39 years was the ranked second (21.4%) and the third rank was 30 – 34 years (19.3%). From this statistical data, it appeared that 69.7% of participants were between 25 – 34 years old. Moreover, the quantitative findings revealed that age had significant correlation with extrinsic motivation and volitional strategies. This data imply that participants in age between 25 – 34 years old were more likely to have extrinsic motivations to learn and volitional strategies in maintaining their motivation to learn, the findings therefore indicated that extrinsic motivation and volitional strategies made important contributions to student progress.

In the same time, gender also made contribution to a goodness of fit of the model, but it made a minor factor influencing student progress (section 5.5). This perhaps was caused by unequal sample size between male and female participants. In this study, the sample size of male participants (62.7%) was twice higher than female participants (37.7%).

Volitional strategies. The quantitative and qualitative phases of the study indicated that volitional strategies made a significant contribution to student progress. The multiple case study analysis explained that there were two types of volitional strategies employed by ten participants in relation to their student progress at the Indonesia Open University: volitional self-efficacy and meta-cognition (section 6.1.2). Volitional self-efficacy in this study refers to perceived self-efficacy in a post-intentional stage (post-decision) and has a crucial role for engagement in planning and for change in behaviour (Deimann & Bastiaens, 2010; Schwarzer, 2008). Meanwhile, metacognition refers to higher order thinking which involves active control over the cognitive processes engaged in learning. Activities such as planning how to approach a

given learning task, monitoring comprehension, and evaluating progress toward the completion of a task are classified as metacognitive processes (Livingston, 1997). The multiple case study analysis identified several volitional strategies revealed by participants (section 6.1.2):

“I believe in my ability to accomplish my study” (*volitional self-efficacy*).

“I realised that studying at the Indonesia Open University needs an independent learning” (*volitional self-efficacy*)

“I remind myself about my target to complete my study as soon as possible” (*volitional metacognitive*)

“I remind myself that study at the Indonesia Open University should be able to manage time between study, family, and work” (*volitional metacognitive*)

There was no prior research found studying the relationship of volitional strategies and student progress in the Open University contexts. The only study of volitional strategies in distance education setting conducted by Deimann and Bastiaens (2010) on students' volitional competence at the FernUniversität in Hagen, the only state-maintained distance teaching university in Germany. Deiman and Bastiaens (2010) identified four types of volitional competence that tailored to distance learners: volitional efficacy, consequence control, emotion control, and meta-cognition. The findings of the study reported that learners had highest scores in volitional efficacy and meta-cognition and lowest in emotion control. By identifying these types of volitional competence will allow the development of support systems tailored to learners' individual needs. Furthermore, volition has a pivotal role in maintaining a student's motivation because it is the case that a distance learner is challenged by multiple and conflicting responsibilities (e.g., study, family, job), which may undermine his/her motivation to learn.

Self-Motivation. Self-motivation in this study was classified into two types of motivation: intrinsic and extrinsic motivation (section 2.5.1). The quantitative findings demonstrated that intrinsic and extrinsic motivation contributed to the model of student progress. Moreover, the qualitative multiple case study analysis indicated that intrinsic and extrinsic motivation did not stand in conflict and co-existed together in affecting student progress.

The co-existence between both types of motivation was probably driven by similar qualities shared between intrinsic and extrinsic motivation. The qualitative multiple case study found two major reasons why the participants were still motivated to continue their studies by re-enrolling within four consecutive semesters (section 6.1.1): 1) to learn new things; and 2) to get better career prospects. By referring to self-determination theory (SDT), “to learn new things” was classified into intrinsic motivation due to being enjoyable or satisfying in itself while learning something new. Meanwhile, “to get better career prospects” signified the participants’ acceptance of the value of university degree for promoting their future career and thus represented the autonomous form of extrinsic motivation (section 2.5.1). In this sense, the participants represented an internal perceived locus of causality and integration of the value of learning activities into other values and needs (fully assimilated to the self). Although this extrinsic motivation shares many qualities with intrinsic motivation, it is still considered extrinsic due to being conducted for separable outcomes (rewards) rather than for inherent enjoyment (Ryan & Deci, 2000b; Vansteenkiste, Lens, & Deci, 2006).

The findings in this study reinforced the idea that motivation was bounded with the learner and learning contexts. In the Open University contexts, intrinsic and extrinsic motivation strengthened each other and the autonomous types of extrinsic motivation had important roles in affecting student progress. These findings supported the view that motivation is multidimensional and situational. In the online learning context, Hartnett, et al. (2011) found that students can be motivated for several different reasons and in different ways, often influenced by situational factors.

In line with these findings, another prior study conducted by Wilkesman, et al. (2012) also found that intrinsic and extrinsic motivation were the dominant predictors in deciding to and continuing with a university study for non-traditional students at three German Universities (TU Dortmund University, University Duisburg-Essen, and University of Oldenburg). The research also revealed that intrinsic and extrinsic aspects of academic motivation amplified each other. Therefore, additional selective incentives for intrinsically motivated students would not eliminate their intrinsic motivation.

7.3 Research Question 3

To what extent do institutional factors influence student progress?

Institutional factors encompass procedures, policies and structures of the educational institution that enable or discourage student progress. In this study, institutional factors are concerned with students' perception of learning services, student support services, and interaction. Quantitative results reported that the majority of participants were satisfied with the learning and student support services provided by the Indonesia Open University. The logistic regression analysis indicated that "student support services", "learning services", and "interaction" contributed to the goodness of fit of the student progress model (section 5.5). Moreover, the Wald test indicated that a variable of learning services had a statistically significant individual contribution to the model (section 5.5).

These quantitative findings were supported by qualitative multiple case study analysis that the quality of institutional supports and interaction had significant contribution on student progress in the Indonesia Open University. However, the multiple case study found positive and negative perception regarding the quality of institutional supports. Below are two major sub-themes that emerged within the multiple case study analysis: quality of academic services and quality of registration services.

Quality of academic services. All 13 participants from both active and inactive student groups talked about the quality of academic services including student support services, modules, and tutors in relation to their student progress.

Student support services. These support services included examination and academic services provided by the regional offices. The qualitative findings demonstrated that nine of 13 participants from both active and inactive groups were satisfied with the quality of student services. In contrast, the multiple case study analysis found negative perceptions from three active students (Wati, Haril, Ina) regarding the student services in the regional offices, but those perceptions did not undermine their motivation to continue their studies. Similarly, one of three inactive students (Devi) had revealed negative perception about the quality of institutional supports, which contributed to her decision for withdrawal (section 6.2.4).

.... I experienced several disappointments about services provided by staff of regional office. They provided less friendly services and could not provide information exactly about what I needso this made me reluctant to communicate a lot with the staff except for registration purpose only (Wati, an active student).

According to me, the registration service was not a computerised process and then the staffs were looked very old....some of them were not having computer skills and made the registration process little bit messy with many papers everywhere on the table....(Devi, an inactive student).

... then I had an experience that made me to discontinue my study at the Indonesia Open University at that point, I asked my assistant to put the registration deadline into the list of events but she forgot to remind me I had finally passed the deadline of registration, I tried to register on the day after the closing date, but the system rejected my payment, eventually it really annoyed me (Devi, an inactive student).

The role of regional offices in the Indonesia Open University is very important in enhancing student progress. The pivotal role of regional offices on student progress supported another study conducted by Fozdar et al. (2006) at Indira Gandhi National Open University. Fozdar's study demonstrated that insufficient academic supports and lack responsiveness from study centres affected largely students' dropout decisions. Therefore, the regional offices must provide the

proactive supports including cognitive, affective, and systemic supports (Tait, 2000). Simpson (2013) asserted that students in distance education settings most often dropout because they lack proactive support. Therefore, change are required in institutional attitudes by providing supporting environments for improvement and proactive, rather than reactive, support. In the same way, Ivankova & stick (2007) also reported that student persistence had a positive relationship with the faculty's roles pertinent to the support and encouragement, the willingness to accommodate the students' needs, and the capability to deliver personal assistance.

Modules. All participants had different views about the quality of modules. 12 participants agreed with the good quality of contents and layouts of the modules in Indonesia Open University. However, two participants (Santoso and Zulki) from the active student group suggested further improvements for certain modules, such as requiring updated administrative rules and the correction of many spelling mistakes. Meanwhile, an inactive student (Devi) provided another comment that most modules needed additional materials about the relevant empirical researches and assignments aimed to increase students' abilities to analyse real cases.

... some modules have a lot of spelling mistakes and that seemed less proofreading. Furthermore, some parts of modules are confusing and less communicative, and were impressed that the writing had been done in hurry to catch the publishing deadline of the modules in order to achieve the target for launching the new course programmes (Zulki, an active student).

Tutors. Nine of 13 participants addressed the quality of tutors. Four of nine participants indicated that the tutors of online tutorials were less responsive in providing feedback or comments on students' questions and assignments. However, these negative perceptions had different effects on their decisions regarding student progress. For Devi, an inactive student, the low quality of tutors along with other issues had affected her decision to withdraw (section 6.1.3). Meanwhile, for active students (Wawan, Zulki, and Santoso), the

unsatisfying quality of tutors did not contribute to withdrawal decisions probably because they held personal goals as the most important reasons to stay in the university, such as the motivation to learn new things and the expectation that the university degree lead to better career prospects. In their words:

... sometimes tutors only give a case and allowed students to discuss without any feedback at all. And then another complaint is tutors assigned assignments to the students, but did not want to show the assignment markings to the students so that the students are left to wonder about the task that has been done (Wawan, an active student)).

... I took the course programme at the Indonesia Open University because I like exploring of new knowledge (Zulki, an active student).

My main goal to study at the Indonesia Open University is for career improvement, so that I have to get a Bachelor degree, then at least I will get a higher level of career in the workplace ... (Haril, an active student).

The negative perceptions about the performance of tutors indicated that the tutors' qualities did not meet students' expectations. Lack of awareness of cognitive student support, such as tutoring, feedback, supervision, and assignment (Tait, 2000) by open university institutions will likely negatively affect student retention. A mixed method study conducted by Ivankova and Stick (2007) demonstrated that students' satisfaction toward instructors' accessibility and promptness of the feedback encouraged students to persist in their programme. Therefore, it is important to enhance the tutors' performances by following several strategies (Tait, 2004): 1) the tutors/facilitators should make proactive contact by creating a welcoming environment in the moment of initial contact between the student and the tutor. Likewise, the tutor should provide encouragement for the submission of a first assignment by giving prompt feedback on assignments. 2) It is important to develop strong relationships amongst students, tutors, and the institution in order to overcome distance, manage students' expectations and ambitions, and enable students to make effective choices in a context of open learning. Additionally, the research report indicates that successful learning derives from good relationships and from well-timed and structured

interventions. 3) As an effort to enable student retention, it needs strong commitment from tutors to their own development and to students' progress.

Moreover, the qualitative findings demonstrated the negative perceptions among participants toward the quality of services provided by regional offices and the quality of tutors. However, these negative perceptions did not undermine their motivation to keep studying and be enrolled as active students. This phenomenon possibly indicated that their intrinsic or extrinsic related goals were the most important factors in retaining them as active students. Furthermore, the Indonesia Open University had been assumed by employed participants as the most suitable place to learn and to pursue a university degree due to its flexibility.

Quality of registration services. 12 of the participants talked about the good quality of registration services in the Indonesia Open University. They agreed that online registration service was easier and more helpful rather than the manual registration service. As Haril said:

Since online registration was available, it was easier for me. I now never visit again to the regional office because I could do it through online registration. Moreover, I thank for God, I was able to register despite not having the cost of tuition. Therefore, this service was quite helpful. I hope the university could retain such this registration system. In addition, when we did not have enough money to pay the tuition fees, we were still allowed to enrol in advance so we would not miss the registration deadline (Haril).

Only Devi, an inactive student, criticised the process of registration services. However, her perception will probably be different if the online registration services had been implemented during her study.

The quantitative and qualitative findings in this study highlighted the essential role of the institution in affecting student progress in the Open University contexts. The students, though, might continue or withdraw as active students because of personal reasons (i.e., self-motivation), the low quality of institutional services would be the main barriers to increasing student

progress, as indicated by the quantitative findings that the second major reason of non-enrolment was lack of supports from the institution. In addition, the high quality of student support services will enormously contribute to the reduction of dropout (Tait, 2003).

The quantitative and qualitative findings also demonstrated that student progress could be enhanced by endorsing all three primary functions of student support running in a good quality level. These three functions include cognitive, affective, and systemic supports (Tait, 2000). The cognitive support encompass all learning support services through the variety of media, such as the delivery of high quality of learning materials and learning resources, and timely feedback on students' assignment. The affective support plays the pivotal role in providing the supporting environment in enhancing students' motivation, self-commitment, self-esteem, and self-efficacy. Finally, the systemic support provides a friendly administrative process for students and effective and transparent information management systems.

However, these three primary functions should be supported by the transformation of institutional attitudes that involves all staff at all levels in an effort to setting retention goals and developing the strategies, motivators and rewards to achieve them. The empowering institutional change absolutely requires considerable energy and is linked to institutional learning and feedback, planning processes, resource, a willingness to challenge entrenched attitudes and rewards for individual endeavour (Johnston & Simpson, 2006).

Interaction. The logistic regression analysis indicated that interaction contributed to the predictive model of student progress at the Indonesia Open University. In the meantime, the multiple case study analysis revealed that interaction was an important factor for student progress. In the inactive student group, Amri stated that less interaction with other students and the institution left him feeling alone and had contributed to his decision to suspend his study. Meanwhile, Devi was reluctant to join a learning group because she never found a good learning partner.

Meanwhile, for all participants in the active student group, peer interaction was also an important factor to keep them motivated to learn and to achieve learning achievement. They did not feel lonely while studying at the Indonesia Open University because they found many ways to get interaction with other students. Furthermore, they realised that studying at the Indonesia Open University required independent learning. For Wawan, studying at the Indonesia Open University required learning strategies in order to obtain the high GPA and complete his study as soon as possible. In doing so, Wawan invite other colleagues in his office to create a learning group. This learning strategy not only helped him and other learning group members to achieve good achievement in the study but also helped them to keep motivated as active students in order to complete their study as soon as possible. For other participants, Zulki and Haril, from the beginning when they decided to study at the Indonesia Open University, they understood that they would be required to be independent learners. This understanding helped them to keep motivated as active students. Meanwhile, for Rama, self-learning was not a big problem for him and he understood the consequence of learning in the distance learning system as applied to the Open University. In addition, Rama actively made interaction with other students through online media. This activity had prevented him being alone while studying at the Indonesia Open University.

The quantitative and qualitative findings indicated that the participants lacked support from the regional offices and faculties to interweave inter-student and student/institution (tutors and staff) interactions. As Amri said:

Personally, I feel lonely when I was a student of Indonesia Open University. It would be nice therefore if the university could facilitated us to know our friends in the course programme, so that we could establish communication among us, and it is easier than we have to find out by ourselves (Amri, an inactive student).

Therefore, it is important for Indonesia Open University to facilitate peer interaction and to initiate “faculty validation” as interactions with students, initiated by faculty and others in the campus community, that engender

feelings of self-worth and a belief in the students' ability to succeed in the college environment (Barnett, 2011). A study conducted by Barnett (2011) at Midwest College, a community college, involving 333 students as the sample, reported that faculty validation among community college students had significant influences on academic integration and in turn influences intention to persist.

Although the open university stresses self-independent learning, prior studies have demonstrated that interactions between students and also between students and the institution played a pivotal role in enhancing student progress and persistence (Barnett, 2011; Tait, 2004; Thompson, 1997; Workman & Stenard, 1996). Moreover, Muilenburg & Berge (2001) identified ten barriers to distance education. Two of ten factors were consistent with my findings: social interaction and programme quality, and student support services. Social interaction factor concerned about the important role of peer interaction in the distance learning courses and students can feel isolated due to lack of person-to-person contact. There were concerns also about the quality of distance learning courses, programmes and student learning. Moreover, student support services had a critical contribution to student's success in distance learning, such as provision of advisement, library services, admissions, and financial aid.

Morris et al. (2005) also confirmed through their study about the importance of student engagement on student persistence. They reported the research findings in the context of online courses that students who actively participated in learning interactions, especially with teachers and course content, were more likely to complete successfully and persist in online courses. In the Morris's study, the interaction between student and content was measured by the frequency and duration of students' use of online content. As a result, completers showed significantly higher participation rates in learning activities than withdrawers in three measurements: the number of discussion posts viewed, the number of content pages viewed, and the number of seconds spent viewing discussions. Moreover, the research also indicated

that the withdrawers and unsuccessful completers were not sufficiently motivated to engage meaningfully in online course activities.

7.4 Research Question 4

To what extent do external factors influence student progress?

The quantitative findings reported that “working environment” and “family and friends” contributed to the predictive model of student progress (section 5.5). However, the Wald test in the logistic regression analysis indicated that only “working environment” had a strong contribution to the model.

The prominent role of working environment was also explained in the qualitative findings. Nine employed participants stated that they received support from their employers and colleagues in pursuing a Bachelor degree at the Indonesia Open University. Conversely, only one participant revealed that the lack of support from employers had affected his decision to withdraw from his study.

These findings were reinforced by the quantitative finding of heavy workloads as the major reason of non-enrolment in Indonesia Open University. These findings supported previous studies that employment conditions could provide motivation and stimulation to student progress in a course. The student who receives support from his employer will find it easier to balance time spent studying with work obligations than a student who does not have the employer support. Therefore, time at work had a direct relationship with time to study. Likewise, the students with higher salaries tend to have greater responsibilities and obligations (Kember, 1995). In line with this, Packham et al. (2004) identified key factors influencing student withdrawal of e-learning programme in the E-College Wales BA Enterprise programme. The results of the study reported that working conditions were the most significant factor leading to withdrawal. The successful learners were typically not in employment. This

result indicated that the students should have sufficient time to complete the course. Work commitment therefore makes an important contribution affecting the students' decision to drop out. Adult distance learners are generally full-time workers who have to manage their time and energy to meet both work and study obligations, such as full-time employee status, increasing pressure to work additional hours, or changes in work responsibilities (Lee & Choi, 2011).

Considering the pivotal role of employer support on adult learners, Simpson (2003) suggested the institution needs to promote a supporting environment by providing brochures, whether online or hard copy. The brochures contain materials about the importance of their support for progression of the study, such as information about the learning process, ways to support student progress, and potential problems encountered by distance learners. Furthermore, the institutions also need to encourage employers for supporting their employees, possibly by providing motivation, time off, and facilities. This encouragement may be conducted by providing a letter, leaflet, or text.

In terms of support from family members, the qualitative multiple case study reported that support from spouse or partner contributed differently to student progress for participants. Participants from the active student group stated that support from family had considerable effect on their decision to student progress. As Hasan Said:

My wife's support for me was very huge. I ever thought to suspend the course registration and my wife was angry. Now I had been enrolled as an active student due to my wife's encouragement (Hasan).

Meanwhile, for participants from the inactive student group, although they obtained support from their family to study at Indonesia Open University, their family's support did not stand as a strong factor to enhance student progress. Similarly, the study conducted by Ivankova and Stick (2007) revealed that family support and significant others had no statistical significance on student persistence. The qualitative findings of Ivankova and Stick's study explained different participant had different sources of external support. For example,

for some participants it was family and employment, for others family and pets, and for some there was no apparent support from external sources.

In the wider contexts, most previous studies on student persistence in distance education agree that external factors have a significant effect on persistence (Kember, 1995; Lee & Choi, 2011; Packham et al., 2004; Rovai, 2003).

According to Park (2007), many studies have portrayed that some external factors have a direct effect to dropout or persistence decision. Bean and Metzner (1985) revealed that environmental variables had a significant effect on persistence for non-traditional students. These variables consisted of finances, hours of employment, family responsibilities, and outside encouragement. Rovai (2003) delineated in his composite persistence model that external factors made important contribution to student persistence decisions. In explaining those external factors, Rovai (2003) heavily grounded on Bean and Metzner's model and added a variable of life crises from Tinto's model, for example, sickness, divorce, or loss of a job. In line with this point, Kember (1995) explained that environmental factors (work, home, and social) determine the success of students in achieving the social integration (the degree to which a student is able to integrate the study process with work, family and social life). In Kember's model, social integration will lead to academic integration and in turn will influence students' decisions to persist in the courses.

Moreover, environmental factors are the most frequent reasons stated by students who difficult to achieve social integration. When a student fails to integrate study with the environmental pressures, that student will achieve negative social integration or external attribution. The external attribution is classified into three sub-components: (1) Insufficient time: the most common reason given for dropout in the autopsy report and indicates a failure to come to terms with competing priorities. (2) Distraction attributes lack of application to study tasks to competing demands from family, employers and friends. It is

indicative of a lack of social integration between academic demands and daily life. (3) Events hinder study examines the way in which unforeseen happenings at the time of enrolment influence the cost-benefit analysis between continuing and ceasing study (Kember, 1995).

Cultural orientation. In terms of cultural orientation, the quantitative analysis reported that individualism and collectivism were not included in the model of student progress. After several statistical tests in the logistic regression analysis, the results indicated the model was not significant if individualism and collectivism were included in the model (section 5.5). These findings demonstrated that individualism and collectivism had no direct contributions to student progress. However, the individualism had statistically significant correlations with self-efficacy and volitional strategies, and both predictors contributed considerably to the model of student progress (appendix 2d.6). Therefore, the participants who had high independent cultural orientation were more likely to have high self-efficacy and volitional strategies and in turn were more likely to be committed to student progress.

Furthermore, descriptive statistical analysis demonstrated that more than 50% of participants from the active and inactive student groups had positive responses and scored high in both individualism and collectivism (section 5.3.3). These findings interestingly revealed other points that to some extent individualism and collectivism might exist together on the individual level. Furthermore, in this case, individualism and collectivism probably were not always consistent with the societal level. According to Hofstede's study (2001), Indonesia is classified as a collectivistic and masculine culture and Indonesians are supposed to be predominantly interdependent. Therefore, individuals may have different cultural orientations regardless of their nationality, and have different cultural outlooks, even within the same country (Hwang, 2012; McCoy, Galletta, & King, 2005). Furthermore, Straub et al. (2002) argued that individuals may or may not identify with the national culture, and they can show a different cultural orientation even though they are in the same country.

In the upcoming chapter, this study arrives at conclusion of the results and discussion of implications and limitations of the study. Finally, some unanswered issues are highlighted as recommended studies in the future.

Universitas Terbuka

Chapter 8 Discussion and Conclusion

There is no simple formula that ensure student persistence
(Rovai, 2003, p.12)

The purpose of this mixed methods study aimed to: 1) investigate factors influencing student progress in the Indonesia Open University; and 2) examine the extent to which the identified factors in the quantitative phase influence student progress by employing a sequential explanatory mixed methods approach. By using this two-stage approach, the quantitative survey design was conducted in the first phase, and followed by obtaining qualitative data from semi-structured interviews. Moreover, the purpose of the study was addressed by the following four research questions:

1. What factors influence student progress in the Indonesia Open University?
2. To what extent do individual factors influence student progress?
3. To what extent do institutional factors influence student progress?
4. To what extent do external factors influence student progress?

8.1 Summary

The quantitative and qualitative findings revealed that student progress in the Indonesia Open University is influenced by individual, institutional, and external factors. The findings also demonstrated that when students feel more socially and academically integrated, then they are more likely to stay at the university. Furthermore, the findings reported that the psychological variables (intrinsic and extrinsic motivation, volitional strategies, and self-efficacy) made important contributions to student progress.

The quantitative phase generated a predictive model of student progress consisting of 12 predictors. This predictive model could explain 37.3 percent and 67.3 percent of the variability of student progress. 1) age; 2) gender; 3) prior education; 4) intrinsic motivation; 5) extrinsic motivation; 6) self-efficacy; 7) volitional strategies; 8) student services; 9) learning services; 10) interaction; 11) family & friends; and 12) work environment. Meanwhile, out of the 12 predictors, the Wald test conveyed four predictors that had significant contributions to the model: volitional strategies (.047) learning services (.036), working environment (.036), and prior education (0.027). The Wald test in the regression analysis indicated that the four variables had p-values less than .05. ($P > .05$).

Meanwhile, the qualitative findings clearly supported the quantitative findings and revealed five major themes related to student progress in the Indonesia Open University: self-motivation, volitional strategies, quality of institutional services, interaction, and supporting environment.

Self-motivation. There were two types of motivation identified in the multiple case study analysis: intrinsic motivation as to learn new things and extrinsic motivation as to get better career prospects. These two sorts of motivation co-existed together in determining student progress in the Indonesia Open University.

Volitional strategies. The findings of the multiple case study analysis indicated two volitional types used by most of the participants (ten participants) in relation to their student progress in the Indonesia Open University: volitional self-efficacy and meta-cognition. These volitional strategies had helped the participants to maintain their academic motivation, and in turn positively affected their student progress. Therefore, the higher level of volitional strategies that the students have, the more likely they stay at the university.

