Factors impacting on school retention rates of lower secondary school female students in rural Cambodia and ways forward: A case study

TITHCHANBUNNAMY LOR

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School of Education
Charles Darwin University
Darwin, Australia

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ACRONYMS

EFA  Education For All
ASEAN  Association of South East Asia Nations
MoEYS  Ministry of Education Youth and Sport
UNICEF  United Nations Children's Fund
UNDP  United Nation Development Program
UNESCO  United Nations Educational, Scientific and Cultural Organization
USAID  United States Agency for International Development
CRC  Convention on the Right of the Child
MDG  Millennium Development Goals
ABSTRACT

This study is concerned with the high rates of school attrition among adolescent girls in rural regions of Cambodia and with the effectiveness of national and international programmes that have thus far been undertaken in order to ameliorate this problem. The research sought to investigate the impact that these programs have had on the dispositions and attitudes to education of female students in a rural school in Cambodia as reflected through the perspectives they offer on their own context. In order to elicit these beliefs, the study looked for the differences between the participants’ perspectives and the key factors that research and government reports traditionally identified as limiting educational opportunities of female students.

This is a mixed methods study. Qualitative and quantitative data was analysed using quantitative procedures. Questionnaire was chosen as a method of data collection. The questions were informed by studies which examined the impact of different factors on the retention of female students’ enrolments. The participants included 206 female students from a lower secondary school in Pursat province, Cambodia. Overall, the findings show that participants value education despite its many challenges.

Still, not all students felt that they could pursue their education, predominantly due to financial pressures. Drawing on theories of Freire (1973, 1990) and Gadotti (2010), the study interpreted its research findings in relation to frameworks which concern themselves with power as a factor of one’s engagement. It concludes with a framework proposed to assist the government in developing capacity-building programs which support change by building community social capital through strategies which focus less on problems and more on the mechanisms by which communities can negotiate, envisage and address the needs and resources that are appropriate for their well-being and sustainable futures. Girls’ education can only benefit from such a reflective, critical and constructive process.
STATEMENT OF ORIGINALITY

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text.

I give consent to this copy of my thesis, when deposited in the University Library, being made available for loan and photocopying online via the University’s Open Access repository eSpace.

Signed by: Tithchanbunnany Lor

Date: February 7, 2016
CHAPTER 1: INTRODUCTION

This study is concerned with the high rates of school attrition among adolescent girls in rural regions of Cambodia and with the effectiveness of government initiatives that have thus far been undertaken in order to ameliorate this problem. The study builds on the understandings which inform the 21st century polices and reforms in Cambodia and around the world and which see education no longer as a privilege or a choice, but a must. Education is a necessity, if individuals and nations want to prosper and participate in the global economy. This critical role of education is emphasised in every international study reporting on progress and sustainable development of countries and the world in general.

For example, the Human Development Report: The rise of the South (Malik, 2013), identifies “the striking transformation of a large number of developing countries into dynamic major economies” and links this transformation to the accelerated “achievements in the education, health, and income dimensions” of all countries all over the world, even if the rate of progress was not even within and between regions (p. iv). The Sustainable Development in the 21st century report (UN, 2013) predicts that by 2050, there will be a “universal primary and secondary education for all […] with women most likely accounting for most of the higher-level degrees world-wide in 2050” (p. 5).

In short, education matters and so does women’s education. In the 21st century and beyond, lack of education means inability to engage in the decision-making processes on issues of local and global relevance which impact on people’s daily lives (UN, 2013, p. 11). Equal access to education is understood to give individuals the
opportunity to participate in the life of their immediate and global society in a responsible and informed manner.

However, the right to education does not instantly translate into equal access opportunities; this is especially the case with women’s education. The governments all over the world are painfully aware of this problem and, as this study shows, have been active in this area seeking to increase learning opportunities for women and, especially, school attendance rates of female students. This study focuses on the subject of female education in Cambodia and looks at the impact of government initiatives and programs in this area. To this end, the study investigates conditions which surround female students’ school experiences and the impact they have on their school attendance and the decision to complete their lower secondary schooling. The study draws on previous research in this area and seeks to establish whether there is an observable change in opportunities and/or attitudes to school in comparison to previous studies.

The study focuses on rural Cambodia largely due to the low female literacy rates which prevail in rural regions of Cambodia and the stereotyped roles that females traditionally performed in their families and continue to be expected to perform (Kell & Kell, 2014, p. 98). Low levels of education and traditional values make it difficult for females to break the poverty cycle. Consequently, this situation not only reduces their chances of leading fully accomplished and empowering lives, it also impacts on the economy of the country and the future of their children. The research was undertaken at Pursat province, which is located in the region of Tonle Sap Lake (TSL), in the centre of Cambodia.

Chapter 1 presents the background of the study and provides the reader with key information on Cambodian education in general and the issue of girls’ completion rates
in particular. The chapter covers (1) research background and problem statement; (2) research aims; (3) research methodology, (4) significance of the study; and (6) an outline of the study.

1.1 Research background

1.1.1 Education in the 21st century

Numerous countries of South-East Asia are in the process of shifting their economies from agricultural to industrial and post-industrial modes of production at an accelerated rate (Malik, 2013). Technology and the pressures of the information age continue to break traditional ways of living and force individuals, communities and entire countries to work within a broader framework and in consideration of regional and global impacts of their actions and plans.

The 21st century globalisation model places new pressures on education, educational resources and expectations that individuals and countries have from this process. Furthermore, developed countries, like Australia or Great Brittan, are optimising their curricula and exporting education, especially to the developing countries (Bennell & Pearce, 2003). Education has become one of the key industries, with countries competing for global dominance and establishing norms to measure their competitive edge (Freebody, 2016; Stewart, 1996). Countries worldwide construct policies about the value of education and develop agreements which make student and worker mobility possible. Education has both a monetary and a cultural value.

1.1.2 Pedagogic challenges of 21st century education

The outdated teaching models are also being challenged. Today, the practices of knowledge transfer, from expert to a novice, from a knower to a naïve person, are
undergoing change (Lian, A-P., 2016). Learner-centred practices are increasingly implemented and expected by the students (Darling-Hammond, 2006; Choudhury, 2011). This means that content-driven teaching models are being replaced with project-based learning, which emphasises critical and creative thinking skills as well as higher order attitudes, values, and ethics (ACARA, 2014; Saavedra & Opfer, 2012; P21, 2011). The new pedagogies challenge both teachers and students. In South-East Asia, implementation of these objectives implies a cultural change which is not always met either due to lack of resources or training, or both. The 21st century learning skills, outlined in the Asia Society report (Saavedra & Opfer, 2012, pp. 4-5), include changes in the following areas:

1. Ways of thinking: creativity and innovation, critical thinking, problem solving, decision-making, and learning to learn (or metacognition).
2. Ways of working: communication and teamwork.
3. Tools for working: general knowledge and information communication technology (ICT) literacy.
4. Living in the World: citizenship, life and career, and personal and social responsibility, including cultural awareness and competence.

The Asia Society and the U.S. Council of Chief State School Officers (Saavedra & Opfer, 2012) define 21st century skills as the capacity and disposition to understand and act on issues of global significance, including: (1) investigate the world beyond their immediate environment; (2) recognise perspectives, others’ and their own; (3) communicate ideas effectively with diverse audiences; and (4) take action to improve conditions (p. 5).
The 21st century skills are complex, give preference to cross-disciplinary learning and have a significant relevance to contemporary life (Saavedra & Opfer, 2012, p. 4). Meeting these standards is a challenge for every country, including Cambodia.

**1.1.3 Education in Asia**

Regionalisation, globalisation, population growth and technological advancement impact on and challenge Asian education policies and traditions. In order to meet these challenges, Asia Society organised the Global Cities Education Network to focus on challenges and opportunities for the improvement of their education system (ASEAN Secretariat, 2009). In addition, opportunities for human development are created in order to enhance the wellbeing of people living in the ASEAN countries (ASEAN Secretariat, 2009). Examples of this initiative include investment in education and life-long learning, human resource training, capacity building, innovation, entrepreneurship, English language training, ICT, applied science and technology in socio-economic development activities (ASEAN Secretariat, 2009).

In order to achieve this human development plan, the ASEAN community developed its strategic objective which include the universal access to primary education across the ASEAN countries by 2015 with the increased emphasis on literacy, gender equality in education and the exchange of best practices on gender-sensitive school curriculum. Other strategies cover: the development of ASEAN scholarship programs, the encouragement of ICT in education and life-long learning, especially at remote areas, teacher-training, and higher education staff exchange programs (ASEAN Secretariat, 2009).
1.1.4 Education in Cambodia

Regarding school attendance, the School Dropout Prevention Pilot Program Dropout Trend Analysis: Cambodia (USAID, 2011) reports a drop in an overall number of out-of-school children by approximately 38% over a six-year period, from 115 million in 2001/02 to 71 million in 2007. Still, of the 56% of children who do enter school, a high percentage is at-risk of leaving before completing an education cycle or not transitioning to the next cycle, especially in the rural and remote regions of Cambodia (USAID, 2011). This view is confirmed by the statistics reported by United Nations International Children's Emergency Fund (UNICEF) (UNICEF, 2010). UNICEF is a permanent part of the United Nations’ system to provide humanitarian and developmental assistance where needed to support children (and their mothers) all over the world.

In Cambodia, UNICEF works closely with the government through the Ministry of Education Youth and Sport (MoEYS) as well as with other relevant bodies and non-governmental organisations. In its recent report on education in Cambodia, UNICEF (2010) notes that, increasingly, the gender gap in school enrolments is closing, especially at the primary level, as more children attend school. However, increased numbers do not signify that all children in Cambodia attend school. According to UNICEF, factors that prevent children from going to schools, or completing their schooling are poverty and opportunity cost and low expectation of parents. Poverty and opportunity costs are generally an issue in rural areas where children in low income families are expected to help parents with agricultural work. While parents do understand that education plays an important part in securing their children’s wellbeing and future, for low socio-economic families, when facing financial difficulties, they are not willing to invest in the education of their children equally.
This parental gender discrimination generally happens in the families which have limited economic resources and girls are expected to do the household chores and work outside the house to make money to support the family living (Booth, 2014). Therefore, girls of poorer family have less opportunity to go to school as compared to boys. Also, low education of parents is reported to be the factor that contributes to high repetition rates which lead to school dropout (Brown, 2006). Children whose parents have low levels of education are more likely to leave school prematurely (Brown, 2006). Also, parents with low levels of education show less inclination to provide students with forms of education that are valued by formal institutions. This includes encouragement, reading practices or homework (Brown, 2006). Poorly educated parents are likely to make less investment in their children’s education by giving less financial and emotional support toward their children’s learning (Brown, 2006).

Additionally, education in Cambodia is still facing some significant issues which impact on school attendance especially in rural Cambodia (UNICEF, 2010). This includes limited access to quality instruction, inadequate school facilities, late enrolment, unavailability of academic grades, poor teacher qualification, ineffective teaching methodologies, school management issues, and poor community involvement. Other factors compound the problems and include lack of drinking water and sanitation, and no toilets.