Quality of institutional services. There were positive and negative perception from participants regarding the quality of institutional supports in the

Indonesia Open University. The quality of institutional services encompassed quality of academic services (student support services, modules, and tutors) and registration services. Nine of 13 participants from the active and inactive groups were satisfied about the quality of student services and 12 participants agreed with the good quality of contents and layouts of the modules in Indonesia Open University. However, the lack of feedback on assignments had been a challenging issue in enhancing student progress. Finally, most of the participants (12), both for the active and inactive student groups agreed with the good quality of online registration services in the Indonesia Open University.

Interaction. Peer interaction was indicated as an important factor to influence student progress. The findings revealed that the interaction mostly occurred in the formal academic settings, such as face-face tutorials and online tutorials, and the participants needed support from the institution in developing peer interaction outside of formal academic settings. Therefore, it is important for Indonesia Open University to facilitate peer interaction and interaction between student and institution in order to enhance student progress.

Supporting environment. The findings indicated that employer's support was a potent factor in contributing student progress in the Indonesia Open University. Therefore, the student who gets support from his/her employer will easier to balance between time spent studying and work obligations than who does not. These findings were supported by other quantitative data in this study (see section 5.2.3) that the major reason of non-enrolment was heavy workloads in the workplace.

As a contribution to knowledge, my research demonstrates that student progress in the Open University context is better explained by looking at individual, institutional, and external factors. This study also reveals volitional strategies, intrinsic motivation, and extrinsic motivation as having significance contribution to student progress. Moreover, intrinsic motivation did not stand in conflict with extrinsic motivation in influencing student progress. This

finding refines previous theories about learning motivation that extrinsic motivation could undermine intrinsic motivation to learn.

Moreover, the predictive model of student progress generated in the quantitative phase had a limited generalisation to the population from which the sample was obtained. However, the model of student progress can, with reasonable confidence, be employed to predict student progress in a new context. Moreover, more research is needed in different Open University contexts by using new data as any model is only tentative and must be tested and validated on a different sample. These studies are useful to develop a reliable model of student progress in Open Universities.

Finally, my concluding reflection highlights that student progress is a complex issue involving multiple individual, institutional, and external factors that change over time as the needs and expectations of students and institutions change, and so are context dependent. As Rovai (2003, p.12) asserted that “there is no simple formula that ensure student persistence”, therefore the transformation of institutional attitudes must become the key element to ensure students of Open University receive the highest quality of student supports (cognitive, affective, and systemic), as this will, as I have demonstrated in this thesis, in turn motivate them to keep learning in the university.

8.2 Implications for Practice

This study has explored the pivotal roles of individual, institutional, and external factors in influencing student progress in the Indonesia Open University. At the practice level, the results of this study aimed to enhance student progress and degree completion in the Open University contexts through the development of strategies based on the individual, institutional, and external factors. Specifically, the implications of this study include:

1. The significant role of prior education experience in influencing student progress and the positive correlation between prior education and self-efficacy (section 5.5) indicated that students of the Indonesia Open University need appropriate levels of preparatory knowledge, skills, and attitudes to study successfully at distance. However, it is important not only for the Open University but also for all Universities to set up the preparatory or induction courses to enhance the students' preparedness for studying at the University level.
2. Intrinsic and extrinsic motivation had paramount effects on student progress in the Indonesia Open University. The findings of this study also pointed out that intrinsic and extrinsic motivation amplify each other in influencing student progress (Section 6.1). Therefore, both intrinsic and extrinsic motivations should be supported and encouraged by developing the high standard of student supports, and effective and productive course design. This course design should include interactive and interesting learning design, effective learning materials, and productive communication. Interactive and interesting learning design may be implemented by applying several learning activities, such as problem-based learning, team-based learning, and others. Effective learning materials are developed by considering students' needs. Meanwhile, productive communication is designed to facilitate student-student interaction and student-institution interaction (Lee & Choi, 2011).
3. The role of volitional strategies in relation to student progress in the context of the Open University is extremely important. Conflicting responsibilities would be a challenge for a distance learner and may undermine his/her motivation in continuing and completing his/her study. Therefore, the university should develop the support systems that are tailored to learners' individual needs. This study identified two volitional types employed by most of the participants: volitional self-efficacy and metacognition. Therefore, providing soft skills to new students is very important, particularly related to self-regulated learning, learning strategies, and time management skills. Puspitasari (2012) revealed that interventions on learning strategies and study time management on students of Open University may enhance students'

regulated learning, and in turn would lead to students' course completion. The learning strategy intervention in this case focuses on providing knowledge about strategies to learn in the distance education context. These strategies consist of information on how to (1) use learning strategies smartly, (2) use study time effectively, (3) plan study time realistically, (4) set learning goals that are attainable, (5) plan learning goals that are accurate or measurable, and (6) plan learning goals that are specific. In the meantime, intervention on study time management covers information on how to set weekly learning goals and how to monitor the learning goals.

In addition, the University may also enhance volitional strategies by sending motivational messages. These messages may include self-efficacy enhancement (i.e., personal goals, past successes, and ability to succeed), stress-reducing actions, and negative-based incentives (i.e., awareness of the intrapersonal and interpersonal consequences of failure) (Bartels, et al., 2009). These messages may be delivered through a variety of media such as phone, e-mail, text messaging to mobile phones (SMS), and voice-mail systems.

4. Satisfaction towards quality of institutional support is very important for enhancing student progress in the Open University. In the context of Open University, satisfaction toward the institutional supports should be developed at the University level and the regional offices level. In the University level, the University could consider enhancing proactive roles in providing academic and administrative services that support independent learning, such as enhancing the quality and quantity of interaction between students and university, assessing the students' needs and feedback particularly from students who are at-risk, and addressing students' problems promptly. The role of tutors in the Open University is very important to the learning and teaching strategies. Therefore, the Open University Tutors are not only responsible for marking and grading assignments, running online and face-to-face tutorials, but also play as bridging the gap between students and the university. For these roles, the University staff including the tutors should also provide academic and social

supports to students, including personalised support services for all new students. Meanwhile, in the Regional Offices level, the university could consider providing the necessary skills for staff who deliver student services with “a welcoming environment” for students, and as “retention staff” who have roles to predict students who at risk, provide additional proactive support and interventions in timely manner (Tait, 2004). In addition, the university should increase the number of the student support centres in the remote areas. This facility will ease students to get learning and administrative supports, and in turn will keep their motivation to complete their studies.

5. Less interaction would become a barrier to student progress in Open University. Less interaction, either with peers or institution will lead students to having low sense of community. Insufficient interactions will be characterised by feelings of isolation and will place the students at risk of becoming dropouts (Rovai & Jordan, 2004). Therefore, the university may construct and support learning environments that support peer-based learning by setting up an online tutorial as a virtual classroom, developing real and virtual learning communities, and conducting social media interventions to promote interactions

6. External supports have pivotal factors in influencing student progress in Open University. Therefore, the university may develop supporting environment for students by sending the institutional brochure for family members and employers, whether online or hard copy, containing information about the importance of family support and employers support on student progress.

7. The important roles of individual, institutional, and external factors in contributing student progress in the Indonesia Open University may help the policy makers and educational practitioners to set up the strategies needed to enhance student progress in the distance education settings. The predictive model of student progress developed in this study may also help the policy makers and educational practitioners in other education institutions to enhance proactive supports for students.

8. This study also confirmed that student progress is better explained by using a mixed methods approach. A mixed methods approach will provide a deeper understanding about student's experiences, a complete picture of research problem, and a robust analysis of student progress.

8.3 Limitations of the Study

This study was subject to the following limitations:

1. The population of this study was confined only to students of Faculty of Social and Political Sciences, the Indonesia Open University. Therefore, the findings of this study could be generalised only to the population from which the sample was obtained.
2. The sample was not representative of population due to using convenience sampling in the quantitative method. This convenience sampling method limits the generalisability of the results from this study to other populations.
3. The response rate to an internet survey is another limitation. Low response rates may result in a biased estimate of the characteristics of the population.
4. There was a potential for bias in the quantitative results because this study relied on self-reported instruments. Self-report instruments have several major limitations: a) results of self-report instruments could be unreliable and inaccurate due to the personal circumstances. b) There will be a potential for subjective responses because of people tend to report socially desirable responses.
5. There was a potential for bias in the interpretation of the qualitative results interpretation, because the researcher is a lecturer at the Faculty of Social and Political Sciences, the Indonesia Open University.

8.4 Future Research

This research recommends some unanswered issues to be investigated in the future research. These issues involve:

1. The sample of this study was confined only to students of Faculty of Social and Political Sciences. In the future, the sample should cover all faculties in the Indonesia Open University in order to strengthen the external validity of the research.
2. The findings of the research was mainly focused on student perceptions. Therefore, the future studies should focus on the perspective of administrators, tutors, faculty, and regional offices. It will be meaningful if the researchers broaden the coverage of the study by including open universities in the variety contexts.
3. In this study, individual cultural orientations did not significantly affect the student progress. Therefore, future studies may explore the links between cultural orientations and student progress by using other qualitative methods.
4. The findings of the study indicated that intrinsic and extrinsic motivation co-existed together in influencing student progress in the Open University context. Therefore, this finding should be verified by future studies in different open universities populations.
5. Finally, many aspects of student progress in the Open University context have been largely unexplored that require further research. Greater understanding of these areas could help to identify areas of concern on student progress in the Open University context and in turn would help to enhance student progress and students' completion rates in the Open University settings.

Appendices

Appendix 1: Participant Recruitment Letters

- 1a. Participant information sheet for online survey
- 1b. Informed consent form for online survey
- 1c. Participant information sheet for individual interview
- 1d. Informed consent form for individual interview

Appendix 2: Quantitative Phase

- 2a. Questionnaires in English
- 2b. Questionnaires in Bahasa
- 2c. Questionnaires for pilot study
- 2d. Quantitative results

Appendix 3: Qualitative Phase

- 3a. Interview protocol in English
- 3b. Interview protocol in Bahasa
- 3c. An example of interview extract

Appendix 1a: Participant Information Sheet for Online Survey



Participant Information Sheet (Online Survey)

Study Title: Student Progress in the Indonesia Open University

Researcher: Muhammad Husni Arifin **Ethics number:** 2150

Please read this information carefully before deciding to take part in this research. If you are happy to participate you will be asked to sign a consent form.

What is the research about?

I am Muhammad Husni Arifin, a PhD student at The University of Southampton. I am conducting a study of students' progress in the Indonesia Open University. I am requesting your assistance in completing the survey, as your inputs will help me to understand the students' experience in distance learning.

This study aims to gather information about factors influencing the students' decision to be active or inactive students. The results of this study will contribute in the accomplishing of my PhD Thesis, and also an attempt to further improving of students' progress and the quality of student services in the Indonesia Open University.

Why have I been chosen?

You are selected as a participant in this study because you are a student of Universitas Terbuka, particularly in the Faculty of Social and Political Sciences, You have enrolled from the term 2011.1, and you are either now becoming an active or inactive student.

What will happen to me if I take part?

If you consent to participate, you will be asked to fill in the blanks and multiple choice questions. The survey consists of 8 sections and will take approximately 15 minutes to complete. The first section is asking about academic profile and includes 11 questions. The second section is about academic services at the Indonesia Open University and consists of 10 multiple choice questions. The

Appendix 1a

third section is about academic motivation and consists of 12 multiple choice questions. The fourth section is asking about self-efficacy and peer student interaction, and includes 6 multiple choice questions. The fifth section is about cultural orientation and includes 8 multiple choice questions. The sixth section consists of 7 multiple choice questions asking about external factors influencing students' progress. The seventh section includes 9 questions asking about demography information. The last section consists of 3 questions about computer skill, learning style, and an open ended question about additional information that are not mentioned in the previous questions.

Are there any benefits in my taking part?

There is no direct benefit for your participation in this research. However, your participation is very important to further improving of students' progress and the quality of student services in the Indonesia Open University.

Are there any risks involved?

There are no known risks with this research and are no right or wrong answers. So please be candid and frank in giving your responses as a student. In addition, participation in this survey requires a minimal amount of your time and effort.

Will my participation be confidential?

The information you provide shall be held in strictest confidence and reported only as group responses of all data collected. The results of this study may be published in a thesis, scientific journals or presentations at professional meetings. Your privacy will be protected in all publications and presentations.

What happens if I change my mind?

You are free to decide not to participate in this study or to withdraw at any time without affecting your existing academic status and performance. You may also refuse to answer any questions you do not want to answer and still remain in the study.

What happens if something goes wrong?

If you have any concern or complaint about this study, you may contact Head of Research Governance, Dr Martina Prude via email mad4@soton.ac.uk or give a call at (+44) 2380 595058

Where can I get more information?

If you would like to ask questions about this study or any aspect of the survey, feel free to write notes and email me at mha2e11@soton.ac.uk or give a call at (+44) 07808820754. All communication will be confidential.

Appendix 1b: Consent Form for Online Survey



CONSENT FORM (Online Survey)

Study title: Student Progress in the Indonesia Open University

Researcher Name: Muhammad Husni Arifin

Ethics reference: 2150

Please initial the box(es) if you agree with the statement(s):

I have read and understood the information sheet and have had the opportunity to ask questions about the study.

☐

I agree to take part in this research project and agree for my data to be recorded and used for the purpose of this study

☐

I understand that my responses will be anonymised in reports of the research
I consent to having my responses identified personally with me in reports of the research

☐

Please delete statement as appropriate

I understand my participation is voluntary and I may withdraw at any time without my legal rights being affected

☐

Data Protection

I understand that information collected about me during my participation in this study will be stored on a password protected computer and that this information will only be used for the purpose of this study.

Name of participant (print name).....

<p>Please tick (check) this box to indicate that you consent to taking part in this survey</p>
--

Appendix 1c: Participant Information Sheet for Individual Interview



Participant Information Sheet (Individual Interview)

Study Title: Student Progress in the Indonesia Open University

Researcher: Muhammad Husni Arifin **Ethics number:** 2150

Please read this information carefully before deciding to take part in this research. If you are happy to participate, you will be asked to sign a consent form.

What is the research about?

I am Muhammad Husni Arifin, a PhD student at The University of Southampton. I am conducting a study of students' progress in the Indonesia Open University. I am requesting your assistance in completing the survey, as your inputs will help me to understand the students' experience about the student's progress in distance learning.

This study aims to gather information about factors influencing the students' decision to be active or inactive students. The results of this study will contribute in the accomplishing of my PhD Thesis, and also an attempt to further improving of students' progress and the quality of student services in the Indonesia Open University.

Why have I been chosen?

You are selected as a participant in this individual interview because you are a participant of an online survey, a student of Universitas Terbuka, particularly in the Faculty of Social and Political Sciences. You have enrolled from the term 2010.1, and you are either now becoming an active or inactive student.

What will happen to me if I take part?

If you consent to participate, you will be asked to participate in the online interview through telephone, Skype tool, or email, which one you decide it as the most convenient way for you. The interview will last approximately 40 minutes and will be conducted at the time most convenient for you. The time

Appendix 1c

of interview will be scheduled after receiving the signed and dated informed consent form. In addition, the interview will be audio recorded.

Are there any benefits in my taking part?

There is no direct benefit to your participation in this research. However, your participation is very important to further improving of students' progress and the quality of student services in the Indonesia Open University.

Are there any risks involved?

There are no known risks with this research and are no right or wrong answers. So please be candid and frank in giving your responses as a student. However, participation in this survey requires a minimal amount of your time and effort.

Will my participation be confidential?

The information you provide shall be held in strictest confidence, and in any report names will be removed and reported only as group responses of all data collected. The results of this study may be published in a thesis, scientific journals or presentations at professional meetings. Your privacy will be protected in all publications and presentations.

What happens if I change my mind?

You are free to decide not to participate in this study or to withdraw at any time without affecting your existing academic status and performance. You may also refuse to answer any questions you do not want to answer and still remain in the study.

What happens if something goes wrong?

If you have any concern or complaint about this study, you may contact Head of Research Governance, Dr Martina Prude via email mad4@soton.ac.uk or give a call at (+44) 2380 595058

Where can I get more information?

If you would like to ask questions about this study or any aspect of the survey, feel free to write notes and email me at mha2e11@soton.ac.uk or give a call at (+44) 07808820754. All communication will be confidential.

Appendix 1d: Consent Form for Individual Interview



CONSENT FORM (Individual Interview)

Study title: Students' Progress in the Indonesia Open University

Researcher name: Muhammad Husni Arifin

Ethics reference: 2150

Please initial the box(es) if you agree with the statement(s):

I have read and understood the information sheet (INSERT THE DATE AND VERSION NUMBER OF YOUR PARTICIPANT INFORMATION SHEET BETWEEN THESE BRACKETS) and have had the opportunity to ask questions about the study.

☐

I agree to take part in this research project and agree for my data to be recorded and used for the purpose of this study

☐

I understand that my responses will be anonymised in reports of the research

☐

I consent to having my responses identified personally with me in reports of the research

I understand my participation is voluntary and I may withdraw at any time without my legal rights being affected

☐

Data Protection

I understand that information collected about me during my participation in this study will be stored on a password protected computer and that this information will only be used for the purpose of this study.

Name of participant (print name).....

Signature of participant.....

Date.....

Appendix 2a: Questionnaire in English



STUDENT PROGRESS IN THE INDONESIA OPEN UNIVERSITY

Academic Profile

Q1. What is your programme?

- ☐ Course Programme

- ☐ Regional office

Q2. What is your enrolment status in the program for a registration period of 2010.1 until 2013.2?

- | | | |
|------------------------------|-------------------|---------------------|
| <input type="radio"/> 2010.1 | 1. Active student | 2. Inactive student |
| <input type="radio"/> 2010.2 | 1. Active student | 2. Inactive student |
| <input type="radio"/> 2011.1 | 1. Active student | 2. Inactive student |
| <input type="radio"/> 2011.2 | 1. Active student | 2. Inactive student |
| <input type="radio"/> 2012.1 | 1. Active student | 2. Inactive student |
| <input type="radio"/> 2012.2 | 1. Active student | 2. Inactive student |
| <input type="radio"/> 2013.1 | 1. Active student | 2. Inactive student |
| <input type="radio"/> 2013.2 | 1. Active student | 2. Inactive student |

Q3. If you are or have been an inactive student, what are your main reasons?

- | | |
|---|--|
| <input type="radio"/> Programme quality | <input type="radio"/> Lack of adequate computer skills |
| <input type="radio"/> Finance | <input type="radio"/> Work loads |
| <input type="radio"/> Enrolment problems | <input type="radio"/> Health problems |
| <input type="radio"/> Academic advising | <input type="radio"/> Personal problems |
| <input type="radio"/> Quality of modules | <input type="radio"/> Other (<i>please specify</i>) |
| <input type="radio"/> Location of regional office | _____ |
| | _____ |

Academic Motivation

Q4. Please indicate to what extents do you agree or disagree with the following statements regarding your decision to study at the University level. (*Please use*

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the scale below from one through five, with “1” indicating you strongly disagree with the statement and “5” indicating you strongly agree).

I decide to study at the university level because:	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
	1	2	3	4	5
a. I experience pleasure and satisfaction while learning new things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Study at the University allows me to continue to learn about many things that interest me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Study at the University allows me to communicate my own ideas to others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I would have a personal satisfaction when I am able to accomplish my study within 8 semesters	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. (if you are an employee) I think that having an education at the university level will help me better prepare for the career I have chosen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. in order to have a better salary later on	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. it will help me to get social prestige in the community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Learning Services and Student Support Services

Q5. Please read the statements below and indicate to what extents do you agree or disagree with the learning services and student support provided by the university. *(Please use the scale below from one through five, with “1” indicating you strongly disagree with the statement and “5” indicating you strongly agree).*

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
	1	2	3	4	5
a. The course materials are relevant to my academic need	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. I am satisfied with the final examination services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. The registration process is convenient and responsive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

d. I have access to library resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. The student support centre has helped me to overcome some of my academic problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. My expectations of the quality of programme were met	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. The offered courses in the programme have been relevant and useful to my career plans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. I received promptly feedback and help from tutors when I needed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. I get advising regularly while to be active student	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. I feel that participation in online tutorial has a positive influence on my study	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. I feel that attending face to face tutorial has a useful impact on my study	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Self-Efficacy, Volition, and Peer Interaction

Q6. Please indicate to what extents do you agree or disagree with these statements. *(Please use the scale below from one through five, with "1" indicating you strongly disagree with the statement and "5" indicating you strongly agree).*

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
	1	2	3	4	5
a. I am certain that I can understand the most difficult material presented in the modules for this degree programme	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. I am confident that I can do an excellent job on the assessment in this programme	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I am confident that I am able to study independently	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I am confident in my academic ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 2a

e. I remind myself that I can accomplish my study within eight semesters when I am always to be an active student	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. I think of interesting or different ways to make studying more fun or challenging for me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. I think about how disappointed others (family/friends) will be if I fail in my study	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. I think about the sacrifices that I have made (financial and time) while being in university	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. I feel isolated studying while study at Universitas Terbuka	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. My fellow-students helped create a supportive learning environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. I feel that participation in a learning community has increased my motivation to learn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Cultural Orientation

Q7. Please read and indicate to what extents do you agree or disagree with the statements below that describe your cultural orientation (How do you see yourself in relation to others). *(Please use the scale below from one through five, with "1" indicating you strongly disagree with the statement and "5" indicating you strongly agree).*

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
	1	2	3	4	5
a. I tend to do my own thing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. My family encouraged me to be independent in many respects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. When faced with a difficult personal problem, it is better to decide for myself than follow the advice of others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

d. It is important to me that I perform better than others on a task	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Being able to take care of myself is important for me for me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. I enjoy working in situations involving competition with others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. I enjoy being unique and different from others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. I always respect decisions made by the group or organisation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. I always sacrifice my self-interest for the benefit of my group or organisation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. Before making a decision, I always consult with others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. I always consult with my family members on work or study related matters	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. I have feeling that my relationships with others are more important than my own accomplishment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m. I would help, within my means, if my relatives are in financial difficulty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

External Factors

Q8. Please indicate to what extents do you agree or disagree with the statements below which describe how the selected external supports influence your decision to be an active student. *(Please use the scale below from one through five, with "1" indicating strongly disagree with the statement and "5" indicating strongly agree)*

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
	1	2	3	4	5
a. My family members support my efforts to pursue the degree in the distance learning environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. My partner has become annoyed because I spent so much time studying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. My domestic duties in the house have distracted me from my studies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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d. My friends encouraged me in my study efforts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. My employer has encouraged me to pursue the degree in Universitas Terbuka	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. My job responsibilities are too pressing to continue with my studies in the programme	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Financial issues are an obstacle to continue my study	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Demographics

Q9. Please indicate your gender?

- ☐ Male ☐ Female

Q10. What is your age in years? _____

Q11. Where do you currently reside? (*Please describe district/regency where you are living*)

Q12. Please describe your ethnicity that you most consider yourself to be (i.e. Javanese, Sundanese, etc.)

Q13. Please indicate your latest degrees earned.

- ☐ Senior High School (*year*) _____ ☐ Master's (*year*) _____
☐ Associate (*year*) _____ ☐ Doctoral (*year*) _____
☐ Bachelor (*year*) _____

Q14. What is your employment status when you were enrolled in the programme?

- ☐ Full-time ☐ Part time ☐ Unemployed

Q15. Please describe your employment?

Q16. How many years of working experience do you have?

Q17. How many hours do you work every day?

Q18. Which best describes your family structure when you were enrolled in the programme?

- Married with children under 18
- Married with children over 18
- Single parent family with children under 18
- Single person, not married
- Single person, divorced, separated or widowed

Q19. How many children do you have at home?

Q20. How many people live together in your home?

Q21. How do you assess your computer skills?

<input type="radio"/> Very limited	<input type="radio"/> Some experience	<input type="radio"/> Quite a lot	<input type="radio"/> Extensive
------------------------------------	---------------------------------------	-----------------------------------	---------------------------------

Q22. Which best describes your learning style?

- Visual learner (I prefer using picture and images, graphs, charts, flowcharts and diagrams)
- Auditory learner (I prefer using sound, music, and speech)
- Reading/writing learner (I prefer using printed words, reading, and writing)
- Kinesthetic/physical (I prefer using my senses, body, and hands by touching and moving)

Q23. What additional information can you provide about your experience in the degree programme at Universitas Terbuka?

Appendix 2b: Questionnaire in Bahasa



STUDENT PROGRESS IN THE INDONESIA OPEN UNIVERSITY

Profil Akademik

Q1. Program studi apa yang sedang Anda ikuti?

- ☐ Program studi _____
- ☐ UPBJJ (Unit Program Belajar Jarak Jauh) _____

Q2. Apakah Anda melakukan registrasi kuliah dari masa registrasi 2010.1 sampai dengan 2013.2?