In order to ameliorate the situation, Cambodian Ministry of Education and UNICEF coordinate a number of national programs and partnerships which address these factors. Other than assisting Cambodia with obtaining financial support, examples of these engagements include initiatives to expand secondary education and the numbers of lower secondary schools through primary school expansion to account for population growth, building community awareness through various community and
home-based parental programs, literacy and business skills programs, small scholarships (especially for girls), as well as teacher-training support (Kell & Kell, 2014).

The Cambodia Education Sector Support Project (CESSP) was launched in 2005 by the World Bank and focused specifically on poor and remote communities (World Bank, n.d.). It sought to promote gender equality, girls’ school enrolments, school attendance, school completion, access to schools, and hygiene in schools. It also sought to build schools in under-served communities. The project has brought noticeable outcomes by cutting down primary education dropout rates from 10.8 to 8.8% between academic years 2006-7 and 2009-10, increasing educational facilities in underserved communities, offering scholarship to 27,502 lower secondary school students to finish nine year of basic education, providing training and capacity building at local levels to improve education services (World Bank, n.d.). Furthermore, over 6,300 primary school teachers (grades 1-6) were trained to become basic education teachers (up to grade 9) (World Bank, n.d.).

1.1.5 Gender equity

The World Bank data from 2015 (World Bank, 2015) shows mixed results. On the one hand, the data show a steady growth in the Cambodian economy and, on the other hand, they also show high poverty, with 42% of children under five-years-old being malnourished and stunted. These statistics illustrate the horrific pressures that the Cambodian society experiences as it also attempts to integrate new ways of living and thinking, with gender equity being one of them. Based on the Gender Gap Index (World Economic Forum, 2012), it is reported that Cambodia has made very little progress over the last six years toward gender equity. This puts Cambodia at the lowest
rank in the region. In order to ameliorate the situation, the Cambodian government, together with many non-governmental agencies, run awareness raising programs, including regular literacy activities, mother and daughter learning groups, as well as courses in small business (Kell & Kell, 2014, p. 96).

Before the UN Millennium Summit in 2000, in order to support gender equality, almost all the countries around the world participated in the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and the Convention on the Rights of the Child (CRC). CEDAW had worked on the establishment of equal happiness between men and women in regard to their civil, cultural, economic, political, and social rights. This was to ensure that there is no discrimination against women in the public or private sector. It is understood that gender inequality is not a national problem but a global problem which requires global community to solve it. The “Goal 3” of UN Millennium Development Goals (UNDP, 2015) put the emphasis on the promotion of gender equality and sought to eliminate gender disparity in primary and secondary education preferably by 2005 and in all levels of education no later than 2015. Since then, there was a noticeable improvement in women condition, especially in relation to their health, education, mortality rates, life expectation and gender gaps in primary school education (UNDP, 2015). Despite this improvement, many countries fail to meet the deadline for “Goal 3” of the UN Millennium Development Goals (UNDP, 2015).

In their analysis of the Cambodian educational context, Kell and Kell (2014, p. 98) propose that any lasting change needs to be accompanied by changes in attitudes and the belief systems of the people themselves. This view is also supported by the theoretical and practical work of Freire (1973, 1990) and Gadotti (1996), who believe
that conscientisation is the key element of transformation. In their view, social problems are complex and require multi-level solutions.

It is hoped that the present study will shed some light on the strategies that the Cambodian government put in place in order to improve the gender equity in education and their impact.

1.1.6 Community transformation as education

Transformation takes more than simply a change in policies. It requires strategy development at each level of the system in order to frame the relevant parameters and actions that can result in an innovation (Martin & Osberg, 2015). In the context of education, Freire (1973, 1990) described two models of leadership that can be used to generate transformation process. He juxtaposed a dialogic, negotiation-based leadership/pedagogic model and a top-down, “oppressive”, “command-and-control” style of leadership approach, which the leader constructs in order to command “silence”. The dialogic approach is based on the premise that for social transformation to take place, it has to be understood and, therefore engaged, by the people whom it is to impact. Only when engaged, through reflective praxis, people can identify the opportunities and the limitations of the situations that affect them. In this sense, a dialogue strengthens community and helps build social capital.

In the context of rural of Botswana, Maruatona (1996) captures the essence of Freire’s model by demonstrating that the “Botswana Government is gradually becoming aware of the limitations of planning for people and not with them” (p. 1). In a similar vein, Gadotti (2010) proposed the concept of “eco–pedagogy” with which he describes the sustainability of practices which support and build community awareness, thus resulting in “the emergence of a different, possible world” (p. 203). Eco-pedagogy is
a form of communications that encourages “transition from transmissive education to transformative education” (Gadotti, 2010, p. 206).

This re-orienting of practice requires a re-orientation in one’s world view, away from seeing the world in terms of isolated actions, toward seeing connections, thus embracing a systemic view of the world which contains “multiple, undetermined and interdependent causalities” (Gadotti, 2010, p. 206). To Gadotti (1996), a responsible globalisation is a necessity in a world where everything is related to everything, reciprocally conditioning each other (pp. 17-20). Schools too are not disconnected from the (external) world, but are an integral part of it. In order to investigate the impact of educational and social reforms, it is necessary to identify opportunities which people generate for themselves and their communities as a result of their engagement with those reforms.

Likewise, in the context of this study, the problem of low completion rates by female students in lower secondary schools in rural areas is framed as a function of the opportunities that reforms and programs make possible for communities to transform their own condition. To put it simply, the most thoughtful initiatives, when imposed externally, can be perceived as a sign of oppression, rather than the gift that it was meant to be. The idea that social change involves community transformation provides this study with a critical perspective from which the policies and their impact will be assessed.

1.2 Research Problem

Relatively high non-completion rates of lower secondary schooling by female students are a matter of concern for the government of Cambodia and for the Cambodian community as a whole. The school completion rates by female students; especially in
rural areas of Cambodia are low and research shows that the factors that impact on their decision to leave school prematurely are complex. Poverty in rural Cambodia, reliance on child labour, low levels of education of parents, traditional values access to schools are exacerbated by problems with school access, issues with quality teacher-training, as well as the quality and hygiene of the buildings. With unfavorable geographical characteristics and tropical climate, events such as frequent flooding, damaged schools and infrastructure are additional factors that prevent children from attending school, as roads can be blocked and children are moved to shelters for flood victims (World Bank, 2014). As a result, the prospects of these children for better jobs or professional careers are much lesser than those of urban children (World Bank, Education for All, 2014).

The preliminary review of the literature shows that the government is not indifferent to this situation. However, most initiatives target all children and there is lack of data which would reflect the actual impact that these program have, or have had thus far, on girls’ education, i.e. the factors which interact with the decision whether they should continue their learning beyond the primary stage of schooling.

Measuring the impact of the government programs and initiatives on girls’ education is beyond the scope of this study. However, as argued above, the reform cannot take place in the absence of the people who are to benefit from its impact.

The present study builds on the understandings developed by Freire (1990) and Gadotti (2010, 1996), and sets out to investigate the impact that the national and international programs have had on the dispositions and attitudes to education of adolescent female students in a rural school in Cambodia as reflected through the perspectives they offer on their own context. To this end, the study looks for any differences that may emerge
between these perspectives and the key factors that research and government reports traditionally identified as limiting educational opportunities of female students in rural Cambodia.

1.3 Research aims and questions
In view of the troubling statistics and in consideration of the progress that has been made in education since the fall of the last regime in Cambodia, this study seeks to explore the impact that the social and educational programs have had on the conditions which influence the future of adolescent girls in rural regions. The aim of this study is to capture the perceptions of Cambodian girls of the world around them, their own context, and their school and learning experiences. It is expected that these perceptions will contribute to a better understanding of their immediate environment as reported by them and the factors which influence their decision whether to continue education beyond primary school. The investigation is led by the following sub-questions:

1. What are young female students’ life values in rural Cambodia?
2. What are young female students’ opinions about their school education environment in rural Cambodia?
3. What are young female students’ opinions about their learning experiences in schools?
4. Do these opinions impact on their life values in rural Cambodia?
5. To what extent all these perspectives influence their decision to complete or abandon the education process?

1.4 Research methodology
This is a mixed methods study. Qualitative and quantitative data was analysed using quantitative procedures. Questionnaire was chosen as a method of data collection. The
questions were informed by studies and reports on issues relevant to creating learning contexts which support female students in completing their schooling. Bronfenbrenner’s (1977, 1979, 1994) ecological system model was used in order to ensure that the questions draw on studies which address a full spectrum of the dynamics which form children’s environment. 

In addition, students were also asked to provide their suggestions for improvement. The participants included 206 female students from a lower secondary school in Pursat province, Cambodia. Appropriate ethical and methodological processes were implemented to ensure participants’ safety, anonymity and comfort.

Data analysis sought to take account of the relationships between the various factors reflected in the questionnaires in relation to the study’s sub-questions. As a result, the study is able to achieve the following:

(a) Offer an insight on the impact that the national and international programs have had on the dispositions and attitudes to education of adolescent female students in a rural school in Cambodia as reflected through the perspectives they offer on their own context.

(b) Provide up-to-date information on the factors which contribute to the overall quality of girls’ school experience.

1.5 Significance of the study

Little has been written about the success stories of young female students in remote areas of Cambodia in regard to their commitment to continue their education through to upper secondary levels and the factors which influence this commitment. A quantitative study allows comparing and contrasting a multitude of factors reported by a large number of participants.
As suggested by various studies examined in this study and reported in Chapter 2, students’ decisions may be impacted by a combination of related factors ranging from family, peers, neighborhood, school, teachers, and others. To understand the role of each of these factors and their impact on each other is a complex task. In order to account for this complexity, the study also makes links to the students’ emotions, feelings about their school, their peers, and their self-efficacy beliefs.

The outcomes of the study are intended to inform projects and programs which work directly with communities and adolescent female students in order to support girls in their educational journeys. Most importantly, the research and its approach to change as a community-building process offer a powerful tool for evaluating the role that studies and government programs attribute to the community in order to effect transformation.

1.6 Study outline

Chapter 1 offers a general overview of the study and provides a brief description of the study context and research participants. The chapter explains its terms and definitions, and describes the research problem, purpose and the significance of the study. It also offers a short description of each of the chapters in the study.

Chapter 2 presents an in-depth literature review on issues relevant to the history of Cambodian education and an overview of the social and educational context of rural Cambodia. The chapter also describes the ecological system theory of Bronfenbrenner (1977, 1979, 1994) which forms the conceptual framework of the study which informs its approach to data collection and analysis.

Chapter 3 describes the research design and the methods for data collection and analysis. The chapter begins with an overview of the research questions and explains
how the research was developed. It does so by describing the rationale for the selection of its methods, the participants, the instruments and the procedures that were used to collect data. It explains how the data was collected and analysed. It describes briefly the ethical protocols it followed and the limitations of the research.

Chapter 4 presents the results of the data analysis. It links the data analysis to the aims of the study. The results are presented in relation to the six key themes which include demographic characteristics, family background, school environment, female students’ life value priorities, their three-year plan, and their suggestion on school improvement strategies.