- | | | |
|------------------------------|-------------------|---------------------|
| <input type="radio"/> 2010.1 | 1. Active student | 2. Inactive student |
| <input type="radio"/> 2010.2 | 1. Active student | 2. Inactive student |
| <input type="radio"/> 2011.1 | 1. Active student | 2. Inactive student |
| <input type="radio"/> 2011.2 | 1. Active student | 2. Inactive student |
| <input type="radio"/> 2012.1 | 1. Active student | 2. Inactive student |
| <input type="radio"/> 2012.2 | 1. Active student | 2. Inactive student |
| <input type="radio"/> 2013.1 | 1. Active student | 2. Inactive student |
| <input type="radio"/> 2013.2 | 1. Active student | 2. Inactive student |

Q3. Jelaskan alasan utama Anda ketika pernah menunda registrasi kuliah atau menjadi mahasiswa non-aktif (Apabila Anda tidak pernah menunda registrasi, tuliskan "tidak pernah"). Anda boleh menuliskan alasan lebih dari satu.

- | | |
|--|--|
| <input type="radio"/> Kualitas program | <input type="radio"/> Tidak adanya keterampilan komputer |
| <input type="radio"/> Masalah keuangan | <input type="radio"/> Beban kerja |
| <input type="radio"/> Masalah registrasi ulang | <input type="radio"/> Masalah kesehatan |
| <input type="radio"/> Pembimbingan akademik | <input type="radio"/> Masalah pribadi |
| <input type="radio"/> Kualitas modul | <input type="radio"/> Lainnya (<i>silahkan dijelaskan</i>) |
| <input type="radio"/> Jarak dengan UPBJJ | _____ |
| | _____ |

Motivasi Akademik

Q4. Saudara mahasiswa, Anda diminta untuk menjelaskan motivasi Anda melanjutkan kuliah di perguruan tinggi S1, khususnya di Universitas Terbuka, berdasarkan alasan-alasan yang disajikan berikut ini. Penggunaan pilihan respon mulai dari "Sangat tidak

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setuju" sampai dengan "Sangat setuju" untuk menilai alasan-alasan apakah sesuai dengan motivasi Anda sebenarnya.

Saya memutuskan kuliah di level universitas karena:	Sangat tidak setuju	Tidak setuju	Ragu-ragu	Setuju	Sangat setuju
	1	2	3	4	5
Kuliah membuat saya merasa senang dan puas ketika mempelajari hal-hal baru	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kuliah membuat saya dapat terus belajar tentang banyak hal yang menarik minat saya	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kuliah membuat saya dapat mengkomunikasikan ide-ide saya kepada orang lain, terutama teman-teman kuliah	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kuliah memungkinkan saya untuk memperoleh kepuasan pribadi ketika dapat lulus kuliah tepat waktu (8 semester)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kuliah akan membantu saya mempersiapkan diri secara lebih baik untuk karir/jabatan yang telah saya cita-citakan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kuliah akan meningkatkan status sosial saya di lingkungan masyarakat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Salah satu motivasi saya kuliah adalah untuk mendapatkan gaji yang lebih besar di kemudian hari	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Pelayanan Mahasiswa

Q5. Saudara mahasiswa, pada bagian ini Anda diminta untuk memberikan penilaian terhadap layanan akademik yang disediakan oleh Universitas Terbuka. Berikan penilaian dengan memilih salah satu respon mulai dari "Sangat Tidak Setuju" sampai dengan "Sangat Setuju" terhadap pernyataan-pernyataan berikut ini.

	Sangat tidak setuju	Tidak setuju	Ragu-ragu	Setuju	Sangat setuju
	1	2	3	4	5
Saya merasa materi-materi semua modul yang saya pelajari sesuai dengan kebutuhan akademik saya	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saya merasa puas dengan pelayanan Ujian Akhir Semester (UAS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Saya merasa proses registrasi kuliah di UPBJJ berlangsung nyaman dan responsif	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saya punya akses ke layanan perpustakaan di daerah saya	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pusat layanan mahasiswa di UPBJJ telah membantu saya untuk mengatasi masalah akademik yang saya alami	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Kualitas program studi yang saya pilih sudah sesuai harapan saya	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Semua matakuliah yang ditawarkan dalam program studi saya berguna untuk rencana karir saya	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saya menerima umpan balik dan bantuan secara cepat dari tutor ketika saya membutuhkannya	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saya mendapatkan bimbingan akademik secara teratur ketika menjadi mahasiswa aktif	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saya merasa bahwa berpartisipasi dalam tutorial online berguna untuk kemajuan studi saya	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saya merasa bahwa berpartisipasi dalam tutorial tatap muka memiliki dampak positif pada studi saya	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Self-Efficacy, Volition, and Peer Interaction

Q6. Berikan penilaian dengan memilih salah satu respon mulai dari "Sangat Tidak Setuju" sampai dengan "Sangat Setuju" terhadap pernyataan-pernyataan berikut ini..

	Sangat tidak setuju	Tidak setuju	Ragu-ragu	Setuju	Sangat setuju
	1	2	3	4	5
Saya percaya bahwa saya dapat memahami materi modul yang menurut saya paling sulit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saya yakin saya bisa menyelesaikan soal-soal Ujian Akhir Semester dengan benar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saya yakin bahwa saya mampu untuk belajar mandiri	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saya percaya terhadap kemampuan akademik saya	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 2b

Saya sadar bahwa saya akan mampu untuk lulus kuliah tepat waktu (8 semester) apabila tetap menjadi mahasiswa aktif	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saya selalu berusaha untuk menemukan cara belajar yang menyenangkan dan mudah	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saya sadar bahwa saya akan mengecewakan keluarga dan kolega apabila saya gagal dalam studi	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saya sadar akan pengorbanan (uang dan tenaga) yang telah saya curahkan selama kuliah di Universitas Terbuka	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saya merasa ada perasaan terasing dan sendirian selama menjadi mahasiswa Universitas Terbuka	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teman kuliah di Universitas Terbuka membantu menciptakan lingkungan belajar yang mendukung kemajuan studi saya	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saya merasa bahwa berpartisipasi dalam kelompok belajar memiliki pengaruh positif pada studi saya	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Orientasi Kultural

Q7. Saudara mahasiswa, pada bagian ini Anda diharapkan untuk memberikan respon terhadap orientasi kultural Anda. Orientasi kultural adalah kecenderungan diri untuk bersikap independen atau interdependen/kolektif dalam kehidupan sehari-hari. Anda diminta untuk memilih salah satu respon mulai dari "Sangat Tidak Setuju" sampai dengan "Sangat Setuju" terhadap pernyataan-pernyataan berikut ini.

	Sangat tidak setuju	Tidak setuju	Ragu-ragu	Setuju	Sangat setuju
	1	2	3	4	5
Saya cenderung untuk melakukan sesuatu hal secara mandiri	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Keluarga saya selalu mendorong saya untuk mandiri di segala hal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 2b

Ketika mengalami masalah pribadi saya cenderung menyelesaikannya sendiri daripada mengikuti nasehat orang lain	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adalah penting bagi saya untuk menyelesaikan tugas-tugas akademik lebih baik daripada orang lain	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mampu menjaga diri adalah penting bagi saya	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saya merasa nyaman bekerja dengan situasi yang mengutamakan kompetisi dan prestasi	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saya merasa unik - berbeda dari orang lain dalam banyak hal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saya merasa nyaman ketika bisa berbeda dengan orang lain	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saya selalu menghormati keputusan yang dibuat oleh kelompok atau organisasi saya	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saya selalu mengorbankan kepentingan saya demi kebaikan kelompok atau organisasi saya	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sebelum membuat keputusan penting, saya selalu berkonsultasi dengan keluarga atau orang lain	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saya selalu mendiskusikan masalah pekerjaan atau studi saya dengan keluarga atau orang lain	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saya merasa bahwa menjaga hubungan dengan orang lain lebih penting daripada kepentingan saya sendiri	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saya akan membantu, dengan kemampuan saya, jika ada seorang anggota keluarga berada dalam kesulitan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 2b

Faktor-Faktor Eksternal

Q8. Saudara mahasiswa, Anda diminta untuk memberikan penilaian terhadap seberapa penting dukungan lingkungan di sekitar Anda terhadap keberlangsungan studi Anda di Universitas Terbuka. Lingkungan ini terdiri dari anggota keluarga, teman, atasan kerja, teman kerja, dan finansial. Berikan penilaian dengan cara memberikan respon mulai dari "Sangat Tidak Setuju" sampai dengan "Setuju" terhadap pernyataan-pernyataan berikut ini.

	Sangat tidak setuju	Tidak setuju	Ragu-ragu	Setuju	Sangat setuju
	1	2	3	4	5
Keluarga saya selalu memberikan dukungan kepada saya untuk menyelesaikan kuliah S1 di Universitas Terbuka	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Istri/Suami saya merasa terganggu karena saya banyak menghabiskan waktu untuk belajar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saya sulit membagi waktu antara tugas-tugas rumah tangga dan kegiatan belajar	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teman-teman saya memberikan dukungan dalam proses studi saya	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Atasan kerja saya mendorong saya untuk menyelesaikan kuliah	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pekerjaan saya menjadi hambatan utama saya untuk menyelesaikan studi di Universitas Terbuka	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teman-teman kerja saya selalu memberikan dukungan untuk menyelesaikan studi di Universitas Terbuka	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Masalah keuangan menjadi halangan untuk menyelesaikan studi saya	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Demografi

Q9. Sebutkan jenis kelamin Anda?

- ☐ Pria ☐ Wanita

Q10. Berapa usia Anda saat ini? _____

Q11. Tuliskan identitas etnik Anda (Mis. Jawa, Sunda, Batak, dll.)

Q13. Sebutkan tingkat pendidikan terakhir Anda ketika mendaftar sebagai mahasiswa Universitas Terbuka.

- SMU (*lulus tahun*) -----
- Sarjana S2 (*lulus tahun*) -----
- Diploma (*lulus tahun*) -----
- Sarjana S3 (*lulus tahun*) -----
- Sarjana S1 (*lulus tahun*) -----

Q14. Sebutkan status pekerjaan Anda saat ini?

- Full-time
- Part time
- Unemployed

Q15. Jelaskan jenis pekerjaan Anda?

Q16. Berapa lama Anda sudah bekerja di bidang tersebut?

Q17. Berapa lama Anda bekerja setiap hari?

Q18. Jelaskan status diri Anda saat ini?

- Menikah dan punya anak di bawah 18 tahun
- Menikah dan punya anak di atas 18 tahun
- Orang tua tunggal dengan anak di bawah 18 tahun
- Belum menikah
- Duda/Janda tanpa anak

Q19. Berapa jumlah anak di rumah? -----

Q20. Berapa jumlah anggota keluarga yang tinggal bersama Anda?

Q21. Berikan penilaian terhadap keterampilan computer yang Anda miliki?

- Tidak bisa
- Sangat tidak terampil
- Kurang terampil
- Terampil
- Sangat terampil

Q22. Berikan gambaran tentang gaya belajar Anda berdasarkan opsi-opsi berikut ini

- Saya lebih suka belajar dengan menggunakan gambar
- Saya lebih suka belajar dengan menggunakan suara
- Saya lebih suka belajar dengan menggunakan tulisan
- Saya lebih suka belajar dengan menggunakan panca indera

Q23. Berikan informasi tambahan lainnya terkait dengan pengamatan Anda sebagai mahasiswa Universitas Terbuka?

Appendix 2c: Questionnaire for Pilot Study



STUDENT PROGRESS IN THE INDONESIA OPEN UNIVERSITY

Academic Profile

Q1. What is your programme?

- ☐ Course Programme

- ☐ Regional office

Q2. What is your enrolment status in the program for a registration period of 2010.1 until 2013.2?

- | | | |
|------------------------------|-------------------|---------------------|
| <input type="radio"/> 2010.1 | 1. Active student | 2. Inactive student |
| <input type="radio"/> 2010.2 | 1. Active student | 2. Inactive student |
| <input type="radio"/> 2011.1 | 1. Active student | 2. Inactive student |
| <input type="radio"/> 2011.2 | 1. Active student | 2. Inactive student |
| <input type="radio"/> 2012.1 | 1. Active student | 2. Inactive student |
| <input type="radio"/> 2012.2 | 1. Active student | 2. Inactive student |
| <input type="radio"/> 2013.1 | 1. Active student | 2. Inactive student |
| <input type="radio"/> 2013.2 | 1. Active student | 2. Inactive student |

Q3. If you are or have been an inactive student, what are your main reasons?

- | | |
|---|--|
| <input type="radio"/> Programme quality | <input type="radio"/> Lack of adequate computer skills |
| <input type="radio"/> Finance | <input type="radio"/> Work loads |
| <input type="radio"/> Enrolment problems | <input type="radio"/> Health problems |
| <input type="radio"/> Academic advising | <input type="radio"/> Personal problems |
| <input type="radio"/> Quality of modules | <input type="radio"/> Other (<i>please specify</i>) |
| <input type="radio"/> Location of regional office | _____ |
| | _____ |

Appendix 2c

Academic Motivation

Q4. Please indicate to what extents do you agree or disagree with the following statements regarding your decision to continue studying in University. *(Please use the scale below from one through five, with "1" indicating you strongly disagree with the statement and "5" indicating you strongly agree).*

I decide to study at the university level because:	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
	1	2	3	4	5
h. I experience pleasure and satisfaction while learning new things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. Becoming a student allow me to continue to learn about many things that interest me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. Becoming a student will allow me to communicate my own ideas to others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. I will have a personal satisfaction when I am able to accomplish my study within 8 semesters	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. (if you are an employee) I think that having an education at the university level will help me better prepare for the career I have chosen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m. in order to have a better salary later on	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
n. (if you are not an employee) eventually it will enable me to enter the job market in a field that I like	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
o. it will help me to get social prestige in the community	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Learning Services and Student Support Services

Q5. Please read the statements below and indicate to what extents do you agree or disagree with the academic process. *(Please use the scale below from one through five, with "1" indicating you strongly disagree with the statement and "5" indicating you strongly agree).*

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
	1	2	3	4	5
l. The course materials are relevant to my academic need	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m. I find it easy to understand the content of UT course materials	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
n. I am satisfied with the final examination services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
o. The registration process is convenient and efficient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
p. I have access to library resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
q. The student support centre has helped me to overcome some of my academic problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
r. My expectations of the quality of programme were met	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
s. The offered courses in the programme have been relevant and useful to my career plans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
t. I received promptly feedback and help from tutors when I needed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
u. I get advising regularly while to be active student	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
v. I feel that participation in online tutorial has a positive influence on my study	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
w. I feel that attending face to face tutorial has a useful impact on my study	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 2c

Self-Efficacy, Volition, and Peer Interaction

Q6. Please indicate to what extents do you agree or disagree with these statements. *(Please use the scale below from one through five, with “1” indicating you strongly disagree with the statement and “5” indicating you strongly agree).*

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
	1	2	3	4	5
l. I am certain that I can understand the most difficult material presented in the modules for this degree programme	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m. I am confident that I can do an excellent job on the assessment in this programme	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
n. I am confident that I am able to study independently	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
o. I am confident in my academic ability	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
p. I remind myself that I can accomplish my study on schedule when I am always to be an active student	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
q. I remind myself that accomplishment of my study will affect my future	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
r. I think of interesting or different ways to make studying more fun or challenging for me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
s. I think about how disappointed others (family/friends) will be if I fail in my study	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
t. I think about the sacrifices that I have made (financial and time) while being in college	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
u. I feel isolated studying while study at Universitas Terbuka	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

v. My fellow-students helped create a supportive learning environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
w. I feel that participation in a learning community has increased my motivation to learn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Cultural Orientation

Q7. Please read and indicate to what extents do you agree or disagree with the statements below that describe your cultural orientation (How do you see yourself in relation to others). *(Please use the scale below from one through five, with "1" indicating you strongly disagree with the statement and "5" indicating you strongly agree).*

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
	1	2	3	4	5
n. I tend to do my own thing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
o. My family encouraged me to be independent in many respects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
p. When faced with a difficult personal problem, it is better to decide for myself than follow the advice of others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
q. It is important to me that I perform better than others on a task	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
r. Being able to take care of myself is important for me for me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
s. I enjoy working in situations involving competition with others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
t. I enjoy being unique and different from others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
u. I always respect decisions made by the group or organisation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
v. I always sacrifice my self-interest for the benefit of my group or organisation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
w. Before making a decision, I always consult with others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
x. I always consult with my family members on work or study related matters	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
y. I have feeling that my relationships with others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix 2c

are more important than my own accomplishment					
z. I would help, within my means, if my relatives are in financial difficulty	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

External Factors

Q8. Please indicate to what extents do you agree or disagree with the statements below which describe how the selected external supports influence your decision to be an active student. *(Please use the scale below from one through five, with “1” indicating strongly disagree with the statement and “5” indicating strongly agree)*

	Strongly disagree	Disagree	Unsure	Agree	Strongly agree
	1	2	3	4	5
h. My family members support my efforts to pursue the degree in the distance learning environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. My partner has become annoyed because I spent so much time studying	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. My domestic duties in the house have distracted me from my studies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. My friends encouraged me in my study efforts	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
l. My employer has encouraged me to pursue the degree in Universitas Terbuka	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
m. My job responsibilities are too pressing to continue with my studies in the programme	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
n. Financial issues are an obstacle to continue my study	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Demographics

Q9. Please indicate your gender?

- ☐ Male ☐ Female

Q10. What is your age in years? _____

Q11. Where do you currently reside? (*Please describe district/regency where you are living*)

Q12. Please describe your ethnicity that you most consider yourself to be (i.e Javanese, Sundanese, etc.)

Q13. Please indicate your latest degrees earned.

- ☐ Senior High School (*year*) _____ ☐ Master's (*year*) _____
☐ Associate (*year*) _____ ☐ Doctoral (*year*) _____
☐ Bachelor (*year*) _____

Q14. What is your employment status when you were enrolled in the programme?

- ☐ Full-time ☐ Part time ☐ Unemployed

Q15. Please describe your employment?

Q16. How many years of working experience do you have?

Q17. How many hours do you work every day?

Q18. Which best describes your family structure when you were enrolled in the programme?

- ☐ Married with children under 18
☐ Married with children over 18
☐ Single parent family with children under 18
☐ Single person, not married
☐ Single person, divorced, separated or widowed

Q19. How many children do you have at home?

Q20. How many people live together in your home?

Q21. How do you assess your computer skills?

<input type="radio"/> Very limited	<input type="radio"/> Some experience	<input type="radio"/> Quite a lot	<input type="radio"/> Extensive
------------------------------------	---------------------------------------	-----------------------------------	---------------------------------

Q22. Which best describes your learning style?

Appendix 2c

- Visual learner (I prefer using picture and images, graphs, charts, flowcharts and diagrams)
- Auditory learner (I prefer using sound, music, and speech)
- Reading/writing learner (I prefer using printed words, reading, and writing)
- Kinesthetic/physical (I prefer using my senses, body, and hands by touching and moving)

Q23. What additional information can you provide about your experience in the degree programme at Universitas Terbuka?

Universitas Terbuka

Appendix 2d: Quantitative Results

2d.1 Demographic information

2d.2 Academic profile

2d.3 Frequency analysis of scales

2d.4 Descriptive analysis of scales

2d.5 Independent-sample t-test

2d.6 Correlations

2d.7 Logistic regression

Universitas Terbuka

Appendix 2d.1

2d.1 Demographic Information

Age

		Age in range			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	19 - 24	21	13.7	14.5	14.5
	25 - 29	42	27.5	29.0	43.4
	30 - 34	28	18.3	19.3	62.8
	35 - 39	31	20.3	21.4	84.1
	40 - 44	12	7.8	8.3	92.4
	45 - 49	6	3.9	4.1	96.6
	50 - 54	1	.7	.7	97.2
	55 - 59	2	1.3	1.4	98.6
	60 - 64	1	.7	.7	99.3
	65 - 69	1	.7	.7	100.0
	Total	145	94.8	100.0	
Missing	System	8	5.2		
Total		153	100.0		

Gender

		Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	94	61.4	62.3	62.3
	Female	57	37.3	37.7	100.0
	Total	151	98.7	100.0	
Missing	System	2	1.3		
Total		153	100.0		

		Gender ^a			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	18	75.0	75.0	75.0
	Female	6	25.0	25.0	100.0
	Total	24	100.0	100.0	

a. Are you an active student or inactive student? = Inactive Student

Gender^a

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	69	60.0	61.1	61.1
	Female	44	38.3	38.9	100.0
	Total	113	98.3	100.0	
Missing	System	2	1.7		
Total		115	100.0		

a. Are you an active student or inactive student? = Active Student

Ethnicity

Ethnicity

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Javanese	56	36.6	42.4	42.4
	Batak	3	2.0	2.3	44.7
	Malay	19	12.4	14.4	59.1
	Sundanese	18	11.8	13.6	72.7
	Acehnese	6	3.9	4.5	77.3
	Betawi	1	.7	.8	78.0
	Dayak	3	2.0	2.3	80.3
	Chinese	3	2.0	2.3	82.6
	Mixed ethnicity	10	6.5	7.6	90.2
	Balinese	3	2.0	2.3	92.4
	Banjar	2	1.3	1.5	93.9
	Makassar	5	3.3	3.8	97.7
	Sassak	1	.7	.8	98.5
	Madurese	2	1.3	1.5	100.0
	Total	132	86.3	100.0	
Missing	System	21	13.7		
Total		153	100.0		

Appendix 2d.1

		Ethnicity			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Javanese	56	36.6	42.4	42.4
	Batak	3	2.0	2.3	44.7
	Malay	19	12.4	14.4	59.1
	Sundanese	18	11.8	13.6	72.7
	Acehnese	6	3.9	4.5	77.3
	Betawi	1	.7	.8	78.0
	Dayak	3	2.0	2.3	80.3
	Chinese	3	2.0	2.3	82.6
	Mixed ethnicity	10	6.5	7.6	90.2
	Balinese	3	2.0	2.3	92.4
	Banjar	2	1.3	1.5	93.9
	Makassar	5	3.3	3.8	97.7
	Sasak	1	.7	.8	98.5
	Madurese	2	1.3	1.5	100.0
	Total	132	86.3	100.0	
Missing	System	21	13.7		
Total		153	100.0		

		Ethnicity ^a			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Javanese	8	33.3	38.1	38.1
	Batak	2	8.3	9.5	47.6
	Malay	3	12.5	14.3	61.9
	Sundanese	4	16.7	19.0	81.0
	Acehnese	1	4.2	4.8	85.7
	Chinese	1	4.2	4.8	90.5
	Mixed ethnicity	2	8.3	9.5	100.0
	Total	21	87.5	100.0	
Missing	System	3	12.5		
Total		24	100.0		

a. Are you an active student or inactive student? = Inactive Student

Prior education

		Prior Education			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Senior High School	109	71.2	73.2	73.2
	Diploma	27	17.6	18.1	91.3
	Undergraduate	11	7.2	7.4	98.7
	Master's Degree	2	1.3	1.3	100.0
	Total	149	97.4	100.0	
Missing	System	4	2.6		
Total		153	100.0		

		Prior Education ^a			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Senior High School	85	73.9	75.9	75.9
	Diploma	19	16.5	17.0	92.9
	Undergraduate	7	6.1	6.3	99.1
	Master's Degree	1	.9	.9	100.0
	Total	112	97.4	100.0	
Missing	System	3	2.6		
Total		115	100.0		

a. Are you an active student or inactive student? = Active Student

		Prior Education ^a			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Senior High School	13	54.2	54.2	54.2
	Diploma	6	25.0	25.0	79.2
	Undergraduate	4	16.7	16.7	95.8
	Master's Degree	1	4.2	4.2	100.0
	Total	24	100.0	100.0	

a. Are you an active student or inactive student? = Inactive Student

Appendix 2d.1

Employment status

Employment Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Full time employment	81	52.9	54.0	54.0
	Part time employment	38	24.8	25.3	79.3
	Self-employment	18	11.8	12.0	91.3
	Unemployment	13	8.5	8.7	100.0
	Total	150	98.0	100.0	
Missing	System	3	2.0		
Total		153	100.0		

Employment Status^a

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Full time employment	63	54.8	55.8	55.8
	Part time employment	27	23.5	23.9	79.6
	Self-employment	13	11.3	11.5	91.2
	Unemployment	10	8.7	8.8	100.0
	Total	113	98.3	100.0	
Missing	System	2	1.7		
Total		115	100.0		

a. Are you an active student or inactive student? = Active Student

Employment Status^a

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Full time employment	12	50.0	50.0	50.0
	Part time employment	7	29.2	29.2	79.2
	Self-employment	2	8.3	8.3	87.5
	Unemployment	3	12.5	12.5	100.0
	Total	24	100.0	100.0	

a. Are you an active student or inactive student? = Inactive Student

Family structure

		Family Structure			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married and had children over 18	9	5.9	6.0	6.0
	Married and had children under 18	80	52.3	53.0	58.9
	Single parent with children under 18	2	1.3	1.3	60.3
	Divorced or Widowed	3	2.0	2.0	62.3
	Single person (not married)	57	37.3	37.7	100.0
	Total	151	98.7	100.0	
Missing	System	2	1.3		
Total		153	100.0		