Chapter 5 includes the discussion of the findings and their implications to future planning of social and educational projects/initiatives and research. The chapter summarises the findings of the study in relation to the research sub-questions outlined in Section 1.3. The findings are related to the previous studies and reports discussed in the literature review; similarities and differences are highlighted. The implications to future projects in the area of girls’ education are proposed in relation to visions inspired by scholars such as Freire and Gadotti, both of whom see development and transformation as dialogically conditioned. The findings of the study reinforce the need for projects and initiatives which draw on the power of community intelligence, the need for creativity and divergent thinking, and the intellectual empowerment of people in general (Lian, 2011).
CHAPTER 2: LITERATURE REVIEW

This chapter provides the study with concepts and understandings for analysing the dynamics which affect retention of girls in schools. To this end, the chapter describes the ecological system theory proposed by Bronfenbrenner (1977, 1979, 1994) and draws on studies which address a full spectrum of the dynamics which form children’s environment.

Following Bronfenbrenner’s categories (1994), the chapter looks at different kinds of policies, initiatives and programs that have been undertaken around the world, including countries grouped around the Association of Southeast Asian Nations (ASEAN) community and Cambodia, to assist girls in continuing their education. It also reports on the factors which research shows to impact on the quality of female students’ school experiences, which may need to be taken into consideration when evaluating the success of the government programs.

Against this background, the chapter identifies the research questions of the study and its sub-questions (Section 1.3).

2.1 Ecological system theory

There is a number of studies which look at strategies for supporting children in attending school, including studies which look at girls’ attendance in particular. When examining school retention rates, researchers look at a wide range of factors which together impact on the learning experience of female students and their school environment. This includes factors such as parents, siblings, peers, teachers, school environment, and culture. These findings resonate with the ecological system theory developed by Bronfenbrenner, who investigated human development in terms of the dynamics which impact on children from early on (Bronfenbrenner, 1994).
Bronfenbrenner’s ideas provide this study with concepts for analysing the dynamics which affect retention of girls in schools. A brief overview of his theory illustrates the concerns that need to be taken into account when investigating a child’s environment and their experiences.

Bronfenbrenner’s theory shows that human development is impacted by children’s more and less immediate environment. He defines environment as a system of relationships that a child has with people and everything in and around him or her (Bronfenbrenner, 1977, p. 513). These people and factors form complex layers, with each layer having a significant impact on the development of a child (Bronfenbrenner, 1979).

Bronfenbrenner divides these into five systems. Figure 1 illustrates the relationships between the various systems in Bronfenbrenner’s model. The macrosystem includes the social, political and historical factors which shape the context of girls’ education and their enrolment retention in schools. The exosystem looks at the relationships which form education environment, including policies. The mesosystem concerns itself with the dynamics which shape students’ learning experiences. The microsystem focuses on immediate students’ family relationships, the local community and resources.

All systems impact on one another (Bronfenbrenner, 1979, 1994). The macrosystem is the overarching structure of the model and comprises of comprehensive patterns of the exosystem, mesosystem and microsystem which, together, allow to account for a range of factors, from global trends to cultural belief/values, sub-cultures, norms, principles, regulations, laws, customs, life-styles, and other practices. For example, the model helps to relate a local practice (microsystem), such as parents’ belief that
investing in boys’ education is more valuable than in girls, to other practices and traditions, such as the role of women in rural Cambodia (exosystem), girls’ own feelings and experiences (mesosystem), and the global trends which reflect the direction of change and the impact it will have on women globally (macrosystem).

In the present study, based on this structure, the macrosystem is the right of all children to education. This right was declared by the United Nation Convention on the Rights of the Child (UNICEF, n. d) and signed by approximately 150 countries, including Cambodia. In this regard, when investigating girls’ learning experiences, the market forces were considered and their impact on the economy of the world, Cambodia, and on women.

The exosystem takes into consideration the impact that the global conditions had on local conditions. In this study, the political history of Cambodia is discussed and the impact of that history on education and current developments.

The mesosystem links two or more settings. Good examples of this category are intersections between the different cultural frameworks (values) which impact on how girls evaluate their own experiences and expectations people have of them. In the present study the mesosystem will be investigated by examining the relationship between the characteristics of female students’ demographics and their school environment.

The microsystem is the immediate environment that has the most direct connection or interpersonal relations with the child. This layer includes the people closest to the students, consisting of groups such as parents, siblings, guardians, peers, teachers, classmates, neighbourhood and other developmental setting such as childcare, school, and the local community. The relationships have a two-way effect on the participants.
For example, while parents may affect a child’s beliefs/behaviour, a child too affects the behaviour and the beliefs of his or her parents (Bronfenbrenner, 1979). In the present study, this category will be examined by focusing on female students’ demographic characteristics, which include female students’ school age, school distance, family as an educational resource (family social capital, family human capital, family economic capital, family cultural capital), school environment, financial support, teachers support and teacher-student relationships, schools’ physical condition/facilities and environment, access to technology, academic performance, students’ learning experience in schools.

Figure 1: Theoretical framework
In the next section, the study looks at the findings of previous research and reports in relation to the different layers of the model.

2.2 The right of adolescent female students to education

The importance of girls’ right to education is widely recognised all around the world. Still, it is sad to learn that, in 2006, girls between six to eleven years of age constituted 60% of the 110 million children in the world’s least developed countries, such as Cambodia, Nepal, and New Guinea, who discontinued their school education (Herz & Sperling, 2004). Still, in 2000, UNESCO found that 44 million girls could access primary schools in the least developed countries, which is far more than in 1990, and policy-makers continue seeking solutions to improve girls’ education in the developing world. However, the disparity between girls’ and boys’ access to school continues to exist (UNESCO, 2000).

The following sections offer detailed information about the global and local recognition that is given to the importance of girls’ education and its relevance to their countries and citizens. Significant policies, programs and initiatives are outlined, which have been implemented internationally and in Cambodia in order to enhance the opportunities of adolescent girls to continue their education throughout the lower and upper secondary school levels.