		Family Structure ^a			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married and had children over 18	6	5.2	5.3	5.3
	Married and had children under 18	60	52.2	53.1	58.4
	Single parent with children under 18	2	1.7	1.8	60.2
	Divorced or Widowed	3	2.6	2.7	62.8
	Single person (not married)	42	36.5	37.2	100.0
	Total	113	98.3	100.0	
Missing	System	2	1.7		
Total		115	100.0		

a. Are you an active student or inactive student? = Active Student

Appendix 2d.1

Family Structure^a

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married and had children over 18	2	8.3	8.3	8.3
	Married and had children under 18	11	45.8	45.8	54.2
	Single person (not married)	11	45.8	45.8	100.0
	Total	24	100.0	100.0	

a. Are you an active student or inactive student? = Inactive Student

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2d.2 Academic Profile

Course Programme

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	State Administration Science	37	24.2	25.0	25.0
	Business Administration Science	3	2.0	2.0	27.0
	Sociology	17	11.1	11.5	38.5
	Government Science	44	28.8	29.7	68.2
	Communication Science	3	2.0	2.0	70.3
	English for Translation	44	28.8	29.7	100.0
	Total	148	96.7	100.0	
Missing	System	5	3.3		
Total		153	100.0		

Course Programme

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
Valid	State Administration Science		2	14.3	16.7	16.7
	Sociology		1	7.1	8.3	25.0
	Government Science		5	35.7	41.7	66.7
	Communication Science		1	7.1	8.3	75.0
	English for Translation		3	21.4	25.0	100.0
	Total		12	85.7	100.0	
	Missing System		2	14.3		
Total			14	100.0		
Inactive Student	Valid	State Administration Science	2	8.3	8.3	8.3
		Sociology	7	29.2	29.2	37.5
		Government Science	5	20.8	20.8	58.3
		English for Translation	10	41.7	41.7	100.0
	Total		24	100.0	100.0	
Active Student	Valid	State Administration Science	33	28.7	29.5	29.5
		Business Administration Science	3	2.6	2.7	32.1
		Sociology	9	7.8	8.0	40.2
		Government Science	34	29.6	30.4	70.5
		Communication Science	2	1.7	1.8	72.3
		English for Translation	31	27.0	27.7	100.0
	Total		112	97.4	100.0	
	Missing System		3	2.6		
Total			115	100.0		

Appendix 2d.2

Number of Students based on Regional offices

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Banda Aceh	6	3.9	4.0	4.0
	Medan	4	2.6	2.7	6.7
	Batam	12	7.8	8.1	14.8
	Padang	1	.7	.7	15.4
	Pangkal Pinang	3	2.0	2.0	17.4
	Pekan Baru	3	2.0	2.0	19.5
	Jambi	4	2.6	2.7	22.1
	Bengkulu	1	.7	.7	22.8
	Bandar Lampung	3	2.0	2.0	24.8
	Jakarta	45	29.4	30.2	55.0
	Serang	2	1.3	1.3	56.4
	Bogor	8	5.2	5.4	61.7
	Bandung	10	6.5	6.7	68.5
	Purwokerto	6	3.9	4.0	72.5
	Semarang	9	5.9	6.0	78.5
	Surakarta	2	1.3	1.3	79.9
	Yogyakarta	4	2.6	2.7	82.6
	Pontianak	4	2.6	2.7	85.2
	Palangkaraya	4	2.6	2.7	87.9
	Banjarmasin	1	.7	.7	88.6
	Samarinda	2	1.3	1.3	89.9
	Surabaya	4	2.6	2.7	92.6
	Malang	2	1.3	1.3	94.0
	26	4	2.6	2.7	96.6
	27	1	.7	.7	97.3
	Kupang	1	.7	.7	98.0
	29	1	.7	.7	98.7
	Manado	1	.7	.7	99.3
	38	1	.7	.7	100.0
	Total	149	97.4	100.0	
Missing	System	4	2.6		
Total		153	100.0		

Number of students based on regional offices and enrolment status

Are you an active student or inactive student?		Frequency	Percent	Valid Percent	Cumulative Percent
.Non-status response	Valid				
	Banda Aceh	1	7.1	9.1	9.1
	Batam	1	7.1	9.1	18.2
	Jakarta	5	35.7	45.5	63.6
	Semarang	2	14.3	18.2	81.8
	Pontianak	1	7.1	9.1	90.9
	Banjarmasin	1	7.1	9.1	100.0

Appendix 2d.2

Total			11	78.6	100.0	
Missing System			3	21.4		
Total			14	100.0		
Inactive Student	Valid	Medan	1	4.2	4.2	4.2
		Batam	2	8.3	8.3	12.5
		Pekan Baru	1	4.2	4.2	16.7
		Jambi	1	4.2	4.2	20.8
		Bandar Lampung	1	4.2	4.2	25.0
		Jakarta	9	37.5	37.5	62.5
		Bogor	2	8.3	8.3	70.8
		Bandung	2	8.3	8.3	79.2
		Surakarta	1	4.2	4.2	83.3
		Surabaya	2	8.3	8.3	91.7
		Malang	1	4.2	4.2	95.8
		Denpasar	1	4.2	4.2	100.0
		Total	24	100.0	100.0	
Active Student	Valid	Banda Aceh	5	4.3	4.4	4.4
		Medan	3	2.6	2.6	7.0
		Batam	9	7.8	7.9	14.9
		Padang	1	.9	.9	15.8
		Pangkal Pinang	3	2.6	2.6	18.4
		Pekan Baru	2	1.7	1.8	20.2
		Jambi	3	2.6	2.6	22.8
		Bengkulu	1	.9	.9	23.7
		Bandar Lampung	3	2.6	2.6	26.3
		Jakarta	31	27.0	27.2	53.5
		Serang	2	1.7	1.8	55.3
		Bogor	6	5.2	5.3	60.5
		Bandung	8	7.0	7.0	67.5
		Purwokerto	6	5.2	5.3	72.8
		Semarang	7	6.1	6.1	78.9
		Surakarta	1	.9	.9	79.8
		Yogyakarta	4	3.5	3.5	83.3
		Pontianak	3	2.6	2.6	86.0
		Palangkaraya	4	3.5	3.5	89.5
		Samarinda	2	1.7	1.8	91.2
		Surabaya	2	1.7	1.8	93.0
		Malang	1	.9	.9	93.9
		Denpasar	3	2.6	2.6	96.5
		Kupang	1	.9	.9	97.4
		Makasar	2	1.7	1.8	99.1
		Manado	1	.9	.9	100.0
		Total	114	99.1	100.0	
		Missing System	1	.9		
		Total	115	100.0		

Appendix 2d.2

Enrolment Status

.Non-response	N	Valid	0
		Missing	14
Inactive Student	N	Valid	24
		Missing	0
Active Student	N	Valid	115
		Missing	0

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2d.3 Frequency Analysis of Scales

a. Individual Factors

1) Intrinsic motivation

I experience pleasure and satisfaction while learning new things

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Agree	9	64.3	69.2	69.2
		Strongly agree	4	28.6	30.8	100.0
		Total	13	92.9	100.0	
	Missing	System	1	7.1		
Total			14	100.0		
Inactive Student	Valid	Agree	15	62.5	65.2	65.2
		Strongly agree	8	33.3	34.8	100.0
		Total	23	95.8	100.0	
	Missing	System	1	4.2		
Total			24	100.0		
Active Student	Valid	Unsure	3	2.6	2.6	2.6
		Agree	57	49.6	49.6	52.2
		Strongly agree	55	47.8	47.8	100.0
		Total	115	100.0	100.0	

Study at the University allows me to continue to learn about many things that interest me

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Unsure	1	7.1	7.7	7.7
		Agree	6	42.9	46.2	53.8
		Strongly agree	6	42.9	46.2	100.0
		Total	13	92.9	100.0	
	Missing	System	1	7.1		
Total			14	100.0		
Inactive Student	Valid	Unsure	1	4.2	4.3	4.3
		Agree	10	41.7	43.5	47.8
		Strongly agree	12	50.0	52.2	100.0
		Total	23	95.8	100.0	
	Missing	System	1	4.2		
Total			24	100.0		
Active Student	Valid	Unsure	6	5.2	5.2	5.2
		Agree	52	45.2	45.2	50.4
		Strongly agree	57	49.6	49.6	100.0
		Total	115	100.0	100.0	

Appendix 2d.3

Study at the University allows me to communicate my own ideas to others

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Disagree	1	7.1	7.7	7.7
		Unsure	1	7.1	7.7	15.4
		Agree	8	57.1	61.5	76.9
		Strongly agree	3	21.4	23.1	100.0
		Total	13	92.9	100.0	
	Missing	System	1	7.1		
Total			14	100.0		
Inactive Student	Valid	Disagree	1	4.2	4.5	4.5
		Unsure	2	8.3	9.1	13.6
		Agree	12	50.0	54.5	68.2
		Strongly agree	7	29.2	31.8	100.0
		Total	22	91.7	100.0	
	Missing	System	2	8.3		
Total			24	100.0		
Active Student	Valid	Disagree	6	5.2	5.4	5.4
		Unsure	24	20.9	21.6	27.0
		Agree	61	53.0	55.0	82.0
		Strongly agree	20	17.4	18.0	100.0
		Total	111	96.5	100.0	
	Missing	System	4	3.5		
Total			115	100.0		

I will have a personal satisfaction when I am able to accomplish my study within eight semesters

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Agree	8	57.1	61.5	61.5
		Strongly agree	5	35.7	38.5	100.0
		Total	13	92.9	100.0	
	Missing	System	1	7.1		
Total			14	100.0		
Inactive Student	Valid	Disagree	1	4.2	4.3	4.3
		Unsure	4	16.7	17.4	21.7
		Agree	10	41.7	43.5	65.2
		Strongly agree	8	33.3	34.8	100.0
		Total	23	95.8	100.0	
	Missing	System	1	4.2		
Total			24	100.0		
Active Student	Valid	Disagree	2	1.7	1.8	1.8
		Unsure	4	3.5	3.6	5.4
		Agree	47	40.9	42.0	47.3
		Strongly agree	59	51.3	52.7	100.0
		Total	112	97.4	100.0	
	Missing	System	3	2.6		
Total			115	100.0		

2) Extrinsic motivation

I think that having an education at the university level will help me better prepare for the career I have chosen

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Unsure	1	7.1	7.7	7.7
		Agree	7	50.0	53.8	61.5
		Strongly agree	5	35.7	38.5	100.0
		Total	13	92.9	100.0	
	Missing	System	1	7.1		
Total			14	100.0		
Inactive Student	Valid	Disagree	1	4.2	4.5	4.5
		Agree	8	33.3	36.4	40.9
		Strongly agree	13	54.2	59.1	100.0
		Total	22	91.7	100.0	
	Missing	System	2	8.3		
Total			24	100.0		
Active Student	Valid	Strongly disagree	1	.9	.9	.9
		Disagree	2	1.7	1.8	2.7
		Unsure	7	6.1	6.2	8.8
		Agree	41	35.7	36.3	45.1
		Strongly agree	62	53.9	54.9	100.0
		Total	113	98.3	100.0	
	Missing	System	2	1.7		
	Total		115	100.0		

In order to have a better salary later on

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Disagree	5	35.7	38.5	38.5
		Unsure	2	14.3	15.4	53.8
		Agree	6	42.9	46.2	100.0
		Total	13	92.9	100.0	
	Missing	System	1	7.1		
Total			14	100.0		
Inactive Student	Valid	Strongly disagree	1	4.2	4.8	4.8
		Disagree	4	16.7	19.0	23.8
		Agree	10	41.7	47.6	71.4
		Strongly agree	6	25.0	28.6	100.0
		Total	21	87.5	100.0	
	Missing	System	3	12.5		
Total			24	100.0		
Active Student	Valid	Strongly disagree	7	6.1	6.4	6.4

Appendix 2d.3

	Disagree	12	10.4	11.0	17.4
	Unsure	19	16.5	17.4	34.9
	Agree	48	41.7	44.0	78.9
	Strongly agree	23	20.0	21.1	100.0
	Total	109	94.8	100.0	
Missing	System	6	5.2		
Total		115	100.0		

It will help me to get social prestige in the community

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Disagree	1	7.1	8.3	8.3
		Agree	11	78.6	91.7	100.0
		Total	12	85.7	100.0	
	Missing	System	2	14.3		
	Total		14	100.0		
Inactive Student	Valid	Disagree	2	8.3	9.5	9.5
		Unsure	5	20.8	23.8	33.3
		Agree	7	29.2	33.3	66.7
		Strongly agree	7	29.2	33.3	100.0
		Total	21	87.5	100.0	
	Missing	System	3	12.5		
Total			24	100.0		
Active Student	Valid	Strongly disagree	5	4.3	4.5	4.5
		Disagree	10	8.7	9.1	13.6
		Unsure	13	11.3	11.8	25.5
		Agree	50	43.5	45.5	70.9
		Strongly agree	32	27.8	29.1	100.0
		Total	110	95.7	100.0	
	Missing	System	5	4.3		
	Total		115	100.0		

It will help me to get my desired job

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Unsure	2	14.3	18.2	18.2
		Agree	7	50.0	63.6	81.8
		Strongly agree	2	14.3	18.2	100.0
		Total	11	78.6	100.0	
	Missing	System	3	21.4		
Total			14	100.0		
Inactive Student	Valid	Disagree	1	4.2	4.8	4.8
		Unsure	5	20.8	23.8	28.6

		Agree	7	29.2	33.3	61.9
		Strongly agree	8	33.3	38.1	100.0
		Total	21	87.5	100.0	
	Missing	System	3	12.5		
	Total		24	100.0		
Active Student	Valid	Strongly disagree	1	.9	.9	.9
		Disagree	5	4.3	4.5	5.5
		Unsure	18	15.7	16.4	21.8
		Agree	55	47.8	50.0	71.8
		Strongly agree	31	27.0	28.2	100.0
		Total	110	95.7	100.0	
	Missing	System	5	4.3		
	Total		115	100.0		

3) Self-efficacy

I am certain that I can understand the most difficult material presented in the modules for this degree programme

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Disagree	1	7.1	7.1	7.1
		Unsure	4	28.6	28.6	35.7
		Agree	9	64.3	64.3	100.0
		Total	14	100.0	100.0	
Inactive Student	Valid	Disagree	4	16.7	16.7	16.7
		Unsure	5	20.8	20.8	37.5
		Agree	12	50.0	50.0	87.5
		Strongly agree	3	12.5	12.5	100.0
		Total	24	100.0	100.0	
Active Student	Valid	Strongly disagree	2	1.7	1.8	1.8
		Disagree	11	9.6	9.8	11.6
		Unsure	42	36.5	37.5	49.1
		Agree	52	45.2	46.4	95.5
		Strongly agree	5	4.3	4.5	100.0
		Total	112	97.4	100.0	
	Missing	System	3	2.6		
	Total		115	100.0		

Appendix 2d.3

I am confident that I can do an excellent job on the final assessments in every academic term

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Unsure	3	21.4	21.4	21.4
		Agree	10	71.4	71.4	92.9
		Strongly agree	1	7.1	7.1	100.0
		Total	14	100.0	100.0	
Inactive Student	Valid	Disagree	1	4.2	4.2	4.2
		Unsure	6	25.0	25.0	29.2
		Agree	15	62.5	62.5	91.7
		Strongly agree	2	8.3	8.3	100.0
		Total	24	100.0	100.0	
Active Student	Valid	Disagree	3	2.6	2.7	2.7
		Unsure	31	27.0	27.4	30.1
		Agree	70	60.9	61.9	92.0
		Strongly agree	9	7.8	8.0	100.0
		Total	113	98.3	100.0	
	Missing	System	2	1.7		
Total			115	100.0		

I am confident that I am able to study independently

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Unsure	1	7.1	7.1	7.1
		Agree	13	92.9	92.9	100.0
		Total	14	100.0	100.0	
Inactive Student	Valid	Disagree	1	4.2	4.2	4.2
		Unsure	5	20.8	20.8	25.0
		Agree	12	50.0	50.0	75.0
		Strongly agree	6	25.0	25.0	100.0
		Total	24	100.0	100.0	
Active Student	Valid	Disagree	3	2.6	2.7	2.7
		Unsure	9	7.8	8.0	10.6
		Agree	81	70.4	71.7	82.3
		Strongly agree	20	17.4	17.7	100.0
		Total	113	98.3	100.0	
	Missing	System	2	1.7		
Total			115	100.0		

I am confident in my academic ability

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Agree	13	92.9	92.9	92.9
		Strongly agree	1	7.1	7.1	100.0
		Total	14	100.0	100.0	
Inactive Student	Valid	Disagree	1	4.2	4.2	4.2
		Unsure	1	4.2	4.2	8.3
		Agree	13	54.2	54.2	62.5
		Strongly agree	9	37.5	37.5	100.0
		Total	24	100.0	100.0	
Active Student	Valid	Disagree	1	.9	.9	.9
		Unsure	7	6.1	6.2	7.1
		Agree	78	67.8	69.0	76.1
		Strongly agree	27	23.5	23.9	100.0
		Total	113	98.3	100.0	
	Missing	System	2	1.7		
Total			115	100.0		

4) Volitional strategies

I remind myself that I can accomplish my study within the planned terms when I am always to be an active student

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Disagree	1	7.1	7.1	7.1
		Unsure	1	7.1	7.1	14.3
		Agree	9	64.3	64.3	78.6
		Strongly agree	3	21.4	21.4	100.0
		Total	14	100.0	100.0	
Inactive Student	Valid	Unsure	7	29.2	29.2	29.2
		Agree	11	45.8	45.8	75.0
		Strongly agree	6	25.0	25.0	100.0
		Total	24	100.0	100.0	
Active Student	Valid	Disagree	3	2.6	2.7	2.7
		Unsure	19	16.5	17.0	19.6
		Agree	56	48.7	50.0	69.6
		Strongly agree	34	29.6	30.4	100.0
		Total	112	97.4	100.0	
	Missing	System	3	2.6		
Total			115	100.0		

Appendix 2d.3

I think of interesting or different ways to make studying more fun or challenging for me

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Agree	9	64.3	69.2	69.2
		Strongly agree	4	28.6	30.8	100.0
		Total	13	92.9	100.0	
	Missing	System	1	7.1		
	Total		14	100.0		
Inactive Student	Valid	Unsure	4	16.7	16.7	16.7
		Agree	12	50.0	50.0	66.7
		Strongly agree	8	33.3	33.3	100.0
		Total	24	100.0	100.0	
Active Student	Valid	Disagree	1	.9	.9	.9
		Unsure	6	5.2	5.3	6.2
		Agree	77	67.0	68.1	74.3
		Strongly agree	29	25.2	25.7	100.0
		Total	113	98.3	100.0	
	Missing	System	2	1.7		
	Total		115	100.0		

I think about how disappointed others (family/friends) will be if I do poorly

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Strongly disagree	3	21.4	21.4	21.4
		Disagree	1	7.1	7.1	28.6
		Unsure	2	14.3	14.3	42.9
		Agree	6	42.9	42.9	85.7
		Strongly agree	2	14.3	14.3	100.0
		Total	14	100.0	100.0	
Inactive Student	Valid	Disagree	4	16.7	16.7	16.7
		Unsure	6	25.0	25.0	41.7
		Agree	13	54.2	54.2	95.8
		Strongly agree	1	4.2	4.2	100.0
		Total	24	100.0	100.0	
Active Student	Valid	Strongly disagree	5	4.3	4.7	4.7
		Disagree	13	11.3	12.1	16.8
		Unsure	7	6.1	6.5	23.4
		Agree	44	38.3	41.1	64.5
		Strongly agree	38	33.0	35.5	100.0
		Total	107	93.0	100.0	
	Missing	System	8	7.0		
	Total		115	100.0		

I think about the sacrifices that I have made (financial and time) while being in Universitas Terbuka

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Strongly disagree	1	7.1	7.1	7.1
		Disagree	2	14.3	14.3	21.4
		Agree	9	64.3	64.3	85.7
		Strongly agree	2	14.3	14.3	100.0
		Total	14	100.0	100.0	
Inactive Student	Valid	Disagree	1	4.2	4.3	4.3
		Unsure	3	12.5	13.0	17.4
		Agree	14	58.3	60.9	78.3
		Strongly agree	5	20.8	21.7	100.0
		Total	23	95.8	100.0	
	Missing	System	1	4.2		
Total			24	100.0		
Active Student	Valid	Strongly disagree	3	2.6	2.7	2.7
		Disagree	5	4.3	4.5	7.2
		Unsure	7	6.1	6.3	13.5
		Agree	55	47.8	49.5	63.1
		Strongly agree	41	35.7	36.9	100.0
		Total	111	96.5	100.0	
	Missing	System	4	3.5		
Total			115	100.0		

b. Institutional Factors

1) Student support services

The registration process is convenient, efficient, and responsive

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Strongly disagree	1	7.1	7.1	7.1
		Disagree	1	7.1	7.1	14.3
		Unsure	2	14.3	14.3	28.6
		Agree	10	71.4	71.4	100.0
		Total	14	100.0	100.0	
Inactive Student	Valid	Disagree	3	12.5	12.5	12.5
		Unsure	4	16.7	16.7	29.2
		Agree	15	62.5	62.5	91.7
		Strongly agree	2	8.3	8.3	100.0
		Total	24	100.0	100.0	
Active Student	Valid	Strongly disagree	1	.9	.9	.9
		Disagree	3	2.6	2.6	3.5
		Unsure	20	17.4	17.4	20.9
		Agree	70	60.9	60.9	81.7
		Strongly agree	21	18.3	18.3	100.0
		Total	115	100.0	100.0	

Appendix 2d.3

I have access to library resources

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	Disagree	1	7.1	7.7	7.7
		Unsure	4	28.6	30.8	38.5
		Agree	3	21.4	23.1	61.5
		Strongly agree	5	35.7	38.5	100.0
		Total	13	92.9	100.0	
	Missing	System	1	7.1		
Total			14	100.0		
Inactive Student	Valid	Disagree	4	16.7	18.2	18.2
		Unsure	6	25.0	27.3	45.5
		Agree	10	41.7	45.5	90.9
		Strongly agree	2	8.3	9.1	100.0
		Total	22	91.7	100.0	
	Missing	System	2	8.3		
Total			24	100.0		
Active Student	Valid	Strongly disagree	4	3.5	4.1	4.1
		Disagree	31	27.0	31.6	35.7
		Unsure	22	19.1	22.4	58.2
		Agree	33	28.7	33.7	91.8
		Strongly agree	8	7.0	8.2	100.0
		Total	98	85.2	100.0	
	Missing	System	17	14.8		
Total			115	100.0		

The regional office has helped me to overcome some of my academic problems

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	Disagree	1	7.1	7.1	7.1
		Unsure	1	7.1	7.1	14.3
		Agree	3	21.4	21.4	35.7
		Strongly agree	9	64.3	64.3	100.0
		Total	14	100.0	100.0	
	Missing	System				
Inactive Student	Valid	Strongly disagree	1	4.2	4.8	4.8
		Unsure	10	41.7	47.6	52.4
		Agree	7	29.2	33.3	85.7
		Strongly agree	3	12.5	14.3	100.0
		Total	21	87.5	100.0	
	Missing	System	3	12.5		
Total			24	100.0		
Active Student	Valid	Strongly disagree	3	2.6	2.7	2.7
		Disagree	10	8.7	9.0	11.7
		Unsure	31	27.0	27.9	39.6

	Agree	57	49.6	51.4	91.0
	Strongly agree	10	8.7	9.0	100.0
	Total	111	96.5	100.0	
Missing	System	4	3.5		
Total		115	100.0		

I am satisfied with the final examination services

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Strongly disagree	2	14.3	15.4	15.4
		Disagree	1	7.1	7.7	23.1
		Agree	8	57.1	61.5	84.6
		Strongly agree	2	14.3	15.4	100.0
		Total	13	92.9	100.0	
	Missing	System	1	7.1		
	Total		14	100.0		
Inactive Student	Valid	Strongly disagree	1	4.2	4.5	4.5
		Disagree	2	8.3	9.1	13.6
		Unsure	7	29.2	31.8	45.5
		Agree	8	33.3	36.4	81.8
		Strongly agree	4	16.7	18.2	100.0
		Total	22	91.7	100.0	
	Missing	System	2	8.3		
	Total		24	100.0		
Active Student	Valid	Strongly disagree	2	1.7	1.8	1.8
		Disagree	3	2.6	2.8	4.6
		Unsure	16	13.9	14.7	19.3
		Agree	68	59.1	62.4	81.7
		Strongly agree	20	17.4	18.3	100.0
		Total	109	94.8	100.0	
	Missing	System	6	5.2		
	Total		115	100.0		

2) Learning services

The course materials are relevant to my academic need

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Disagree	1	7.1	7.1	7.1
		Unsure	3	21.4	21.4	28.6
		Agree	8	57.1	57.1	85.7
		Strongly agree	2	14.3	14.3	100.0
		Total	14	100.0	100.0	
Inactive Student	Valid	Disagree	2	8.3	8.7	8.7
		Unsure	5	20.8	21.7	30.4
		Agree	11	45.8	47.8	78.3
		Strongly agree	5	20.8	21.7	100.0

Appendix 2d.3

Total			23	95.8	100.0	
Missing System			1	4.2		
Total			24	100.0		
Active Student	Valid	Disagree	5	4.3	4.4	4.4
		Unsure	15	13.0	13.2	17.5
		Agree	83	72.2	72.8	90.4
		Strongly agree	11	9.6	9.6	100.0
		Total	114	99.1	100.0	
	Missing System	1	.9			
Total			115	100.0		

My expectations of the quality of the programme were met

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Strongly disagree	1	7.1	7.1	7.1
		Unsure	3	21.4	21.4	28.6
		Agree	7	50.0	50.0	78.6
		Strongly agree	3	21.4	21.4	100.0
		Total	14	100.0	100.0	
Inactive Student	Valid	Strongly disagree	1	4.2	4.2	4.2
		Unsure	8	33.3	33.3	37.5
		Agree	9	37.5	37.5	75.0
		Strongly agree	6	25.0	25.0	100.0
		Total	24	100.0	100.0	
Active Student	Valid	Disagree	3	2.6	2.7	2.7
		Unsure	11	9.6	9.7	12.4
		Agree	71	61.7	62.8	75.2
		Strongly agree	28	24.3	24.8	100.0
		Total	113	98.3	100.0	
	Missing	System	2	1.7		
Total			115	100.0		

The offered courses in the programme have been useful to my career plans

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Strongly disagree	1	7.1	7.1	7.1
		Unsure	2	14.3	14.3	21.4
		Agree	9	64.3	64.3	85.7
		Strongly agree	2	14.3	14.3	100.0
		Total	14	100.0	100.0	
Inactive Student	Valid	Strongly disagree	1	4.2	4.3	4.3
		Disagree	1	4.2	4.3	8.7
		Unsure	3	12.5	13.0	21.7
		Agree	12	50.0	52.2	73.9
		Strongly agree	6	25.0	26.1	100.0

Total			23	95.8	100.0	
Missing	System		1	4.2		
Total			24	100.0		
Active Student	Valid	Strongly disagree	1	.9	.9	.9
		Disagree	4	3.5	3.6	4.5
		Unsure	19	16.5	17.1	21.6
		Agree	59	51.3	53.2	74.8
		Strongly agree	28	24.3	25.2	100.0
		Total	111	96.5	100.0	
	Missing	System		4	3.5	
Total			115	100.0		

I received promptly feedback and help from tutors when I needed

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Strongly disagree	1	7.1	7.1	7.1
		Disagree	2	14.3	14.3	21.4
		Unsure	6	42.9	42.9	64.3
		Agree	4	28.6	28.6	92.9
		Strongly agree	1	7.1	7.1	100.0
		Total	14	100.0	100.0	
	Missing	System	2	8.3		
Total			24	100.0		
Inactive Student	Valid	Strongly disagree	2	8.3	9.1	9.1
		Disagree	3	12.5	13.6	22.7
		Unsure	11	45.8	50.0	72.7
		Agree	4	16.7	18.2	90.9
		Strongly agree	2	8.3	9.1	100.0
		Total	22	91.7	100.0	
	Missing	System	2	8.3		
Total			24	100.0		
Active Student	Valid	Strongly disagree	1	.9	.9	.9
		Disagree	8	7.0	7.5	8.4
		Unsure	44	38.3	41.1	49.5
		Agree	44	38.3	41.1	90.7
		Strongly agree	10	8.7	9.3	100.0
		Total	107	93.0	100.0	
	Missing	System	8	7.0		
Total			115	100.0		

I get advising regularly while to be active student

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Strongly disagree	1	7.1	7.7	7.7
		Disagree	3	21.4	23.1	30.8
		Unsure	5	35.7	38.5	69.2
		Agree	3	21.4	23.1	92.3

Appendix 2d.3

	Strongly agree		1	7.1	7.7	100.0
	Total		13	92.9	100.0	
	Missing	System	1	7.1		
	Total		14	100.0		
Inactive Student	Valid	Strongly disagree	2	8.3	9.5	9.5
		Disagree	3	12.5	14.3	23.8
		Unsure	10	41.7	47.6	71.4
		Agree	4	16.7	19.0	90.5
		Strongly agree	2	8.3	9.5	100.0
		Total	21	87.5	100.0	
	Missing	System	3	12.5		
	Total		24	100.0		
Active Student	Valid	Strongly disagree	2	1.7	1.9	1.9
		Disagree	12	10.4	11.2	13.1
		Unsure	32	27.8	29.9	43.0
		Agree	54	47.0	50.5	93.5
		Strongly agree	7	6.1	6.5	100.0
		Total	107	93.0	100.0	
	Missing	System	8	7.0		
	Total		115	100.0		

I feel that participation in online tutorial has a positive influence on my study

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Strongly disagree	1	7.1	7.1	7.1
		Unsure	1	7.1	7.1	14.3
		Agree	9	64.3	64.3	78.6
		Strongly agree	3	21.4	21.4	100.0
		Total	14	100.0	100.0	
Inactive Student	Valid	Unsure	5	20.8	23.8	23.8
		Agree	10	41.7	47.6	71.4
		Strongly agree	6	25.0	28.6	100.0
		Total	21	87.5	100.0	
	Missing	System	3	12.5		
	Total		24	100.0		
Active Student	Valid	Strongly disagree	2	1.7	1.8	1.8
		Disagree	4	3.5	3.6	5.4
		Unsure	12	10.4	10.7	16.1
		Agree	63	54.8	56.3	72.3
		Strongly agree	31	27.0	27.7	100.0
		Total	112	97.4	100.0	
	Missing	System	3	2.6		
	Total		115	100.0		

I feel that attending face to face tutorial has a useful impact on my study

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Strongly disagree	1	7.1	7.1	7.1
		Unsure	2	14.3	14.3	21.4
		Agree	8	57.1	57.1	78.6
		Strongly agree	3	21.4	21.4	100.0
		Total	14	100.0	100.0	
Inactive Student	Valid	Disagree	1	4.2	4.8	4.8
		Unsure	4	16.7	19.0	23.8
		Agree	11	45.8	52.4	76.2
		Strongly agree	5	20.8	23.8	100.0
		Total	21	87.5	100.0	
	Missing	System	3	12.5		
Total			24	100.0		
Active Student	Valid	Strongly disagree	1	.9	1.0	1.0
		Disagree	3	2.6	3.0	4.0
		Unsure	23	20.0	22.8	26.7
		Agree	44	38.3	43.6	70.3
		Strongly agree	30	26.1	29.7	100.0
		Total	101	87.8	100.0	
	Missing	System	14	12.2		
Total			115	100.0		

3) Interaction

My fellow-students helped create a supportive learning environment

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Disagree	2	14.3	14.3	14.3
		Unsure	2	14.3	14.3	28.6
		Agree	8	57.1	57.1	85.7
		Strongly agree	2	14.3	14.3	100.0
		Total	14	100.0	100.0	
Inactive Student	Valid	Strongly disagree	2	8.3	8.7	8.7
		Disagree	3	12.5	13.0	21.7
		Unsure	11	45.8	47.8	69.6
		Agree	4	16.7	17.4	87.0
		Strongly agree	3	12.5	13.0	100.0
		Total	23	95.8	100.0	
	Missing	System	1	4.2		
Total			24	100.0		
Active Student	Valid	Strongly disagree	2	1.7	1.9	1.9
		Disagree	13	11.3	12.1	14.0
		Unsure	34	29.6	31.8	45.8
		Agree	49	42.6	45.8	91.6
		Strongly agree	9	7.8	8.4	100.0

Appendix 2d.3

Total	107	93.0	100.0
Missing System	8	7.0	
Total	115	100.0	

I feel that participating in a learning community has a positive influence on my study

Are you an active student or inactive student?	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Unsure	2	14.3	15.4
	Agree	10	71.4	76.9
	Strongly agree	1	7.1	100.0
	Total	13	92.9	100.0
	Missing System	1	7.1	
Total	14	100.0		
Inactive Student	Valid Unsure	11	45.8	50.0
	Agree	6	25.0	77.3
	Strongly agree	5	20.8	100.0
	Total	22	91.7	100.0
	Missing System	2	8.3	
Total	24	100.0		
Active Student	Valid Strongly disagree	1	3.9	1.0
	Disagree	4	15.8	4.8
	Unsure	14	54.2	18.3
	Agree	63	24.4	78.8
	Strongly agree	22	8.5	100.0
	Total	104	90.4	100.0
	Missing System	11	9.6	
Total	115	100.0		

c. External Factors

1) Family and friend

My family members support my efforts to pursue the degree in the distance learning environment

Are you an active student or inactive student?	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	7.1	7.1
	Unsure	3	21.4	28.6
	Agree	5	35.7	64.3
	Strongly agree	5	35.7	100.0
	Total	14	100.0	
Inactive Student	Valid Disagree	2	8.3	8.3
	Unsure	3	12.5	20.8
	Agree	10	41.7	62.5
	Strongly agree	9	37.5	100.0

Total			24	100.0	100.0	
Active Student	Valid	Strongly disagree	2	1.7	1.8	1.8
		Disagree	1	.9	.9	2.6
		Unsure	8	7.0	7.0	9.6
		Agree	60	52.2	52.6	62.3
		Strongly agree	43	37.4	37.7	100.0
	Total	114	99.1	100.0		
Missing	System	1	.9			
Total			115	100.0		

My partner has become annoyed because I spent so much time studying

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Strongly disagree	2	14.3	14.3	14.3
		Disagree	8	57.1	57.1	71.4
		Unsure	1	7.1	7.1	78.6
		Agree	2	14.3	14.3	92.9
		Strongly agree	1	7.1	7.1	100.0
		Total	14	100.0	100.0	
Inactive Student	Valid	Strongly disagree	9	37.5	37.5	37.5
		Disagree	11	45.8	45.8	83.3
		Unsure	3	12.5	12.5	95.8
		Agree	1	4.2	4.2	100.0
		Total	24	100.0	100.0	
Active Student	Valid	Strongly disagree	47	40.9	41.6	41.6
		Disagree	50	43.5	44.2	85.8
		Unsure	10	8.7	8.8	94.7
		Agree	3	2.6	2.7	97.3
		Strongly agree	3	2.6	2.7	100.0
		Total	113	98.3	100.0	
	Missing System		2	1.7		
	Total		115	100.0		

My domestic duties in the house have distracted me from my studies

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Strongly disagree	2	14.3	14.3	14.3
		Disagree	4	28.6	28.6	42.9
		Unsure	1	7.1	7.1	50.0
		Agree	6	42.9	42.9	92.9
		Strongly agree	1	7.1	7.1	100.0
		Total	14	100.0	100.0	
Inactive Student	Valid	Strongly disagree	5	20.8	20.8	20.8
		Disagree	4	16.7	16.7	37.5
		Unsure	4	16.7	16.7	54.2
		Agree	9	37.5	37.5	91.7
		Strongly agree	2	8.3	8.3	100.0
		Total	24	100.0	100.0	

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Active Student	Valid	Strongly disagree	17	14.8	14.9	14.9
		Disagree	48	41.7	42.1	57.0
		Unsure	19	16.5	16.7	73.7
		Agree	23	20.0	20.2	93.9
		Strongly agree	7	6.1	6.1	100.0
		Total	114	99.1	100.0	
	Missing	System	1	.9		
Total		115	100.0			

My friends encouraged me in my study efforts

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Disagree	2	14.3	14.3	14.3
		Unsure	3	21.4	21.4	35.7
		Agree	8	57.1	57.1	92.9
		Strongly agree	1	7.1	7.1	100.0
		Total	14	100.0	100.0	
Inactive Student	Valid	Strongly disagree	2	8.3	8.3	8.3
		Disagree	2	8.3	8.3	16.7
		Unsure	8	33.3	33.3	50.0
		Agree	10	41.7	41.7	91.7
		Strongly agree	2	8.3	8.3	100.0
		Total	24	100.0	100.0	
Active Student	Valid	Strongly disagree	1	.9	.9	.9
		Disagree	4	3.5	3.5	4.4
		Unsure	17	14.8	14.9	19.3
		Agree	71	61.7	62.3	81.6
		Strongly agree	21	18.3	18.4	100.0
		Total	114	99.1	100.0	
	Missing	System	1	.9		
	Total		115	100.0		

2) Work environment

My employer has encouraged me to pursue the Bachelor degree

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Disagree	2	14.3	14.3	14.3
		Agree	10	71.4	71.4	85.7
		Strongly agree	2	14.3	14.3	100.0
		Total	14	100.0	100.0	
Inactive Student	Valid	Strongly disagree	3	12.5	12.5	12.5
		Disagree	3	12.5	12.5	25.0
		Unsure	4	16.7	16.7	41.7
		Agree	8	33.3	33.3	75.0

		Strongly agree	6	25.0	25.0	100.0
		Total	24	100.0	100.0	
Active Student	Valid	Strongly disagree	2	1.7	1.8	1.8
		Disagree	5	4.3	4.4	6.1
		Unsure	19	16.5	16.7	22.8
		Agree	62	53.9	54.4	77.2
		Strongly agree	26	22.6	22.8	100.0
		Total	114	99.1	100.0	
Missing		System	1	.9		
Total			115	100.0		

My job responsibilities become the main barrier to complete my study

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Strongly disagree	2	14.3	14.3	14.3
		Disagree	6	42.9	42.9	57.1
		Unsure	2	14.3	14.3	71.4
		Agree	4	28.6	28.6	100.0
		Total	14	100.0	100.0	
Inactive Student	Valid	Strongly disagree	4	16.7	16.7	16.7
		Disagree	5	20.8	20.8	37.5
		Unsure	7	29.2	29.2	66.7
		Agree	5	20.8	20.8	87.5
		Strongly agree	3	12.5	12.5	100.0
		Total	24	100.0	100.0	
Active Student	Valid	Strongly disagree	24	20.9	21.1	21.1
		Disagree	47	40.9	41.2	62.3
		Unsure	20	17.4	17.5	79.8
		Agree	12	10.4	10.5	90.4
		Strongly agree	11	9.6	9.6	100.0
		Total	114	99.1	100.0	
	Missing	System	1	.9		
	Total		115	100.0		

My colleagues has encouraged me to accomplish my study

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Disagree	1	7.1	7.1	7.1
		Unsure	2	14.3	14.3	21.4
		Agree	9	64.3	64.3	85.7
		Strongly agree	2	14.3	14.3	100.0
		Total	14	100.0	100.0	
Inactive Student	Valid	Strongly disagree	3	12.5	12.5	12.5
		Unsure	9	37.5	37.5	50.0
		Agree	7	29.2	29.2	79.2
		Strongly agree	5	20.8	20.8	100.0
		Total	24	100.0	100.0	

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Active Student	Valid	Strongly disagree	2	1.7	1.8	1.8
		Disagree	5	4.3	4.4	6.1
		Unsure	16	13.9	14.0	20.2
		Agree	67	58.3	58.8	78.9
		Strongly agree	24	20.9	21.1	100.0
		Total	114	99.1	100.0	
	Missing	System	1	.9		
Total		115	100.0			

3) Individualism

I tend to do my own thing

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Unsure	1	7.1	7.7	7.7
		Agree	10	71.4	76.9	84.6
		Strongly agree	2	14.3	15.4	100.0
		Total	13	92.9	100.0	
	Missing	System	1	7.1		
Total			14	100.0		
Inactive Student	Valid	Unsure	2	8.3	8.3	8.3
		Agree	15	62.5	62.5	70.8
		Strongly agree	7	29.2	29.2	100.0
		Total	24	100.0	100.0	
Active Student	Valid	Disagree	1	.9	.9	.9
		Unsure	12	10.4	10.5	11.4
		Agree	75	65.2	65.8	77.2
		Strongly agree	26	22.6	22.8	100.0
		Total	114	99.1	100.0	
	Missing	System	1	.9		
Total			115	100.0		

My family encouraged me to be independent in many respects

Are you an active student or inactive student?		Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid Agree	8	57.1	88.9	88.9
	Strongly agree	1	7.1	11.1	100.0
	Total	9	64.3	100.0	
Missing	System	5	35.7		

Appendix 2d.3

Total			14	100.0		
Inactive Student	Valid	Disagree	2	8.3	10.5	10.5
		Unsure	2	8.3	10.5	21.1
		Agree	12	50.0	63.2	84.2
		Strongly agree	3	12.5	15.8	100.0
		Total	19	79.2	100.0	
	Missing	System	5	20.8		
Total			24	100.0		
Active Student	Valid	Unsure	6	5.2	6.7	6.7
		Agree	52	45.2	58.4	65.2
		Strongly agree	31	27.0	34.8	100.0
		Total	89	77.4	100.0	
	Missing	System	26	22.6		
	Total		115	100.0		

When faced with a difficult personal problem, it is better to decide for myself than follow the advice of others

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Disagree	4	28.6	40.0	40.0
		Unsure	3	21.4	30.0	70.0
		Agree	3	21.4	30.0	100.0
		Total	10	71.4	100.0	
	Missing	System	4	28.6		
	Total		14	100.0		
Inactive Student	Valid	Disagree	1	4.2	6.3	6.3
		Unsure	4	16.7	25.0	31.3
		Agree	10	41.7	62.5	93.8
		Strongly agree	1	4.2	6.3	100.0
		Total	16	66.7	100.0	
	Missing	System	8	33.3		
Total			24	100.0		
Active Student	Valid	Strongly disagree	1	.9	1.2	1.2
		Disagree	18	15.7	21.4	22.6
		Unsure	17	14.8	20.2	42.9
		Agree	37	32.2	44.0	86.9
		Strongly agree	11	9.6	13.1	100.0
		Total	84	73.0	100.0	
	Missing	System	31	27.0		
Total			115	100.0		

Appendix 2d.3

It is important to me that I perform better than others on the academic tasks

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Disagree	1	7.1	7.7	7.7
		Unsure	1	7.1	7.7	15.4
		Agree	10	71.4	76.9	92.3
		Strongly agree	1	7.1	7.7	100.0
		Total	13	92.9	100.0	
	Missing	System	1	7.1		
Total			14	100.0		
Inactive Student	Valid	Disagree	1	4.2	4.3	4.3
		Unsure	5	20.8	21.7	26.1
		Agree	11	45.8	47.8	73.9
		Strongly agree	6	25.0	26.1	100.0
		Total	23	95.8	100.0	
	Missing	System	1	4.2		
Total			24	100.0		
Active Student	Valid	Disagree	5	4.3	4.4	4.4
		Unsure	8	7.0	7.0	11.4
		Agree	69	60.0	60.5	71.9
		Strongly agree	32	27.8	28.1	100.0
		Total	114	99.1	100.0	
	Missing	System	1	.9		
Total			115	100.0		

Being able to take care of myself is important for me

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Unsure	2	14.3	15.4	15.4
		Agree	5	35.7	38.5	53.8
		Strongly agree	6	42.9	46.2	100.0
		Total	13	92.9	100.0	
	Missing	System	1	7.1		
	Total		14	100.0		
Inactive Student	Valid	Unsure	1	4.2	4.2	4.2
		Agree	12	50.0	50.0	54.2
		Strongly agree	11	45.8	45.8	100.0
		Total	24	100.0	100.0	
Active Student	Valid	Strongly disagree	1	.9	.9	.9
		Unsure	3	2.6	2.6	3.5
		Agree	66	57.4	57.4	60.9
		Strongly agree	45	39.1	39.1	100.0
		Total	115	100.0	100.0	

I am enjoy working in situations involving competition with others

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
	Valid	Unsure	1	7.1	10.0	10.0
		Agree	5	35.7	50.0	60.0
		Strongly agree	4	28.6	40.0	100.0
		Total	10	71.4	100.0	
	Missing	System	4	28.6		
Total			14	100.0		
Inactive Student	Valid	Strongly disagree	1	4.2	5.9	5.9
		Disagree	1	4.2	5.9	11.8
		Unsure	6	25.0	35.3	47.1
		Agree	7	29.2	41.2	88.2
		Strongly agree	2	8.3	11.8	100.0
		Total	17	70.8	100.0	
	Missing	System	7	29.2		
Total			24	100.0		
Active Student	Valid	Strongly disagree	1	.9	1.2	1.2
		Disagree	6	5.2	7.1	8.3
		Unsure	9	7.8	10.7	19.0
		Agree	43	37.4	51.2	70.2
		Strongly agree	25	21.7	29.8	100.0
		Total	84	73.0	100.0	
	Missing	System	31	27.0		
Total			115	100.0		

I am enjoy being unique and different from others

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
	Valid	Disagree	1	7.1	11.1	11.1
		Unsure	3	21.4	33.3	44.4
		Agree	5	35.7	55.6	100.0
		Total	9	64.3	100.0	
	Missing	System	5	35.7		
Total			14	100.0		
Inactive Student	Valid	Disagree	2	8.3	12.5	12.5
		Unsure	6	25.0	37.5	50.0
		Agree	6	25.0	37.5	87.5
		Strongly agree	2	8.3	12.5	100.0
		Total	16	66.7	100.0	
	Missing	System	8	33.3		
Total			24	100.0		
Active Student	Valid	Strongly disagree	2	1.7	2.4	2.4
		Disagree	11	9.6	13.4	15.9
		Unsure	23	20.0	28.0	43.9
		Agree	33	28.7	40.2	84.1
		Strongly agree	13	11.3	15.9	100.0
		Total	82	71.3	100.0	

Appendix 2d.3

Missing	System	33	28.7		
Total		115	100.0		

4) Collectivism

I always respect decisions made by the group or organization

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Unsure	1	7.1	7.7	7.7
		Agree	7	50.0	53.8	61.5
		Strongly agree	5	35.7	38.5	100.0
		Total	13	92.9	100.0	
	Missing	System	1	7.1		
	Total		14	100.0		
Inactive Student	Valid	Unsure	3	12.5	12.5	12.5
		Agree	14	58.3	58.3	70.8
		Strongly agree	7	29.2	29.2	100.0
		Total	24	100.0	100.0	
Active Student	Valid	Disagree	1	.9	.9	.9
		Unsure	5	4.3	4.4	5.3
		Agree	69	60.0	60.5	65.8
		Strongly agree	39	33.9	34.2	100.0
		Total	114	99.1	100.0	
	Missing	System	1	.9		
	Total		115	100.0		

Before making an important decision, I always consult with family members or others

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Agree	9	64.3	69.2	69.2
		Strongly agree	4	28.6	30.8	100.0
		Total	13	92.9	100.0	
	Missing	System	1	7.1		
	Total		14	100.0		
Inactive Student	Valid	Unsure	4	16.7	18.2	18.2
		Agree	13	54.2	59.1	77.3
		Strongly agree	5	20.8	22.7	100.0
		Total	22	91.7	100.0	
	Missing	System	2	8.3		
	Total		24	100.0		
Active Student	Valid	Disagree	11	9.6	9.6	9.6
		Unsure	11	9.6	9.6	19.1
		Agree	63	54.8	54.8	73.9
		Strongly agree	30	26.1	26.1	100.0
		Total	115	100.0	100.0	

I always sacrifice my self-interest for the benefit of my group or organization

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Disagree	1	7.1	10.0	10.0
		Unsure	1	7.1	10.0	20.0
		Agree	7	50.0	70.0	90.0
		Strongly agree	1	7.1	10.0	100.0
		Total	10	71.4	100.0	
	Missing	System	4	28.6		
Total			14	100.0		
Inactive Student	Valid	Disagree	1	4.2	6.3	6.3
		Unsure	5	20.8	31.3	37.5
		Agree	8	33.3	50.0	87.5
		Strongly agree	2	8.3	12.5	100.0
		Total	16	66.7	100.0	
	Missing	System	8	33.3		
Total			24	100.0		
Active Student	Valid	Disagree	7	6.1	8.4	8.4
		Unsure	18	15.7	21.7	30.1
		Agree	46	40.0	55.4	85.5
		Strongly agree	12	10.4	14.5	100.0
		Total	83	72.2	100.0	
	Missing	System	32	27.8		
Total			115	100.0		

I always consult with my family members on work or study related matters

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Unsure	1	7.1	10.0	10.0
		Agree	7	50.0	70.0	80.0
		Strongly agree	2	14.3	20.0	100.0
		Total	10	71.4	100.0	
	Missing	System	4	28.6		
	Total		14	100.0		
Inactive Student	Valid	Disagree	4	16.7	25.0	25.0
		Unsure	5	20.8	31.3	56.3
		Agree	6	25.0	37.5	93.8
		Strongly agree	1	4.2	6.3	100.0
		Total	16	66.7	100.0	
	Missing	System	8	33.3		
Total			24	100.0		
Active Student	Valid	Strongly disagree	1	.9	1.2	1.2
		Disagree	11	9.6	12.9	14.1
		Unsure	18	15.7	21.2	35.3
		Agree	39	33.9	45.9	81.2
		Strongly agree	16	13.9	18.8	100.0
		Total	85	73.9	100.0	
	Missing	System	30	26.1		
Total			115	100.0		

Appendix 2d.3

I have the feeling that my relationships with others are more important than my self-interest