2.2.1 Globalisation and the status of girls’ education

Education is widely recognised as the most essential tool to unlock the full potential of women. There is a global understanding that education helps women to broaden their chances of building a healthier life of their own. Additionally, helping girls to receive equal access to quality education is the path to promote sustainable economy (UNICEF, 2011). According to Gene Sperling (in Alter, 2008), a top economic advisor
to both Presidents Barack Obama and Bill Clinton, “Experts believe educating girls is the most important investment in the world [because of] how much they give back to their families” (p. 48). Additionally, when women are educated, they tend to have children later in life, child and maternal mortality decreases, as well as chances of HIV infection. In rural areas, educated mothers are able to improve their farming techniques, resulting in improved nutrition for their children; girls’ education accounted for increases in both women's earnings, which were 20% higher for girls who completed primary school, and the likelihood that their children would persist in school (Levine, 2006). Most studies also recognise the benefits of increasing girls’ opportunity to go to school, as it will help to remove gender inequality in workplace and, as mentioned above, it will also improve child nutrition and decrease women’s fertility rate (Strauss & Thomas, 1995).

In recent history, examples of constructive solutions to support young females in continuing their education are multiple. In Sub-Saharan Africa, in countries such as Nigeria, access of girls to basic education is still low (UNICEF 2007). Considering the direct benefits of girls’ education, such as an increase of girls’ self-confidence, enhanced ability in social involvement, raised awareness on HIV/AIDS and sexual exploitation, and the encouragement to give their children access to education, in December 2004, a joint initiative was established between UNICEF and the Federal Ministry of Education in Nigeria (DFID) to implement the Girls’ Education Project (UNICEF 2007). The aim was to increase the number of girls accessing education at primary and secondary levels and to higher levels by 2015. Furthermore, the project also took action on health, water and sanitation, and on income generation activities. The results suggested encouraging outcomes, in March 2006 noting an increase in girls’ enrolments and school attendance.
Around the world, under the big umbrella of girls’ education projects, there were significant interventions which included (1) promoting girls’ education, (2) improving schools’ technical capacity and pedagogy in order to establish girl-friendly school, girls’ involvement in school and increasing their academic achievement, (3) improved basic education, (4) establishing connections between school and community activities, (5) government-stakeholder joint activities on improving curricular and teaching material of gender education, (6) encouraging employment of female teachers, (7) promoting schools only for girls and developing school facilities such as water, toilets, and libraries, (8) reducing girls’ dropout rate, (9) increasing family income in order to broaden girls’ opportunities to go to school, and (10) a women’s literacy and livelihoods pilots (World Education, n.d).

2.2.2 Globalisation and girls’ education in Cambodia

In the era of globalisation, countries in Southeast Asia face a number of challenges which include the use of English as the primary language for communication, regionalisation, technological advancements and the move toward standardisation, with education being seen as an economic investment that is geared to making productive workers who can help create nation’s economic growth (Lian & Pineda, 2014; Kell & Kell, 2014). With English as the lingua franca of the ASEAN economic community, schools’ curricula now have to include English as one of their compulsory subjects (Clayton, 2006).

The development of the ASEAN community will also mark the start of free trade between the ten member-countries. This means investments, capital, and especially labour, will have a free flow within the region. This requires highly competent and qualified human resources. At the same time, the rapid growth of technology has
resulted in unprecedented rates of change in all aspects of operations, including the quantity of available information, the rate of knowledge production and the richness of communication and mobility (both physical and virtual) (Lian, 2011).

In order to be in step with these changes, the countries of Southeast Asia are preparing the groundwork to develop more qualified human resources. However, for a country like Cambodia, which is young and has a poor infrastructure, the challenges of the ASEAN developments look threatening. People feel that they will not be able to meet the standards required for Cambodia to be an active player on the international arena and to create an adequately trained and qualified workforce. Considering these pressures, access to education is not only the right, but also an indicator of the country’s investment in its own future and wellbeing. In order to respond to these challenges, the Ministry of Education Youth and Sport (MEYS) of Cambodia sought to modernise the system, which also included the promotion of girls’ education as a key investment of the country.

This included Cambodia signing the United Nations’ Convention on the Rights of the Child (CRC), the Millennium Development Goals (CMDG), Education for All (EFA), and the establishment of the Cambodian Ministry of Education Youth and Sport. In order to promote welfare of all children and their right to access education, the United Nations’ Convention on the Rights of the Child, also known as the CRC or UNCR, identified four fundamental principles, namely (1) non-discrimination; (2) the best interests of the child; (3) survival, development, protection and (4) participation (International Child and Youth Care Network, 2001).

The Millennium Development Goals (MDGs) were set up by governments around the world to promote education and gender equality. The overall purpose was to draw
attention to the people’s right to health, education, shelter, and security. Among the eight goals of MDGs for 2015, goal numbers 2 and 3 are concerned with universal primary education, gender equality and the empowerment of women (UNDP, 2015).

*Education for All* (EFA), established in 1990, is another worldwide project that plays an important role in enhancing children’s access to education. To succeed, national governments, civil society groups, development agencies and the World Bank put their fullest effort towards achieving six specific educational goals: (1) to broaden and improve early childhood care and education, especially for vulnerable and disadvantaged groups; (2) that everyone, especially girls and ethnic minorities with difficulties, are given full opportunity to finish free and compulsory primary education; (3) to fulfil the learning needs of adults via life-skills programs; (4) to increase adult literacy by 50%; (5) to remove gender inequality at the primary and secondary education levels and achieve gender equality in accessing basic education; and (6) to ensure that there is an improvement in all aspects of the quality and excellence of education, so that everyone can successfully gain literacy, numeracy and life skills (World Bank, 2014). This project helps broaden the opportunity for girls, especially those in disadvantaged contexts, to have access to education which will lead to the improvement in girls’ school retention rates.

Within the Education for All initiative, in order to promote girls’ education, the MoEYS renewed its commitment and mobilised support for secondary education and literacy programs for girls and women. MoEYS, which is responsible for the wellbeing of people in terms of education in Cambodia, has come up with its own vision, mission, long-term and immediate-term objectives, and main policy priorities in its Education Strategic Plan 2009-2013 (MoEYS, 2010). The vision of MoEYS in Cambodia is to establish and improve the quality of human resources in the country. This vision can
be reached by the betterment of the education, youth, and sport sectors in connection with socio-economic and cultural developments, readiness to regionalisation and globalisation. The main long-term objective of MoEYS is to improve young adult capacity in all fields and to create a national spirit, morality and ethics. This objective is in accordance with UN’s Child Rights Convention (UNICEF, n.d.), whose aim is to create equal access to quality education for all children, no matter their social status, location, ethnic group, religion, language, gender and physical features.

Moreover, the Ministry also seeks to meet the needs of regional and international standards so as to ensure quality competition in the job market. They have three main policies, namely (1) establishing equitable access to education services, (2) upgrading quality of education services, and (3) improving capacity of educational institutes and their staff (MoEYS, 2010). These priorities also play an important part in enabling the achievement of the Ministry’s vision. More specifically, regarding the basic education in lower secondary schools (year levels 7–9), MoEYS created a national curriculum to provide all students with a breadth of knowledge, skills, Khmer language, mathematics, sciences, social studies, foreign languages, learning skills, life skills, vocational education, moral education and personal development. Under MoEYS’ work, the objective of the department of general secondary education, which is responsible for lower secondary education, is to reduce students’ difficulties to access education in order to ameliorate educational quality and service and to expand the lower to upper secondary transition rates (MoEYS, 2010).

Beside the work done in terms of these global and national initiatives, in order to improve the education sector, and especially to promote girls’ status in relation to their education, there are programs which target girls’ education and which are conducted by the World Education Project in various regions, including Cambodia, Nepal,
Guinea and other countries, in cooperation with local (non-government) partners (NGOs/associations), local communities, schools, and the governments of each country. For example, to help raise girls’ education status, Nepal has worked on projects such as the Opportunity Schools Program, Quality of Education through Child Friendly Schools, Good Return — Economic Education and Livelihoods Skills for Economically Disadvantaged Women (World Education, n.d). Guinea implemented significant projects, such as the Women's Literacy and Livelihoods Pilot, Ambassadors' Girls' Scholarship Program (AGSP), Combating Exploitive Human Trafficking through Education and Civic Participation, and Protecting Women and Children from Human Trafficking and Exploitative Labour Practices. Cambodia too has implemented a considerable number of remarkable programs to help improve girls’ education in the country, with much support from international organisations, NGOs and the World Bank. Among them were the Improved Basic Education in Cambodia Program, School Library Construction Project, School Toilets, Wells, and Hand-washing Facilities Project, Pre-Industry Life Skills Program, Youth on the Move, and Schools for Life Program (World Education, n.d).

In addition, the Cambodia Education Sector Support Project (CESSP), launched in 2005 by the World Bank, focused specifically on poor and remote communities. It sought to promote gender equality in considerable ways. The project was implemented with the aim of (1) promoting girls’ school enrolments, attendance, school distance reduction, and hygiene amenity reduction through generating numbers of school in under-served communities; (2) improving equal access to education for students through teacher training; and (3) providing scholarship funding, especially for girls and students at the primary to secondary transition. The evaluation of the project showed positive result and an increase in girls’ enrolments and school participation.
Furthermore, there was also an increase in the upper secondary school transition rate (World Bank, 2012).

Altogether, the programs in Cambodia and elsewhere strongly promoted the prosperity and success of girls and their families by enhancing their access to education, improving enrolments and school retention rates through to grade 9, basic literacy, promoting sustainable livelihoods, developing life skills, knowledge employment readiness, school curriculum, teacher training, school and local capacity building, economic participation for youth, improving awareness of importance of education (World Education, n.d). However, despite this work by local and international organisations, illiteracy is still higher among women (UNESCO, 2012). Furthermore, the issue of girls’ retention rates in schools continues to be of concern in Cambodia, particularly in secondary education.

The next section offers a detailed overview of the historical, political and social factors which, together, impact on and interact with the quality of children’s education in Cambodia and of girls in particular.

2.3 History of education in Cambodia

The education system in Cambodia has been in place from at least the thirteenth century onwards. Cambodian education traditionally took place in Wats (Buddhist temples) and was offered by monks (Kell & Kell, 2014, p. 98). Back then, education was linked to religion (Buddhism). It was restricted to a small part of the population and was exclusive, mainly for males only (HBC-SU, 2007). This educational tradition was practised until the arrival of the French into the country.

During the French Colonial Era (1854-1955), economic infrastructure was the only concern of the French. Therefore, little value or attention was given to the education
sector (HBC-SU, 2007). They did not deal with the creation of the modern education system until the 20th century. However, the work they did in the field of education was not fruitful or publically available to everyone, but rather it was created to serve only a small group of people in order to meet the needs of the French colonial system.

After the French colonisation (1955-1975), once Cambodia became an independent state, a national education system was introduced. Even with very limited resources, the government of the country ruled by King Norodom Sihanouk brought universal education into existence. A group of educational institutes, such as the School of Health (1953), the Royal School of Administration (1956), the College of Education (1959), the National School of Commerce (1958), and the National Institute of Judicial, Political and Economic Studies (1961), were established by the government. Gradually, there were increasingly more secular institutions of higher education built to serve the educational purposes of the country until 1968 (HBC-SU, 2007).