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Disagree	1	7.1	7.7	7.7
		Unsure	1	7.1	7.7	15.4
		Agree	9	64.3	69.2	84.6
		Strongly agree	2	14.3	15.4	100.0
		Total	13	92.9	100.0	
	Missing	System	1	7.1		
Total			14	100.0		
Inactive Student	Valid	Disagree	6	25.0	26.1	26.1
		Unsure	2	8.3	8.7	34.8
		Agree	12	50.0	52.2	87.0
		Strongly agree	3	12.5	13.0	100.0
		Total	23	95.8	100.0	
	Missing	System	1	4.2		
Total			24	100.0		
Active Student	Valid	Strongly disagree	4	3.5	3.5	3.5
		Disagree	12	10.4	10.5	14.0
		Unsure	21	18.3	18.4	32.5
		Agree	54	47.0	47.4	79.8
		Strongly agree	23	20.0	20.2	100.0
		Total	114	99.1	100.0	
Total	Missing	System	1	.9		
	Total		115	100.0		

I would help, within my means, if a relative were in financial difficulty

Are you an active student or inactive student?			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	Agree	7	50.0	53.8	53.8
		Strongly agree	6	42.9	46.2	100.0
		Total	13	92.9	100.0	
	Missing	System	1	7.1		
	Total		14	100.0		
Inactive Student	Valid	Unsure	1	4.2	4.3	4.3
		Agree	13	54.2	56.5	60.9
		Strongly agree	9	37.5	39.1	100.0
		Total	23	95.8	100.0	
	Missing	System	1	4.2		
Total			24	100.0		
Active Student	Valid	Strongly disagree	1	.9	.9	.9
		Disagree	1	.9	.9	1.7
		Unsure	4	3.5	3.5	5.2
		Agree	56	48.7	48.7	53.9
		Strongly agree	53	46.1	46.1	100.0
		Total	115	100.0	100.0	

2d.4 Descriptive Analysis of Scales

Median scores for intrinsic motivation

No	Statements	Active student group (Md)	Inactive student group (Md)
1	I experience pleasure and satisfaction while learning new things	4.0	4.0
2	Study at the University allows me to continue to learn about many things that interest me	4.0	5.0
3	Study at the University allows me to communicate my own ideas to others	4.0	4.0
4	I will have a personal satisfaction when I am able to accomplish my study within 8 semesters	5.0	4.0

Median scores for extrinsic motivation

No	Statements	Active student group (Md)	Inactive student group (Md)
1	I think that having an education at the university level will help me better prepare for the career I have chosen	5.0	5.0
2	In order to have a better salary later on	4.0	4.0
3	It will help me to get social prestige in the community	4.0	4.0

Median scores for self-efficacy

No	Statements	Active student group (Md)	Inactive student group (Md)
1	I am certain I can understand the most difficult material presented in the modules for this degree programme	4.0	4.0
2	I am confident I can do an excellent job on the final	4.0	4.0

Appendix 2d.4

	assessments in every academic term		
3	I am confident that I am able to study independently	4.0	4.0
4	I am confident in my academic ability	4.0	4.0

Median scores for volitional strategies

No	Statements	Active student group (Md)	Inactive student group (Md)
1	I remind myself that I can accomplish my study within the recommended terms when I am always to be an active student	4.0	4.0
2	I think of interesting or different ways to make studying more fun or challenging for me	4.0	4.0
3	I think about how disappointed others (family/friends) will be if I do poorly	4.0	4.0
4	I think about the sacrifices that I have made (financial and time) while being in the university	4.0	4.0

Median scores for student support services

No	Statements	Active student group (Md)	Inactive student group (Md)
1	The registration process is convenient, efficient, and responsive	4.0	4.0
2	I have access to library resources	3.0	4.0
3	The regional office has helped me to overcome some of my academic problems	4.0	3.0
4	I am satisfied with the final examination services	4.0	4.0

Median scores for learning services

No	Statements	Active student group (Md)	Inactive student group (Md)
1	My expectations of the quality of the programme were met	4.0	4.0
2	The course materials are relevant to my academic need	4.0	4.0
3	The offered courses in the programme have been useful to my career plans	4.0	4.0
4	I received promptly feedback and help from tutors when I needed	4.0	3.0
5	I get advising regularly while to be active student	4.0	3.0
6	I feel that participation in online tutorial has a positive influence on my study	4.0	4.0
7	I feel that attending face to face tutorial has a useful impact on my study	4.0	4.0

Median scores for interaction

No	Statements	Active student group (Md)	Inactive student group (Md)
1	My fellow-students helped create a supportive learning environment	4.0	3.0
2	I feel that participating in a learning community has a positive influence on my study	4.0	3.5

Median scores for family and friends

No	Statements	Active student group (Md)	Inactive student group (Md)
1	My family members support my efforts to pursue the degree in the distance learning environment	4.0	4.0
2	My partner has become annoyed because I spent so much time studying	4.0	3.5

Appendix 2d.4

3	My domestic duties in the house have distracted me from my studies	4.0	4.0
4	My friends encouraged me in my study efforts	4.0	3.0

Median scores for work environment

No	Statements	Active student group (Md)	Inactive student group (Md)
1	My employer has encouraged me to pursue the degree	4.0	4.0
2	My job responsibilities become the main barrier to complete my study	2.0	3.0
3	My colleague has encouraged me to accomplish my study	4.0	3.5

Median scores for independent orientation

No	Questions	Active student group (Md)	Inactive student group (Md)
1	I tend to do my own thing	4.0	4.0
2	My family encouraged me to be independent in many respects	4.0	4.0
3	When faced with a difficult personal problem, it is better to decide for myself than follow the advice of others	4.0	4.0
4	It is important to me that I perform better than others on the academic tasks	4.0	4.0
5	Being able to take care of myself is important for me	4.0	4.0
6	I enjoy working in situations involving competition with others	4.0	4.0
7	I enjoy being unique and different from others	4.0	4.0

Median scores for interdependent orientation

No	Statements	Active student group (Md)	Inactive student group (Md)
1	I always respect decisions made by the group or organization	4.0	4.0
2	I always sacrifice my self-interest for the benefit of my group or organization	4.0	4.0
3	Before making an important decision, I always consult with family members or others	4.0	4.0
4	I always consult with my family members on work or study related matters	4.0	3.0
5	I have the feeling that my relationships with others are more important than my self-interest	4.0	4.0
6	I would help, within my means, if a relative were in financial difficulty	4.0	4.0

2d.5 Independent-Sample T-Test

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Intrinsic Motivation	Equal variances assumed	.035	.852	-.016	125	.987	-.00765	.47308	-.94393	.92864
	Equal variances not assumed			-.016	23.014	.987	-.00765	.47214	-.98432	.96903
Extrinsic Motivation	Equal variances assumed	.843	.361	.216	119	.829	.14214	.65766	-1.16009	1.44437
	Equal variances not assumed			.256	20.776	.800	.14214	.55504	-1.01290	1.29717
Self-Efficacy	Equal variances assumed	6.912	.010	-.050	130	.960	-.02500	.50239	-1.01892	.96892
	Equal variances not assumed			-.038	22.238	.970	-.02500	.65488	-1.38229	1.33229
Volitional Strategies	Equal variances assumed	1.409	.237	-1.861	123	.065	-.99007	.53196	-2.04304	.06291
	Equal variances not assumed			-2.189	29.353	.037	-.99007	.45235	-1.91475	-.06539
Student support	Equal variances assumed	1.854	.176	-.497	107	.620	-.33333	.67049	-1.66250	.99584
	Equal variances not assumed			-.424	18.426	.677	-.33333	.78703	-1.98409	1.31743
Learning Services	Equal variances assumed	3.861	.052	-1.379	107	.171	-1.35349	.98169	-3.29959	.59260
	Equal variances not assumed			-1.055	17.475	.306	-1.35349	1.28286	-4.05451	1.34752

Appendix 2d.5

Interaction	Equal variances assumed	3.482	.064	-1.309	119	.193	-.48274	.36891	-1.21322	.24774
	Equal variances not assumed			-1.068	20.455	.298	-.48274	.45199	-1.42423	.45875
Family & friend	Equal variances assumed	.061	.805	-2.564	131	.011	-1.36106	.53087	-2.41125	-.31087
	Equal variances not assumed			-2.691	27.310	.012	-1.36106	.50578	-2.39829	-.32383
Working environment	Equal variances assumed	2.733	.101	-3.800	132	.000	-1.94474	.51175	-2.95702	-.93245
	Equal variances not assumed			-3.176	23.159	.004	-1.94474	.61237	-3.21103	-.67844
Individualism	Equal variances assumed	.000	.987	-2.193	87	.031	-2.31002	1.05321	-4.40340	-.21665
	Equal variances not assumed			-2.187	12.963	.048	-2.31002	1.05617	-4.59241	-.02764
Collectivism	Equal variances assumed	.182	.670	-1.512	91	.134	-1.53991	1.01826	-3.56256	.48274
	Equal variances not assumed			-1.715	14.012	.108	-1.53991	.89770	-3.46513	.38531

2d.6 Correlations

Spearman's correlation coefficients												
No	Variables	1	2	3	4	5	6	7	8	9	10	11
1	Intrinsic Motivation	1.000	.422**	.266**	.213*	.227*	.066	.330**	.208*	.240*	-.310**	.177
2	Extrinsic Motivation	.422**	1.000	.279**	.448**	.203	-.133	.250*	.163	.339**	-.211*	.166
3	Self-efficacy	.266**	.279**	1.000	.234*	.239*	.282*	.275*	.165	.247*	-.155	.203*
4	Volitional strategies	.213*	.448**	.234*	1.000	.106	.142	.244*	.154	.317**	-.140	-.068
5	Interaction	.227*	.203	.239*	.106	1.000	.256*	.156	.198*	.266**	-.155	.051
6	Individualism	.066	-.133	.282*	.142	.256*	1.000	.233	-.116	.027	.044	.147
7	Collectivism	.330**	.250*	.275*	.244*	.156	.233	1.000	.085	.328**	-.128	.204
8	Family	.208*	.163	.165	.154	.198*	-.116	.085	1.000	.521**	-.179	-.023
9	Work Environment	.240*	.339**	.247**	.317**	.266**	.027	.328**	.521**	1.000	-.273**	.052
10	Financial Problem	-.310**	-.211*	-.155	-.140	-.155	.044	-.128	-.179	-.273**	1.000	-.305**
11	Prior education	.177	.166	.203*	-.068	.051	.147	.204	-.023	.052	-.305**	1.000
**. Correlation is significant at the 0.01 level (2-tailed).												
*. Correlation is significant at the 0.05 level (2-tailed).												

2d.7 Logistic Regression

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I.for EXP(B)	
								Lower	Upper
Step 1 ^a	Intrinsic motivation	-.897	.492	3.333	1	.068	.408	.156	1.068
	Extrinsic Motivation	-.062	.271	.053	1	.818	.939	.552	1.599
	Self-efficacy	-.067	.397	.028	1	.866	.935	.429	2.038
	Volitional strategies	1.247	.628	3.939	1	.047	3.480	1.016	11.921
	Student services	.519	.452	1.321	1	.250	1.681	.693	4.073
	Learning services	-1.566	.745	4.418	1	.036	.209	.048	.900
	Family & friend	.718	.430	2.788	1	.095	2.051	.883	4.763
	Working_env	2.261	1.078	4.400	1	.036	9.597	1.160	79.394
	Interaction	-.887	.608	2.130	1	.144	.412	.125	1.356
	Prior education	-2.964	1.338	4.912	1	.027	.052	.004	.710
	Age	.162	.114	2.023	1	.155	1.176	.940	1.472
	Gender	1.114	1.150	.938	1	.333	3.045	.320	28.983
	Constant	5.974	7.727	.598	1	.439	393.189		

a. Variable(s) entered on step 1: Intrinsic_motivation, Extrinsic_Motivation, Self_efficacy, Volitional_strategies, Student_support, Learning_services, Family_Friend, Working_env, Interaction, Var_8.4, Var_8.1, Var_8.2.

Appendix 3a: Interview Protocol in English



STUDENT PROGRESS IN THE INDONESIA OPEN UNIVERSITY

Interviewee:

Date:

Time:

Length of Interview:

1. Please tell me about yourself.
 - Where do you work
 - What is your education
 - Tell me about your family
2. Why do you go to Open University?
 - Why did you choose to study by distance learning?
 - Why did you choose current course programme?
3. How motivated are you to study at the Indonesia Open University?
 - What helps you stay motivated to become an active student?
 - What things positively influenced your desire to be an active student?
 - What things affected your decision to become an inactive student? (for inactive students)
4. How satisfied are you toward the quality of learning materials?
 - Are the course materials relevant with your needs?
 - What do you think of the module's content of Universitas Terbuka?
 - What were your major disappointments, if any, toward the quality of learning materials?
5. How satisfied are you toward the examination services?
 - What do you think of the quality of the examination services?
 - What do you think of the information of the examination results?
 - What were your major disappointments, if any, toward the examination services?

Appendix 3a

6. How satisfied are you toward student support services?
 - How much support did you receive with:
 - Registration and re-registration at every semester
 - Paying the tuition fees
 - Access to library resources
 - Access to learning groups/virtual communities
 - Are there major disappointments pertinent to student support services?
7. What is your experience with the faculty's services?
 - How do you typically communicate with the faculty's administrative staff during your study?
 - What do you think of the programme quality?
 - If any, what were any major disappointments about the course programme?
 - What is/was the role of tutor in improving your academic performance?
 - What do you think of the quality of the academic advisory?
 - What roles should be assigned to faculty in order to increase students' motivation to learn?
8. What relations have you established with other distance learners?
 - Do you have an isolated feeling as a distance learner?
 - Do/did you join a learning group in your city?
 - If you did, what is your experience with such learning group?
 - What kind of support and encouragement do/did you get from such learning group?
 - How do you establish the relationship with other distance learners?
9. How do you manage your time to learning?
 - When do you usually allocate your time to study?
 - What are/were your barriers to manage your time to study?
10. How external factors are affecting your decision to be an active or inactive student?
 - How much support did you receive from
 - Family
 - Employer
 - Colleagues in the workplace
 - How do you balance your family, work, and studies?
 - Is the financial problem becoming barrier for your decision to be an active or inactive student? Please explain.

11. Individual Cultural orientations

- Do you prefer to do your own thing in everyday live?
- What do you think about personal competition in the workplace?
- What do you think about the personal uniqueness? Does everybody should be different from others in many respects?
- What do you think about harmony within group? Is it important to you to respect decisions made by the group?
- How do you usually make important decision? Do you always consult with others before making a decision?
- What do you thing about relationship with others? Is it more important than your own accomplishment?
- If you have a relative are in financial difficulty, what will you do?

12. What else would you like to tell about your progress that we have not talked about?

Thank you for your time and effort

Appendix 3b: Interview Protocol in Bahasa



Informan:
Pewawancara:
Tanggal:
Waktu:
Durasi Wawancara:

1. Ceritakan tentang diri Anda
 - Di mana Anda bekerja?
 - Apa pendidikan Anda?
 - Ceritakan tentang keluarga Anda.
2. Apa alasan Anda memilih Universitas Terbuka sebagai tempat kuliah?
 - Apa alasan Anda memilih program studi yang sedang Anda tempuh?
 - Kenapa memilih kuliah di perguruan tinggi jarak jauh seperti Universitas Terbuka?
3. Bagaimana motivasi Anda ketika kuliah di Universitas Terbuka?
 - Apa yang membuat Anda tetap termotivasi untuk menjadi mahasiswa aktif sampai sekarang?
 - Hal apa saja yang mempengaruhi keputusan Anda untuk tetap menjadi mahasiswa aktif?
 - Hal apa saja yang mempengaruhi keputusan Anda untuk menjadi mahasiswa non-aktif?
4. Bagaimana kepuasan Anda terhadap kualitas bahan ajar?
 - Apakah materi modul sudah sesuai dengan kebutuhan Anda?
 - Apa pendapat Anda terhadap konten modul UT?
 - Apa ketidakpuasan Anda terhadap kualitas bahan ajar UT?
5. Bagaimana kepuasan Anda terhadap penyelenggaraan ujian
 - Bagaimana pendapat Anda terhadap kualitas penyelenggaraan ujian di UT sekarang?
 - Bagaimana dengan layanan pengumuman hasil-hasil ujian?
 - Apa ketidakpuasan Anda terhadap penyelenggaraan ujian UT?

Appendix 3b

6. Bagaimana kepuasan Anda terhadap layanan bantuan belajar

- Seberapa besar bantuan yang Anda peroleh terkait:
 - pelayanan registrasi di setiap semester
 - pembayaran uang kuliah
 - akses ke kelompok belajar atau komunitas online
- Apakah ada ketidakpuasan terkait dengan pelayanan bantuan belajar?

7. Bagaimana pengalaman Anda terhadap layanan belajar dari Fakultas?

- Bagaimana Anda berinteraksi dengan fakultas selama studi Anda?
- Apa pendapat Anda tentang kualitas program studi?
- Apa ketidakpuasan Anda terhadap kualitas program studi?
- Apa harapan Anda terhadap peran tutor UT untuk meningkatkan prestasi mahasiswa?
- Bagaimana pendapat Anda tentang kualitas bimbingan akademik di UT?
- Apa harapan Anda terhadap peran fakultas untuk meningkatkan motivasi mahasiswa?

8. Interaksi

- Apakah Anda merasa terisolasi sebagai mahasiswa UT?
- Bagaimana Anda membangun interaksi dengan sesama mahasiswa UT?
- Bagaimana pendapat Anda tentang peran dan fungsi kelompok belajar?
- Menurut Anda, apa peran UT yang seharusnya dilakukan untuk meningkatkan peran Pokjar dalam membantu keberhasilan studi di UT?

9. Regulasi diri dan manajemen waktu dan studi

- Bagaimana Anda mengatur waktu Anda untuk belajar?
- Apa hambatan Anda untuk mengatur jadwal belajar?

10. Faktor eksternal

- Seberapa besar support yang Anda terima dari:
 - keluarga
 - Atasan kerja
 - Rekan-rekan kerja
- Bagaimana Anda menyeimbangkan antara keluarga, pekerjaan, and kegiatan kuliah?
- Apakah masalah finansial menjadi hambatan Anda untuk menjadi mahasiswa aktif?

11. Orientasi kultural

- Apakah Anda cenderung bertindak mandiri dalam kehidupan sehari-hari?
- Apa pendapat Anda tentang kompetisi personal di tempat kerja?

- Apa pendapat Anda tentang keunikan individu? Apakah setiap prang harus berbeda dengan orang lain dalam segala aspek?
 - Apa pendapat Anda tentang menjaga harmoni dalam kelompok?
 - Bagaimana Anda memutuskan persoalan-persoalan penting dalam hidup Anda?
 - Apa yang Anda lakukan bila kepentingan Anda berbenturan dengan kepentingan kelompok atau organisasi?
 - Apakah Anda dapat mengandalkan sanak saudara dalam urusan finansial?
12. Apakah ada hal lainnya yang belum saya tanyakan terkait dengan factor-faktor yang mempengaruhi mahasiswa untuk menjadi mahasiswa aktif dan non aktif?

Terima kasih atas waktu dan bantuan Anda

Universitas Terbuka

Appendix 3c: An example of Interview Extract

Wawan

No	Interviewer/ interviewee	Questions/Answers
	H (interviewer)	<i>Di dalam kuesioner, pak Wawan menyebutkan pekerjaan sebagai PNS, bisa dijelaskan secara spesifik bidang pekerjaan yang diemban dan di institusi apa</i>
	W (interviewee)	Saat ini saya bekerja sebagai Staf Satpol PP Kabupaten Tegal. Saya adalah pegawai golongan II, sehingga secara aturan belum dapat menduduki jabatan struktural apapun, walaupun saat ini saya adalah bendahara pengeluaran di kantor saya namun penunjukkan saya sebagai bendahara lebih karena kemampuan saya dalam mengoperasikan komputer.
	H	<i>Apakah kuliah di UT berhubungan dengan pekerjaan saat ini? mohon dijelaskan mengapa</i>
	W	Program studi yang saya ambil di UT sedikit banyak berhubungan dengan pekerjaan saya. Ini dapat kita lihat jika kita merunut dari proses pengajuan ijin belajar saya yang harus didahului dengan proses konsultasi dengan bidang diklat badan kepegawaian daerah, dari hasil konsultasi tersebut kemudian dengan melihat pekerjaan saya di kantor maka saya disarankan untuk mengambil program Ilmu Administrasi Negara.
	H	<i>Bagaimana tanggapan atasan kerja dan rekan-rekan kerja terhadap diri pak Wawan sebagai mahasiswa UT</i>
	W	Kepala Satpol PP sangat mendukung bawahannya yang akan melanjutkan pendidikan, bahkan mendorong agar anggota Satpol PP minimal berpendidikan sarjana. Secara garis besar ada dua tanggapan yang saya dapat ketika memutuskan untuk kuliah di UT, mendukung dan memandang sebelah mata, bahkan ada salah satu pejabat struktural di Satpol yang mempunyai anggapan bahwa kuliah di UT, nilai yang didapat itu untung-untungan.
	H	<i>Apa alasan yang paling mendasar yang mendorong pak Wawan memutuskan melanjutkan pendidikan ke jenjang perguruan tinggi?</i>
	W	Motivasi utama saya melanjutkan pendidikan adalah dalam rangka pengembangan karir, karena dengan ijazah SMA golongan maksimal yang bisa saya capai adalah gol III/B, sedang jika memiliki ijazah sarjana golongan maksimal yang bisa dicapai tanpa menjabat adalah III/D dengan harapan bisa pensiun dengan golongan IV/A. Disamping motivasi lainnya, seperti adanya arahan dari pimpinan satpol pp agar pendidikan minimal satpol adalah sarjana, menambah pengetahuan, keinginan untuk menghapus mitos bahwa kuliah di UT susah dan lain-lain.
	H	<i>Apakah ada alasan khusus ketika memutuskan untuk memilih universitas terbuka sebagai tempat kuliah?</i>

Appendix 3c

W	<p>Pada saat memutuskan untuk melanjutkan pendidikan ada tiga pilihan tempat (jalur) pendidikan dimana ketiganya mempunyai konsekuensi masing-masing :</p> <p>Mengikuti tugas belajar, jalur ini tidak bisa saya ambil karena alasan keluarga;</p> <p>Kuliah di Universitas yang ada di Tegal, Universitas Pancasakti (UPS), ini merupakan tempat kuliah mayoritas pegawai di Tegal yang ingin melanjutkan pendidikan, ini tidak saya pilih karena alasan biaya yang terlalu mahal dan adanya anggapan bahwa kuliah di UPS sudah dipastikan menjadi sarjana sehingga UPS diplesetkan menjadi Universitas Pasti Sarjana;</p> <p>Kuliah di UT, sejak awal menjadi PNS ini merupakan opsi utama saya karena jelas biayanya sangat terjangkau, tidak perlu meninggalkan keluarga dan yang utama saya tidak perlu masuk kelas untuk kuliah, sebagai catatan saya pernah mengenyah kuliah regular dan gagal karena prosentase kehadiran saya di ruang kuliah sangat kecil.</p>
H	<p><i>Bagaimana pak Wawan mengatur waktu antara pekerjaan dan waktu belajar? Apakah setiap hari mengalokasikan waktu untuk baca modul?</i></p>
W	<p>Menurut saya yang perlu dilakukan untuk kuliah di UT adalah perencanaan yang matang, ini saya lakukan saat akan mendaftar kuliah di UT. Yang pertama saya lakukan adalah membagi habis seluruh mata kuliah ke dalam rencana pengambilan tiap semester dengan begitu saya bisa melihat dan memasang target kapan bisa lulus. Kemudian saya berusaha untuk mendapatkan modul BMP-UT jauh-jauh hari sebelum Tuton dimulai dengan harapan saya mempunyai waktu yang cukup panjang untuk mempelajari mata kuliah yang saya ambil. Saya tidak pernah mengalokasikan waktu khusus untuk belajar, sepanjang ada waktu senggang saya manfaatkan untuk membaca. Dan ada satu hal yang saya lakukan yang mungkin tidak dilakukan oleh mahasiswa lain, saya membentuk kelompok belajar, berjumlah 5 (lima) orang, dimana tugas tiap orang di awal semester adalah membuat rangkuman BMP-UT yang dibebankan kepadanya, ini saya lakukan untuk memperingan tugas membaca, karena Bapak tahu dong BMP-UT tebal-tebal.</p>
H	<p><i>Masih soal pengaturan waktu, bagaimana mengatur antara perhatian terhadap keluarga dan waktu belajar? Apakah istri dan anak2 keberatan dengan kuliah di UT, misalnya perhatian menjadi berkurang, dll.</i></p>
W	<p>Kebetulan istri sangat mendukung niat saya untuk kuliah dan saat di rumah saya lebih sering membuka Modul kuliah setelah putri saya tidur (jam 21.00 ke atas).</p>
H	<p><i>Saya lihat, catatan akademis tentang status mahasiswa sangat baik sekali, yakni selalu menjadi mahasiswa aktif dari registrasi</i></p>

		<i>awal sampai 2013.1. Pertanyaan saya: Apa yang mendorong pak Wawan untuk selalu menjadi mahasiswa aktif di setiap semester?</i>
	W	Yang jelas saya berusaha berkomitmen dengan rencana yang telah saya buat. Motivasi tambahannya adalah adanya keinginan untuk menghapus mitos kuliah di UT itu susah dan lama (Catatan: di tempat saya banyak yang kuliah di UT dan tidak lulus-lulus dan akhirnya menyerah dan pindah ke Universitas yang Pasti Sarjana) dan harapannya (mudah-mudahan Allah mengabulkan) saya bisa meraih gelar Sarjana hanya dengan kuliah 7 (tujuh) semester.
	H	<i>Menarik sekali mengetahui motivasi dan pengalaman belajar pak Wawan. Saya tertarik bertanya lebih lanjut tentang inisiatif pak Wawan membentuk kelompok belajar informal, apakah bisa cerita awal mula muncul ide tersebut, proses awal mengajak teman mahasiswa lainnya, frekuensi bertemu setiap minggu atau setiap bulan, berapa lama durasi waktu berkumpul, metode belajar lainnya selain merangkum BMP, dan bagaimana efek atau dampak kelompok belajar terhadap kemajuan studi pak Wawan dan teman-teman lainnya.</i>
	W	<p>Semangatnya adalah kebersamaan dan menghemat biaya kuliah.</p> <p>Saat memutuskan melanjutkan pendidikan saya sadar bahwa saya akan mengalami kesulitan dalam membagi waktu antara pekerjaan, keluarga dan kuliah dan adanya keterbatasan keuangan. Kuliah di UT menuntut kemandirian, untuk memperoleh nilai yang baik (walaupun nilai bukan segalanya) mau tidak mau kita harus sukses dalam menghadapi ujian akhir semester. Modal dasar untuk menghadapi UAS adalah dengan menguasai BMP-UT (dari studi awal saya sebelum kuliah saya jadi tahu bahwa apa yang diujikan di UAS semuanya ada di dalam BMP-UT). Untuk menguasai BMP-UT tentunya kita harus membaca BMP tersebut, mininnya waktu untuk membaca dan tebal-tebalnya BMP-UT, umur yang sudah tidak muda lagi menyadarkan saya bahwa jika harus membaca semua modul sendirian mungkin saya tidak akan mampu menyerap materi dengan baik. Atas dasar itulah saat akan mendaftar di UT saya menawarkan kepada teman satu instansi untuk melanjutkan pendidikan di UT, gayung pun bersambut, 4 teman berminat untuk mendaftar di UT satu angkatan satu jurusan. Kepada teman-teman saya menekankan satu hal, komitmen bersama, kita masuk bersama-sama lulus pun sebisa mungkin bersama-sama.</p> <p>Tugas awal tiap individu adalah membuat rangkuman yang dapat digunakan sebagai modal untuk menghadapi ujian akhir semester, rangkuman tersebut harus selesai sebelum tutorial online dimulai. Kami tidak mengkhususkan waktu untuk bertemu, karena satu instansi jadi otomatis banyak waktu untuk bertemu, kami sering berkumpul biasanya setelah tuton dimulai terutama pada saat mengerjakan tugas tuton dan pada minggu terakhir tuton untuk membahas latihan soal-soal ujian. Apa yang kami lakukan Alhamdulillah memberikan hasil yang cukup baik, rata-rata IPK kami berlima masih jauh di atas IPK minimal untuk lulus dari UT</p>

Appendix 3c

		dan 3 (tiga) orang dari kelompok kami berhasil mendapatkan beasiswa BBM dan PPA dari UT selama dua tahun berturut-turut.
	H	<i>Selanjutnya, saya ingin menanyakan tentang kepuasan pak Wawan terhadap pelayanan administratif dan akademik di Universitas Terbuka. Menurut pak Wawan, layanan apa sajakah yang masih dirasakan belum memuaskan selama menjadi mahasiswa UT?</i>
	W	<p>Secara umum hampir tidak ada keluhan sama sekali terhadap pelayanan UT kepada mahasiswa (khususnya kepada saya), sejauh ini saya tidak menemui kendala sama sekali, mungkin yang sedikit mengganggu adalah sekarang LKAM (lembar kemajuan akademik mahasiswa) tidak dapat diakses lagi secara online (padahal dulu bisa), menurut saya ini merupakan suatu kemunduran. Saya juga memberikan apresiasi yang tinggi kepada seluruh civitas akademika UT dalam menanggapi keluhan mahasiswa, mereka merespon dengan sangat cepat (menurut saya loh), dari staf hingga dekan, setiap saya menanyakan sesuatu mereka selalu meresponnya dengan baik.</p> <p>Kemudian berkaitan dengan modul, kebetulan saya selalu memesan modul jauh-jauh hari sebelum perkuliahan dimulai, (mungkin karena jumlah transaksinya masih rendah) sehingga saya bisa mendapatkan pelayanan yang relative cepat dari koperasi UT, antara konfirmasi pembayaran hingga barang sampai ke tangan saya tidak sampai 5 (hari) kerja. Saat ini dengan telah tersedianya ruang baca virtual (RVB) UT mahasiswa menjadi lebih terbantu lagi, BMP-UT telah tersedia secara virtual, (gampangnya) kita tidak usah beli modul lagi, semua tersedia secara virtual. Dan menurut saya kualitas modul UT sangat baik, up to date dan bisa dijadikan pegangan bagi mahasiswa.</p> <p>Tentang Tutor, keluhan yang sering muncul adalah kurang aktifnya tutor dalam kegiatan diskusi, kadang tutor hanya memberikan suatu kasus dan mahasiswa dibiarkan untuk berdiskusi tanpa ada feedback sama sekali, kemudian yang juga sering dikeluhkan adalah tutor memberikan tugas kepada mahasiswa, tetapi tidak mau menunjukkan nilai tugas kepada mahasiswa sehingga mahasiswa dibiarkan bertanya-tanya berapa nilai tugas yang telah dikerjakan.</p>
	H	<i>Terima kasih atas penjelasan pak Wawan. Selanjutnya, saya ingin minta tanggapan pak Wawan soal kualitas penyelenggaraan ujian UT, apakah sudah memuaskan atau masih perlu ada perbaikan?</i>
	W	Berkaitan dengan penyelenggaraan ujian, menurut kaca mata saya, sepanjang saya mengikuti ujian di Tegal penyelenggaraannya sudah cukup memuaskan, walaupun masih juga adanya keluhan dari beberapa mahasiswa terutama terkait dengan pengawasan. Memang kadang ditemui adanya pengawas ujian yang bersifat tegas dan sedikit arogan, keluhan terhadap pengawas yang seperti itu banyak datang dari mahasiswa yang berusia relative sudah tua, menurut saya seorang pengawas

		memang harus tegas tetapi tidak harus bersifat arogan (mentang-mentang pengawas), contoh kadang ada pengawas ujian yang tanpa peringatan menyita handphone peserta ujian hanya karena berbunyi pada saat ujian dilaksanakan. Kemudian sejak diberlakukannya uang kuliah tunggal (UKT), ujian akhir memang tidak dipungut biaya, namun pada prakteknya pengelola ujian local masih melakukan pungut (sebagai bantuan akomodasi pelaksanaan) dengan besaran yang berbeda-beda antara pengelola satu dengan pengelola lainnya, nah yang menjadi masalah bukan pungutannya, tetapi perbedaan besaran pungutan yang kemudian menimbulkan pertanyaan di kalangan mahasiswa.
	H	<i>Bentuk bimbingan akademik yang cocok buat pak Wawan dan apa yang diharapkan terhadap peran tutor atau pembimbing akademik tersebut.</i>
	W	<p>Dalam kuliah regular kita mengenal adanya Dosen Wali (Pembimbing akademik), sebagai tempat berkeluh kesah mahasiswa selama kuliah, termasuk sebagai tempat berkonsultasi dalam mengambil mata kuliah tiap semesternya. Ini yang tidak ada di UT, akibatnya mahasiswa UT kurang terprogram dalam pengambilan mata kuliah, menurut saya UT harus mulai merintis hal tersebut, sehingga tiap mahasiswa mempunyai pembimbing selama mengikuti perkuliahan.</p> <p>Ada dua tipe tutor, aktif dan kurang (tidak) aktif dalam memberikan perkuliahan online, idealnya tutor juga harus aktif mengikuti diskusi yang disediakan tiap minggunya walaupun hanya memberikan feedback singkat, paling tidak dengan feedback tersebut peserta tuton merasa ada yang memperhatikan.</p>
	H	<i>Apa masukan pak Wawan terhadap UT untuk mendorong mahasiswa UT agar selalu termotivasi menjadi mahasiswa aktif</i>
	W	Di UT tidak ada batasan masa studi, menurut saya ini penyebabnya, seharusnya UT seperti juga PTN-PTN lainnya menerapkan batasan masa studi, karena hal ini akan memacu mahasiswa untuk selalu aktif dan segera menyelesaikan pendidikannya.
	H	<i>Apakah pak Wawan pernah merasakan suatu kondisi putus asa atau kehilangan motivasi terkait dengan studi di UT, misalnya karena selalu tidak lulus atau mendapat nilai C untuk matakuliah tertentu meski sudah diulang lebih dari satu kali atau karena layanan UT kurang memuaskan. Kalau pernah, bagaimana pak Indra mengembalikan motivasi untuk studi dan selalu menjadi mahasiswa aktif? kalau merasa tidak pernah, pertanyaan ini diabaikan saja</i>
	W	Alhamdulillah saya belum pernah merasakan karena selama ini saya selalu mendapatkan hasil ujian yang memuaskan.
	H	<i>Apakah dengan membentuk kelompok belajar seperti yang sudah pak Wawan ceritakan sudah bisa membantu kemajuan studi pak Indra? Apakah pak Wawan pernah memanfaatkan fasilitas komunitas online UT?</i>

Appendix 3c

W	Salah satu alasan saya kuliah di UT karena mahasiswa tidak diharuskan mengikuti kuliah tata muka. Menurut saya komunikasi tidak harus terjadi dengan bertemu, untuk berkomunikasi dengan civitas akademik UT banyak sarana yang dapat saya pakai, selain kelompok belajar yang saya bentuk, saya juga memanfaatkan forum komunikasi di UT Online, juga ada group facebook UPBJJ Purwokerto, ada group facebook khusus jurusan administrasi Negara, saya juga dapat berkomunikasi dengan Dekan, Pembantu Dekan dan dosen melalui surel. Menurut saya komunikasi dengan cara seperti ini menjadi lebih efektif karena ada tipe-tipe manusia yang justru lebih mampu mengemukakan sesuatu melalui tulisan daripada melalui lisan. Komunikasi yang terjalin selama ini sedikit banyak membantu saya dalam mengatasi permasalahan perkuliahan.
H	<i>Masih terkait dengan komunikasi dan interaksi, apa yang sebaiknya dilakukan UT untuk mendorong dan memfasilitasi interaksi diantara mahasiswa UT?</i>
W	Dibutuhkan suatu media yang tepat sehingga mampu merangsang terjadinya interaksi yang baik di antara mahasiswa UT. Cuma bentuknya seperti apa saya masih belum tahu. Sebenarnya UT telah menyediakan beberapa media seperti lewat website UT, group facebook, twitter, tapi apakah artinya media jika mahasiswanya tidak mempunyai kemauan untuk memanfaatkannya, jika saya lihat di group facebook UPPBJ UT Purwokerto, komunikasi dan interaksi di antara mahasiswa dan juga pengelola UPPBJ sudah terbangun dengan cukup baik, walaupun rata-rata yang disampaikan adalah permasalahan yang ditemui mahasiswa.
H	<i>Ketika akan membuat keputusan-keputusan penting, apakah pak Wawan cenderung untuk membuat keputusan sendiri atau selalu minta nasehat orang lain?</i>
W	Saat diharuskan untuk membuat keputusan penting, terutama keputusan yang juga berakibat pada orang lain saya hampir selalu meminta nasehat, pertimbangan dan pendapat orang lain, melihat suatu hal dari sudut pandang yang lain menurut saya sangat baik.
H	<i>Apakah pak Wawan merasa nyaman dengan situasi kerja yang mengedepankan koempetisi atau prestasi?</i>
W	Saya kurang nyaman dengan situasi kerja yang mengedepankan kompetisi dan prestasi karena menurut saya situasi kerja yang seperti itu cenderung menimbulkan persaingan yang tidak sehat dan itu sangat tidak baik bagi organisasi. Namun demikian saya sangat menginginkan suatu organisasi kerja yang menerapkan reward dan punishment terhadap kinerja dan kedisiplinan anggotanya.
H	<i>Apakah pak Indra merasa perlu untuk berbeda dengan orang lain atautkah merasa nyaman ketika bisa tampil beda.</i>
W	Berbeda? Menurut saya tidak perlu, hal seperti itu cenderung mendorong ke arah perlakuan yang eksklusif.

List of References

- Al Harthi, A. S. (2010). Learner self-regulation in distance education: a cross cultural study. *American Journal of Distance Education*, 24(3), 135–150.
- Anderson, T., Annand, D., & Wark, N. (2005). The search for learning community in learner paced distance education: or, 'having your cake and eating it, too!'. *Australasian Journal of Educational Technology*, 21(2), 222–241.
- Anderson, T., & Dron, J. (2011). Three generations of distance education pedagogy. *International Review of Research in Open and Distance Learning*, 12(3), 80–97.
- Astin, A. W. (2003). *What matters in college: four critical years revisited*. San Francisco: Jossey-Bass, Inc.
- Auerbach, C. F., & Silverstein, L. B. (2003). *Qualitative data: an Introduction to Coding and Analysis*. New York and London: New York University Press.
- Bandura, A. (1997). *Self-efficacy: the exercise of control*. New York: W.H. Freeman & Co.
- Barnett, E. A. (2011). Validation experiences and persistence among community college students. *Review of Higher Education*, 34(2), 193–+. Retrieved from <Go to ISI>://WOS:000285315400001
- Bartels, J. M., Magun-Jackson, S., & Kemp, A. D. (2009). Volitional regulation and self-regulated learning: an examination of individual differences in approach-avoidance achievement motivation. *Electronic Journal of Research in Educational Psychology*, 7(2).
- Bates, A. W. (2005). *Technology, e-learning and distance education*. London: Routledge.
- Bean, J. P., & Eaton, S. B. (2000). A Psychological model of college student retention. In J. M. Braxton (Ed.), *Reworking the student departure puzzle* (1st ed.). Vanderbilt University Press.
- Bean, J. P., & Metzner, B. S. (1985). A Conceptual model of nontraditional undergraduate student attrition. *Review of Educational Research*, 55(4), 485–540.
- Belawati, T. (1998). Increasing student persistence in Indonesian post-secondary distance education. *Distance Education*, 19(1), 81–108.

- Belawati, T. (2010). Open and distance learning: conceptual origins. In T. Belawati & J. Baggaley (Eds.), *Policy and practice in Asian distance education* (1st ed.). New Delhi: Sage Publications in association with The International Development Centre.
- Blaine, C. K. (2010). *Student persistence in traditional and distance learning courses at two community colleges*. School of Education. University of Pennsylvania, Pennsylvania, USA.
- Bocchi, J., Eastman, J. K., & Swift, C. O. (2004). Retaining the online learner: profile of students in an online MBA program and implications for teaching them. *Journal of Education for Business*, 79(4), 245–253.
- Bordens, K. S., & Abbott, B. B. (2011). *Research design and methods: a process approach* (8th ed.). New York: McGraw-Hill.
- Boston, W. E., & Ice, P. (2011). Assessing retention in online learning: an administrative perspective. *Online Journal of Distance Learning Administration*. University of West Georgia. Retrieved from http://www.westga.edu/~distance/ojdla/summer142/boston_ice142.html
- Brace, I. (2008). *Questionnaire design: how to plan, structure and write survey material for effective market research* (2nd ed.). London: Kogan Page.
- Cabrera, A. F. (1990). *The convergence between two theories of college persistence*. ASHE Annual Meeting Paper (p. 45). Retrieved from <http://search.proquest.com/professional/docview/62994842?accountid=13963>
- Carr, S. (2000). As distance education comes of age, the challenge is keeping the students. *Chronicle of Higher Education*, 46(23), A39.
- Castles, J. (2004). Persistence and the adult learner: factors affecting persistence in Open University students. *Active Learning in Higher Education*. doi:10.1177/1469787404043813
- Chen, K.-C., & Jang, S.-J. (2010). Motivation in online learning: testing a model of self-determination theory. *Computers in Human Behavior*, 26(4), 741–752. doi:10.1016/j.chb.2010.01.011
- Cheung, L. L. W., & Kan, A. C. N. (2002). Evaluation of factors related to student performance in a distance-learning business communication course. *Journal of Education for Business*. doi:10.1080/08832320209599674
- Choi, H., Lee, Y., Jung, I., & Latchem, C. (2013). The extent of and reasons for non re-enrollment: a case of Korea National Open University. *The International Review of Research in Open and Distance Learning*, 14(4).

- Chyung, S. Y. (Yonnie). (2001). Systematic and systemic approaches to reducing attrition rates in online higher education. *American Journal of Distance Education*, 15(3), 36–49. Retrieved from <http://search.proquest.com/professional/docview/62285321?accountid=13963>
- Clay, M. N., Rowland, S., & Packard, A. (2008). Improving undergraduate online retention through gated advisement and redundant communication. *Journal of College Student Retention: Research, Theory and Practice*. doi:10.2190/CS.10.1.g
- Cohen, L., Manion, L., & Morrison, K. (2011). *Research methods in education* (7th ed.). Oxon: Routledge.
- Cole, R. A. (ed.). (2000). *Issues in web-based pedagogy: a critical primer*. London: Greenwood Press.
- Corno, L. (1993). The best-laid plans: modern conceptions of volition and educational research. *Educational Researcher*.
- Corno, L., & Kanfer, R. (1993). Chapter 7: The role of volition in learning and performance. *Review of Research in Education*.
- Creswell, J. P., & Clark, V. L. P. (2011). *Designing and conducting mixed methods research* (Second.). California: Sage Publications.
- Creswell, J. W. (2007). *Qualitative inquiry and reseach design: choosing among five approaches*. California: Sage Publications.
- Creswell, J. W. (2012). *Educational research: planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Boston: Pearson.
- Daniel, J. S. (1999). *Mega-universities & knowledge media: technology strategies for higher education*. Oxon: Routledge.
- Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. (1991). Motivation and education: The self-determination perspective. *Educational Psychologist*, 26(3 & 4), 325–346.
- Deimann, M., & Bastiaens, T. (2010). The role of volition in distance education: An exploration of its capacities. *International Review of Research in Open and Distance Learning*, 11(1).
- Denscombe, M. (2008). Communities of practice: a research paradigm for the mixed methods approach. *Journal of Mixed Methods Research*, 2(3), 270 – 283.

- Diaz, D., & Cartnal, R. (2006). Term length as an indicator of attrition in online learning. *Innovate: Journal of Online Education*, 2(5). Retrieved from <http://www.innovateonline.info/index.php?view=article&id=196>
- Diaz, D. P., & Diaz, D. P. (2002). Online drop rate revisited. *Technology Source*, (1532-0030, 1532-0030). Retrieved from <http://search.proquest.com/professional/docview/62207451?accountid=13963>
- Dillman, D. A. (2007). *Mail and internet surveys: the tailored design method* (2th ed.). New Jersey: John Wiley & Sons.
- Dunbar, R. (1991). Adapting distance education for Indonesians: problems with oral heteronomy and strong oral tradition. *Distance Education*, 13(2), 163–174.
- Duncan, T. G., & McKeachie, W. J. (2005). The making of the motivated strategies for learning questionnaire. *Educational Psychologist*, 40(2), 117–128. doi:10.1207/s15326985ep4002_6
- Dupin-Bryant, P. A. (2004). Pre-entry variables related to retention in online distance education. *American Journal of Distance Education*, 18(4), 199–206. doi:10.1207/s15389286ajde1804_2
- Field, A. (2009). *Discovering statistics using SPSS* (Third.). London: Sage Publications.
- Fletcher, K. M. (2005). Self-efficacy as an evaluation measure for programs in support of online learning literacies for undergraduates. *Internet and Higher Education*, 8(4 SPEC. ISS.), 307–322.
- Fozdar, B. I., Kumar, L. S., & Kannan, S. (2006). A survey of a study on the reasons responsible for student dropout from the bachelor of science programme at Indira Gandhi National Open University. *International Review of Research in Open and Distance Learning*, 7(3).
- Frydenberg, J. (2007). Persistence in university continuing education online classes. *International Review of Research in Open and Distance Learning*, 8(3), 1–15. Retrieved from <http://www.irrodl.org/index.php/irrodl/article/viewArticle/375>
- Garcia, T., McCann, E., Turner, J., & Roska, L. (1998). Modeling the mediating role of volition in the learning process. *Contemporary Educational Psychology*, 23(4), 392–418.
- Garrison, D. R. (2003). Self-directed learning and distance education. In M. G. Moore & W. G. Anderson (Eds.), *Handbook of distance education* (pp. 161–168). Mahwah, NJ: Lawrence Erlbaum Associates.

- Garrison, D. R., & Shale, D. (1987). Mapping the boundaries of distance education: problems in defining the field. *The American Journal of Distance Education*, 1(1), 7-13.
- Gelfand, M. J., Bhawuk, D. P. S., Nishii, L. H., & Bechtold, D. J. (2004). Individualism and collectivism. In R. J. House, P. J. Hanges, M. Javidan, P. W. Dorfman, & V. Gupta (Eds.), *Culture, leadership, and organizations: The globe study of 62 societies*. London: Sage Publications.
- Granger, D., & Benke, M. (1998). Supporting learners at a distance from inquiry through completion. In C. C. Gibson (Ed.), *Distance learners in higher education: Institutional responses for quality outcomes* (pp. 127-137). Madison, WI: Atwood Publishing.
- Grow, G. O. (1991). Teaching Learners To Be Self-Directed. *Adult Education Quarterly*. doi:10.1177/0001848191041003001
- Guifrída, D. A. (2006). Toward a cultural advancement of Tinto's theory. *The Review of Higher Education*, 29(4), 451-472. doi:10.1353/rhe.2006.0031
- Gunawardena, C. N., Wilson, P. L., & Nolla, A. C. (2003). Culture and Online Education. In M. G. Moore & W. G. Anderson (Eds.), *Handbook of Distance Education*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Gwekwerere, B. (2003). *The persistence of online distance education learners (Unpublished PhD thesis)*. Agriculture and Natural Resources. Michigan State University, Michigan.
- Hagedorn, L. S. (2011). How to define retention: a new look at an old problem. Los Angeles: the Lumina Foundation & University of Southern California. doi:http://programs.honolulu.hawaii.edu/intranet/node/745
- Hammond, J. R. (2006). *Predictors of persistence in distance education (Unpublished PhD thesis)*. School of Social Work. University of Louisville, Kentucky, USA.
- Harb, C., & Smith, P. (2008). Self-construals across cultures: Beyond independence-interdependence. *Journal of CrossCultural Psychology*, 39(2), 178-197.
- Harrell, I. L., & Bower, B. L. (2011). Student characteristics that predict persistence in community college online courses. *American Journal of Distance Education*, 25(3), 178-191.
- Hatch, J. A. (2002). *Doing qualitative research in education settings*. New York: State University of New York Press.
- Hesse-Biber, S. N. (2010). *Mixed methods research: merging theory with practice*. New York: The Guilford Press.

- Hofstede, G. (1980). *Culture's consequences*. Beverly Hills: Sage Publications.
- Holder, B. (2007). An investigation of hope, academics, environment, and motivation as predictors of persistence in higher education online programs. *The Internet and Higher Education*, 10(4), 245–260. doi:10.1016/j.iheduc.2007.08.002
- Houle, B. J. (2004). *Adult Student Persistence in Web-Based Education (Unpublished PhD thesis)*. Administration, Leadership, and Technology. New York University, The Steinhardt School of Education.
- Hui, C. H. (1988). Measurement of individualism-collectivism. *Journal of Research in Personality*.
- Husman, J., McCann, E., & Crowson, H. M. (2000). Volitional strategies and future time perspective: embracing the complexity of dynamic interactions. *International Journal of Educational Research*, 33(7–8), 777–799.
- Hwang, Y. (2012). Understanding moderating effects of collectivist cultural orientation on the knowledge sharing attitude by email. *Computers in Human Behavior*, 28(6), 2169–2174. doi:10.1016/j.chb.2012.06.023
- Ibrahim, M., Rwegasira, K. S. P., & Taher, A. (2007). Institutional factors affecting students' intentions to withdraw from distance learning programs in the Kingdom of Saudi Arabia the Case of the Arab Open University (AOU). *Online Journal of Distance Learning Administration*, 10(1). Retrieved from <http://www.westga.edu/~distance/ojda/spring101/ibrahim101.htm>
- Ivankova, N. V., & Stick, S. L. (2007). Students' persistence in a Distributed Doctoral Program in Educational Leadership in Higher Education: A mixed methods study. *Research in Higher Education*, 48(1), 93–135. doi:10.1007/s11162-006-9025-4
- Ivankova, N. V. (2006). Using mixed-methods sequential explanatory design: from theory to practice. *Field Methods*. doi:10.1177/1525822X05282260
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14–26.
- Johnston, V., & Simpson, O. (2006). "Retentioneering" higher education in the UK: attitudinal barriers to addressing student retention in universities. *Widening Participation and Lifelong Learning*, 8, 28–36.
- Kadarko, W. (2003). Kemampuan belajar mandiri dan faktor-faktor psikososial yang mempengaruhinya: kasus Universitas Terbuka. *Jurnal Pendidikan Terbuka Dan Jarak Jauh*, 1(1).

- Kaufman, D. (1989). Third generation course design in distance education. In R. Sweet (Ed.), *Post-secondary Distance Education in Canada: Policies, Practices, and Priorities*. Athabasca: University of Athabasca/Canadian Society for Studies in Education.
- Keegan, D. (1996). *Foundations of distance education* (3rd ed.). London: Routledge.
- Keller, J. M. (1987). Development and use of the ARCS model of motivational design. *Journal of Instructional Development*, 10, 2-10.
- Kember, D. (1989). A longitudinal-process model of drop-out from distance education. *Journal of Higher Education*, 60(3), 278-301. doi:10.2307/1982251
- Kember, D. (1995). *Open learning courses for adults: a model of student progress* (1st ed.). New Jersey: Educational Technology Publications.
- Kember, D. (2007). *Reconsidering open and distance learning in the developing world: Meeting students' learning needs*. New York: Routledge.
- Kember, D. (2007). *Reconsidering open and distance learning in the developing world: Meeting students' learning needs* (1st ed.). London: Routledge.
- Kember, D., Lai, T., Mlurphy, D., Siaw, I., & Yuen, K. S. (1994). Student progress in distance education courses: a replication study. *Adult Education Quarterly*, 45(1), 286-301. doi:10.1177/0741713694045001003
- Kember, D., Lai, T., Murphy, D., Siaw, I., & Yuen, K. S. (1992). Student progress in distance education - identification of explanatory constructs. *British Journal of Educational Psychology*, 62, 285-298. Retrieved from <Go to ISI>://WOS:A1992KA21500001
- Kemp, W. C. (2002). Persistence of adult learners in distance education. *American Journal of Distance Education*, 16(2), 65-81.
- Kerkvliet, J., & Nowell, C. (2005). Does one size fit all? University differences in the influence of wages, financial aid, and integration on student retention. *Economics of Education Review*, 24(25), 85-95.
- Kluckhohn, F., & Strodtbeck, F. (1961). *Variations in value orientation*. Evanston, IL: Row, Peterson.
- Lee, Y., & Choi, J. (2011). A review of online course dropout research: implications for practice and future research. *Etr&D-Educational Technology Research and Development*, 59(5), 593-618. doi:10.1007/s11423-010-9177-y

- Lee, Y., & Choi, J. (2012). A structural equation model of predictors of online learning retention. *The Internet and Higher Education*, (0). doi:10.1016/j.iheduc.2012.01.005
- Levy, Y. (2007). Comparing dropouts and persistence in e-learning courses. *Computers & Education*, 48(2), 185–204. doi:10.1016/j.compedu.2004.12.004
- Levy, Y. (2011). Comparing dropouts and persistence in e-learning courses. *Computers & Education*, 48, 185–204. Retrieved from www.elsevier.com/locate/compedu
- Lint, A. H. (2011). *The impact of student progress factors on student persistence in e-learning (Unpublished PhD thesis)*. Education. Trident University International, California, US.
- Liu, S. Y., Gomez, J., & Yen, C.-J. (2009). Community college online course retention and final grade: predictability of social presence. *Journal of Interactive Online Learning*, 8(2), 165–182. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=ehh&AN=43465768&site=ehost-live>
- Livingston, J. A. (1997). Metacognitive: an overview. Retrieved January 11, 2015, from <http://gse.buffalo.edu/fas/shuell/cep564/Metacog.htm>
- Lodico, M. G., Spaulding, D. T., & Voegtle, K. H. (2006). *Methods in educational research: from theory to practice* (1st ed.). San Francisco: Jossey-Bass.
- Lynch, R., & Dembo, M. (2004). The Relationship between self-regulation and online learning in a blended learning context. *International Review of Research in Open and Distance Learning Research in Open and Distance Learning*, 5(2).
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: implications for cognition, emotion, and motivation. *Psychological Review*.
- Matsumoto, D., & Linda, J. (2013). *Culture and psychology* (5th ed.). Belmont, USA: Wadsworth.
- Maykut, P., & Morehouse, R. (1994). *Beginning qualitative research: A philosophic and practical guide*. London: The Falmer Press.
- Mccann, E. J., & Garcia, T. (1999). Maintaining motivation and regulating emotion: measuring individual differences in academic volitional strategies. *Learning and Individual Differences*, 11(3), 259 – 279.
- McCoy, S., Galletta, D. F., & King, W. R. (2005). Integrating national culture into is research: the need for current individual-level measures. *Communications of the Association for Information Systems*, 15, 211–224.

Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=17557168&site=ehost-live&scope=site>

- McQueen, H. (2009). Integration and regulation matters in educational transition: a theoretical critique of retention and attrition models. *British Journal of Educational Studies*, 57(1), 70–88. doi:10.1111/j.1467-8527.2008.00423.x
- Miller, J. G. (1994). Cultural diversity in the morality of caring: individually oriented versus duty-based interpersonal moral codes. *Cross-Cultural Research*.
- Mitchell, M. L., & Jolley, J. M. (2010). *Research design explained* (7th ed.). Belmont, CA: Wadsworth.
- Moore, G., & Kearsley, G. (2012). *Distance education: a system view of online learning* (3rd ed.). Belmont, USA: Wadsworth.
- Moore, K., Bartkovich, J., Fetzner, M., & Ison, S. (2003). Success in cyberspace: student retention in online courses. *Journal of Applied Research in the Community College*, 10(2), 107–118.
- Moore, M. G. (1993). Theory of transactional distance. In D. Keegan (Ed.), *Theoretical principles of distance education* (pp. 20–35). New York: Routledge.
- Moore, M. G., & Kearsley, G. (2012). *Distance education: a systems view of Online Learning*. (null, Ed.) (3th ed., Vol. null, pp. 242–267). Belmont, CA: Cengage Learning.
- Morris, L. V, Finnegan, C., & Sz-Shyan, W. (2005). Tracking student behavior, persistence, and achievement in online courses. *Internet and Higher Education*, 8(3). doi:10.1016/j.iheduc.2005.06.009
- Muijs, D. (2004). *Doing quantitative research in education with SPSS*. London: Sage Publications.
- Muilenburg, L., & Berge, Z. L. (2001). Barriers to distance education: a factor-analytic study. *American Journal of Distance Education*, 15(2), 7–22. doi:10.1080/08923640109527081
- Muller, C., & Vothknecht, M. (2013). *Group violence, ethnic diversity and citizen participation: evidence from Indonesia*. Retrieved from <https://halsshs.archives-ouvertes.fr/halshs-00796194>
- Müller, T. (2008). Persistence of women in online degree-completion programs. *International Review of Research in Open & Distance Learning*, 9(2), 1–18. Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=ehh&AN=32927126&site=ehost-live>

- Niemiec, C. P., & Ryan, R. M. (2009). Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice. *Theory and Research in Education*, 7(2), 133-144. doi:10.1177/1477878509104318
- Nipper, S. (1989). Third generation distance learning and computer conferencing. In R. Mason & A. Kaye (Eds.), *Mindweave: Communication, computers and distance education* (pp. 63-73). Oxford, UK.
- Osborn, V. (2001). Identifying at-risk students in videoconferencing and web-based distance education. *American Journal of Distance Education*, 15(1), 41-54. Retrieved from <http://search.proquest.com/professional/docview/62279034?accountid=13963>
- Oyserman, D., Coon, H. M., & Kemmelmeier, M. (2002). Rethinking individualism and collectivism: evaluation of theoretical assumptions and meta-analyses. *Psychological Bulletin*, 128(1), 3-72.
- Packham, G., Jones, P., Miller, C., & Thomas, B. (2004). E-learning and retention: key factors influencing student withdrawal. *Education + Training*, 46(6), 335-342.
- Pallant, J. (2005). *SPSS Survival Manual: A step by step guide to data analysis using SPSS for Windows (Version 12)* (Second.). Sydney: Allen & Unwin.
- Park, J., & Choi, H. J. (2009). Factors influencing adult learners' decision to drop out or persist in online learning. *Educational Technology & Society*, 12(4), 207-217. Retrieved from <Go to ISI>://WOS:000271028400017
- Park, J.-H. (2007). Factors related to learner dropout in online learning. In T. H. Chermack, F. M. Nafukho, & C. M. Graham (Eds.), *the International Research Conference in the Americas of the Academy of Human Resource Development*. Indianapolis.
- Parker, A. (1999). A study of variables that predict dropout from distance education. *International Journal of Educational Technology*, 1(2), 1-10. doi:Proquest:62307270
- Parker, A. (2003). Identifying predictors of academic persistence in distance education. *United States Distance Learning Association Journal*, 17(1), 55-62.
- Parsons, T. (1949). *Essays in sociological theory; pure and applied*. New York: Free Press.

- Pascarella, E. T., Duby, P. B., & Iverson, B. K. (1983). A text and reconceptualization of a theoretical model of college withdrawal in a commuter institution setting. *Sociology of Education*, 56(2), 88-100. Retrieved from <http://www.jstor.org/stable/2112657>
- Patterson, B. P. (2007). *A comparative study of factors related to attrition in online and campus based Master's Degree Programs (Unpublished PhD Thesis)*. Department of Educational Leadership. East Carolina University, East Carolina, USA.
- Perraton, H. (2000). *Open and distance learning in the developing world* (1st ed.). London: Routledge.
- Perry, B., Boman, J., Care, W. D., Edwards, M., & Park, C. (2008). Why do students withdraw from online graduate nursing and health studies education? *Journal of Educators Online*, 5(1), 1-17. Retrieved from <http://www.thejeo.com/Archives/Volume5Number1/PerryetalPaper.pdf>
- Pierrakeas, C., Xenos, M., Panagiotakopoulos, C., & Vergidis, D. (2004). A comparative study of dropout rates and causes for two different distance education courses. *International Review of Research in Open and Distance Learning*, 5(2), 1-13.
- Pigliapoco & Bogliolo, A., E. (2008). The effects of psychological sense of community in online and face-to-face academic courses. *International Journal of Emerging Technologies in Learning*, 3(4), 60-69.
- Poellhuber, B., Chomienne, M., & Karsenti, T. (2008). The effect of peer collaboration and collaborative learning on self-efficacy and persistence in a learner-paced continuous intake model. *Journal of Distance Education*, 22(3), 41-62. Retrieved from <http://search.proquest.com/professional/docview/61798157?accountid=13963>
- Porta-Merida, S. (2009). *Online learning success: underlying construct affecting student attrition (Unpublished PhD thesis)*. Department of Education. Lynn University, United States of America.
- Puspitasari, K. (2012). *The effect of learning strategy intervention and study management time intervention on students' self-regulated learning, achievement, and course completion in a distance education learning environment (Unpublished PhD thesis)*. Department of Educational Psychology and Learning System. The Florida State University.
- Ramanujam, P. R. (2001). Distance open learning in the developing asian countries: Problems and possible solutions. Retrieved from <http://asiapacific-odl.oum.edu.my/C23/F426.pdf>

- Ratnaningsih, D. J. (2013). Open and distance education systems: do they enhance graduates' soft skills? the results from 2009 Universitas Terbuka tracer study. *Open Praxis*, 5(4), 289–299.
- Ratnaningsih et.al., D. J. (2008). Analisis daya tahan mahasiswa putus kuliah pada pendidikan tinggi jarak jauh: studi kasus mahasiswa Jurusan Manajemen Fakultas Ekonomi Universitas Terbuka. *Jurnal Pendidikan Terbuka Dan Jarak Jauh*, 9(2), 101–110.
- Realo, A., Allik, J., & Vadi, M. (1997). The hierarchical structure of collectivism. *Journal of Research in Personality*, 31, 93–116. Retrieved from <http://www.sciencedirect.com/science/article/pii/S009265669792170X>
- Rotter, J. (1966). Generalized expectations for internal versus external control reinforcement. *Psychological Monograph*, 80(1), 1–28.
- Rovai, A. P. (2002). Building sense of community at a distance. *International Review of Research in Open and Distance Learning*.
- Rovai, A. P. (2002). Sense of community, perceived cognitive learning, and persistence in asynchronous learning networks. *Internet and Higher Education*, 5(4), 319–332. doi:10.1016/s1096-7516(02)00130-6
- Rovai, A. P. (2003). In search of higher persistence rates in distance education online programs. *The Internet and Higher Education*, 6(1), 1–16. doi:10.1016/S1096-7516(02)00158-6
- Rovai, A. P., & Jordan, H. M. (2004). Blended learning and sense of community: A comparative analysis with traditional and fully online graduate courses. *International Review of Research in Open and Distance Learning*, 5, 1–13. Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/192/274>
- Rovai, A. P., & Wighting, M. J. (2005). Feelings of alienation and community among higher education students in a virtual classroom. *Internet and Higher Education*, 8(2). doi:10.1016/j.iheduc.2005.03.001
- Rowntree, D. (1995). Teaching and learning online: a correspondence education for the 21st century? *British Journal of Educational Technology*, 26(3), 205–215.
- Ryan, R. M., & Deci, E. L. (2000a). Intrinsic and extrinsic motivations: classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54–67. doi:10.1006/ceps.1999.1020
- Ryan, R. M., & Deci, E. L. (2000b). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *The American Psychologist*, 55(1), 68–78.

- Schutze, H. G. (1986). Adults in higher education: lowering the barriers by teaching and learning at a distance. In G. Van Enckevort, K. Harry, P. Morin, & H. Schutze (Eds.), *Distance Higher Education and the Adult Learner* (pp. 21–39). Heerlen: Dutch Open University.
- Schwartz, S. H. (2006). A Theory of cultural value orientations: explication and applications. *Comparative Sociology*, 5(2-3), 137–182.
- Schwarzer, R. (2008). Some burning issues in research on health behavior change: international review of applied psychology. *Applied Psychology*, 57(1), 84–93. doi:10.1111/j.1464-0597.2007.00324.x
- Seidman, I. (2006). *Interviewing as qualitative research: A guide for researchers in education and the social sciences*. New York: Teachers College Press.
- Setijadi. (2007). Kejadian sekitar kelahiran Universitas Terbuka. In A. Said (Ed.), *Perkembangan Universitas Terbuka: perjalanan mencari jati diri menuju PTJJ unggulan*. Tangerang Selatan: Universitas Terbuka.
- Shin, N., & Kim, J. (1999). An exploration of learner progress and drop-out in Korea National Open University. *Distance Education*, 20(1), 81–95. doi:10.1080/0158791990200107
- Shulruf, B., Hattie, J., & Dixon, R. (2003). Development of a new measurement tool for individualism and collectivism. *The NZARE/AARE Joint Conference*. Auckland, New Zealand.
- Simons, H. (2009). *Case study research in practice*. London: SAGE Publications.
- Simonson, M., Smaldino, S., Albright, M., & Zvacek, S. (2000). *Teaching and learning at a distance: foundations of distance education*. Upper Saddle River, NJ: Prentice Hall.
- Simpson, O. (2003). *Student retention in online, open, and distance learning* (1st ed.). London: Kogan Page.
- Simpson, O. (2008). Motivating learners in open and distance learning: do we need a new theory of learner support? *Open Learning: The Journal of Open, Distance and E-Learning*, 23(3), 159–170. doi:10.1080/02680510802419979
- Simpson, O. (2013). Student retention in distance education: are we failing our students? *Open Learning: The Journal of Open, Distance and E-Learning*, 28(2), 105–119. doi:10.1080/02680513.2013.847363
- Singelis, T. M. (1994). The Measurement of independent and interdependent Self-Construals. *Personality and Social Psychology Bulletin*, 20(5), 580–591. doi:10.1177/0146167294205014

- Singelis, T. M., Triandis, H. C., Bhawuk, D. P. S., & Gelfand, M. J. (1995). Horizontal and vertical dimensions of individualism and collectivism: a theoretical and measurement refinement. *Cross-Cultural Research*.
- Singh, K. (2007). *Quantitative social research methods*. London: Sage Publications Ltd.
- Smith, P. B., & Schwartz, S. H. (1997). Values. In J. W. Berry, M. H. Segall, & K. Kagitcibasi (Eds.), *Handbook of cross-cultural psychology* (pp. 77–118). Nedham, MA: Allyn & Bacon.
- Sorensen, A. L. (2010). *Serving students from a distance: a content analysis of persistence characteristics in distance learners (Unpublished PhD Thesis)*. School of Education. The College of William and Mary in Virginia, Virginia, USA.
- Straub, D., Loch, J., Evaristo, R., Karahanna, E., & Srite, M. (2002). Toward a theory-based measurement of culture. *Journal of Global Information Management*, 10(1), 13–23.
- Street, H. (2010). Factors influencing a learner's decision to drop-out or persist in higher education distance learning. *Online Journal of Distance Learning Administration*, 13(4), 5. Retrieved from <http://search.proquest.com/professional/docview/864940356?accountid=13963>
- Sue, V. M., & Ritter, L. A. (2007). *Conducting online surveys*. London: Sage Publications.
- Sungur, S., & Senler, B. (2010). Students' achievement goals in relation to academic motivation, competence expectancy, and classroom environment perceptions. *Educational Research and Evaluation*, 14(4), 303–324.
- Suryadinata, L., Arifin, E. N., & Ananta, A. (2003). *Indonesia's population: ethnicity and religion in a changing political landscape* (1st ed.). Pasir Panjang, Singapore: Institute of Southeast Asian Studies.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (Fifth.). London: Pearson Education, Inc.
- Tait, A. (2000). Planning student support for open and distance learning. *Open Learning: The Journal of Open, Distance and E-Learning*, 15(3), 287–299. doi:10.1080/713688410
- Tait, A. (2003). Reflections on student support in open and distance learning. *The International Review of Research in Open and Distance Learning*, 4(1). Retrieved from <http://www.irrodl.org/index.php/irrodl/article/viewArticle/134/214>

- Tait, J. (2004). The tutor/facilitator role in student retention. *Open Learning*. doi:10.1080/0268051042000177872
- Tello, S. F. (2002). *An analysis of the relationship*. School of Education. University of Massachusetts, Massachusetts, USA.
- Tello, S. F. (2007). An analysis of student persistence in online education. *International Journal of Information and Communication Technology Education*, 3(3).
- Thompson, E. (1997). Distance education drop-out: what can we do? In R. Pospisil & L. Willcoxson (Eds.), *Learning through teaching* (pp. 324–332). Perth.
- Thompson, M. (1998). Distance learners in higher education. In C. Gibson (Ed.), *Distance learners in higher education: institutional responses for quality outcomes* (pp. 9–24). Madison, WI: Atwood Publishing.
- Tinto, V. (1975). Dropout from higher education: a theoretical synthesis of recent research. *Review of Educational Research*. doi:10.3102/00346543045001089
- Tinto, V. (1982). Limits of theory and practice in student attrition. *The Journal of Higher Education*, 53(6), 687–700. Retrieved from <http://www.jstor.org/stable/1981525>
- Tinto, V. (1988). Stages of student departure: reflections on the longitudinal character of student leaving. *The Journal of Higher Education*, 59(4), 438–455. Retrieved from <http://www.jstor.org/stable/1981920>
- Tinto, V. (1993). *Leaving college: rethinking the causes and cures of student attrition* (2nd ed.). Chicago: University of Chicago Press.
- Toennies, F. (1957). *Gemeinschaft und gesellschaft [community and society]*. New Brunswick, NJ: Transaction Publishing.
- Torres, V. (2006). A mixed method study testing data-model fit of a retention model for latino/a students at urban universities. *Journal of College Student Development*, 47(3), 299–318. Retrieved from <http://search.proquest.com/professional/docview/62103257?accountid=13963>
- Triandis, H. C. (2001). Individualism and collectivism: past, present, and future. In D. Matsumoto (Ed.), *The handbook of culture and psychology*. Oxford, UK.
- Triandis, H. C., Bontempo, R., Bond, M., Leung, K., Brenes, A., Georgas, J., ... Jai, B. P. (1986). The measurement of the etic aspects of individualism and

collectivism across cultures. *Australian Journal of Psychology*, 38(3), 257–267.

Universitas Terbuka. (2012a). *28 Tahun Universitas Terbuka melayani bangsa: fakultas dan program pascasarjana*. (H. Pramudibyanto, A. J. Purwanto, D. Andriyani, O. Idrus, M. Amini, Suhartono, ... A. N. Izzati, Eds.). Jakarta: Universitas Terbuka.

Universitas Terbuka. (2012b). *Katalog Universitas Terbuka 2012*. Jakarta: Universitas Terbuka.

Universitas Terbuka. (2012c). UT dalam angka pada 30 April 2012. Universitas Terbuka. Retrieved from <http://www.ut.ac.id/tentang-ut/ut-dalam-angka.html#kepulauan>

Universitas Terbuka. (2014a). Mahasiswa dan alumni. Retrieved February 25, 2015, from <http://www.ut.ac.id/mahasiswa-dan-alumni.html>

Universitas Terbuka. (2014b). UT dalam angka periode 2014.2. Retrieved October 25, 2014, from <http://www.ut.ac.id/tentang-ut/ut-dalam-angka.html>

Universitas Terbuka. (2015a). ASEAN Studies Programme. Retrieved February 22, 2015, from <http://aseanstudies.ut.ac.id/>

Universitas Terbuka. (2015b). Katalog Universitas Terbuka. Retrieved October 02, 2015, from <http://www.ut.ac.id/katalog>

Universitas Terbuka. (2015c). Registrasi online Universitas Terbuka. Retrieved February 25, 2015, from <http://sro.ut.ac.id/>

Universitas Terbuka. (2015d). Sistem pembelajaran. Retrieved January 10, 2015, from <http://www.ut.ac.id/sistem-pembelajaran>

Universitas Terbuka. (2015e). UPBJJ-Universitas Terbuka (UT). Retrieved January 20, 2015, from <http://www.ut.ac.id/upbjj-ut>

Vallerand, R. J., & Bissonnette, R. (1992). Intrinsic, extrinsic, and amotivational styles as predictors of behavior: A prospective study. *Journal of Personality*, 60(3).

Vallerand, R. J., Pelletier, L. G., Blais, M. R., Hriere, N. M., Senecal, C., & Valleries, E. F. (1992). The academic motivation scale: a measure of intrinsic, extrinsic, and amotivation in education. *Educational and Psychological Measurement*, 52, 1003–1017.

Vansteenkiste, M., Lens, W., & Deci, E. L. (2006). Intrinsic versus extrinsic goal contents in self-determination theory: another look at the quality of academic motivation. *Educational Psychologist*.

- Vaus, D. A. de. (2002). *Surveys in social research* (5th ed.). Crows Nest, NSW: Allen & Unwin.
- Vergidis, D., & Panagiotakopoulos, C. (2002). Student dropout at the Hellenic Open University - Evaluation of the graduate program: Studies in education. *International Review of Research in Open and Distance Learning*, 3(2).
- Walsh, S. L., Gregory, E., Lake, Y., & Gunawardena, C. N. (2003). Self-construal, facework, and conflict styles among cultures in online learning environments. *Educational Technology Research and Development*.
- Wilkesman, U., Fischer, H., & Virgillito, A. (2012). *Academic motivation of students: The German case*. Dortmund, Germany.
- Woodley, A. (2004). Conceptualizing student dropout in part-time distance education: pathologizing the normal? *Open Learning: The Journal of Open, Distance and E-Learning*, 19(1), 47-63. Retrieved from <http://oro.open.ac.uk/1098/>
- Woodley, A., Lange, P. de, & Tanewski, G. (2001). Student progress in distance education: kemper's model revisited. *Open Learning: The Journal of Open, Distance and E-Learning*, 16(2), 113-131.
- Workman, J. J. J., & Stenard, R. A. (1996). Student support services for distance learners. *DEOSNEWS*, 6(3). Retrieved from http://learningdesign.psu.edu/deos/deosnews6_3.pdf
- Xenos, M., Pierrakeas, C., & Pintelas, P. (2002). A survey on student dropout rates and dropout causes concerning the students in the course of informatics of the Hellenic Open University. *Computers & Education*, 39(4), 361-377. doi:10.1016/S0360-1315(02)00072-6
- Yin, R. K. (2003). *Case study research: design and methods* (3rd ed.). London: Sage Publications.
- Zimmerman, B. J. (1989). A social cognitive view of self-regulated academic learning. *Journal of Educational Psychology*.