Khmer Rouge Regime (1975-1979) was a time of massive grief for Cambodia. This was the most destructive stage that threw this little country into tragedy in every possible way. The education system suffered a chronic crisis as Pol Pot, the leader of this genocide regime, totally destroyed it. Schools and universities were considered useless to the revolution and unnecessary to the development of the country. Therefore, all educational institutions, ranging from the primary school to the higher education, were closed. Teachers, doctors, and other intellectuals, including those who wore glasses and spoke foreign languages, were killed, as it was believed that this group of people was the ones who brought into the country injustice, corruption, and exploitation. Consequently, 1.7 million people died through execution, hunger, overwork, and disease. After the removal of this regime, tens of thousands of widows and orphans were left in greatest poverty and the majority of the survivors were illiterate.
Moreover, after this aggressive regime, all teaching materials, textbooks, and publishing houses were ruined (Dy, 2013). What was left in the education sector after the overthrow of Pol Pot regime was an absolute destruction of the whole education system of the country. This was the time when the country's educators faced the greatest difficulties.

Modern Cambodia (1979 - present) begins after the overthrow of Pol Pot regime. It sees the on-going efforts to rebuild the education section in Cambodia from its complete destruction. The loss of the intellectual and educated people, and especially of qualified teachers through genocide, left the county with a shortage of human resources, which was one of the greatest barriers to developing a healthy education sector. Pre-school, primary, and secondary schools, non-formal education institutes for adults, higher education institutes, and the right to free basic education (compulsory education 9 years) was re-established by the present government. Furthermore, financial constrains were another important problem. This affected the salaries of teachers and caused a severe shortage of teaching materials. Since the genocide regime had thrown Cambodia into extreme poverty, this situation forced many parents, especially those in rural areas, to keep their children at home to ensure their safety, share household chores, and to work to earn money to support the family’s living standards. Girls were then the most vulnerable group, as parents believed that education for girls was not important. Therefore, there were low youth and adult literacy levels among females as compared to males. The literacy rates in Cambodia are still only 74%, with a literacy rate rank of 167 out of 215 countries (HBC-SU, 2007). It is estimated that over 50% of women are illiterate (Kell & Kell, 2014, p. 98).

In summary, due to the many factors explained above, many Cambodian girls were kept away from education, taking instead domestic duties of caregivers and caretakers
of younger siblings, performing household chores, and supporting the head of the family. Poverty, low status given by parents to girls’ education, the prohibitive distance between the home and the school, and the fear for safety when traveling alone from home to school, together continue to impact on the situation as it is today.

2.4 Current Cambodian education system

With the significant initiatives and the great efforts by the Cambodian government after the educational reform in 1996, the Cambodian education system is slowly improving. General education consists of 12 academic year levels, which are divided between six years of primary education (year levels 1 - 6) and six years of secondary general education (year levels 7 - 12). In secondary general education, there are two levels of educational school programs: lower secondary school (year levels 7 - 9) and upper secondary school (year levels 10 - 12) (see Table 1).

Table 1: Cambodian education system.

<table>
<thead>
<tr>
<th></th>
<th>Starting Age</th>
<th>Grades</th>
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</thead>
<tbody>
<tr>
<td>Primary school</td>
<td>6 years old</td>
<td>1 – 6</td>
</tr>
<tr>
<td>Lower secondary school</td>
<td>12 years old</td>
<td>7- 9</td>
</tr>
<tr>
<td>Upper secondary school</td>
<td>15 years old</td>
<td>10 – 12</td>
</tr>
</tbody>
</table>

2.5 Girls’ status in Cambodia

The next section illustrates the situation of girls and their status in the family, education, employment, and politics in Cambodia. Together, they provide a context for a better understanding of the inequalities that impact on the lives of young Cambodian women.

2.5.1 Girls’ status in the family
The low status of girls in the Cambodian society was highlighted in the Cambodian Defender Project 2012 and in the Gender Based Violence (CDPR) report (Barclay & Ye, 2012). These reports exemplified the additional hardship which Cambodian women experience as the main carers of their parents. For example, during the Khmer Rouge regime, as carers women agreed to have sex with Khmer Rouge soldiers in exchange for food or medicine for their parents (Barclay & Ye, 2012). In terms of forming a family or getting married, men normally had more freedom to decide whom they would marry. Young women were normally given to arranged marriages by their parents. In some cases, girls were considered a commodity to be “traded” in exchange for any benefits a prospect marriage arrangement might have meant to their parents. In other cases, parents believed that they were more experienced and more likely to make the right decision in this regard. In the family, the older daughters’ labour is needed at home to take care of their younger siblings and domestic chores, such as cleaning, cooking, and gardening (Ledgerwood, 2013).

2.5.2 Girls’ status in education

Generally, when it comes to education, sons are prioritised as compared to girls. In cases where parents cannot afford to send all the children to school, they would choose to invest in the education of their sons. Therefore, the lower status which is given to girls’ education is a concern. Even though roughly half of primary school students are girls, the number of female students falls to approximately one third in secondary schools and only about 15% of those in higher education are female (Secretariat of State for Women’s Affairs, 1995). It is officially claimed that education in Cambodia is free, but in practice, money is needed to pay for school fees, books, transportation, clothes and spending money (Ledgerwood, 2013). Early marriage of girls, different
gender roles in families and out-dated traditions which privilege males are factors that keep girls at home (MoEYS, 2002). Also, the transition from primary to secondary school is a critical stage, especially for young females, due to the fact that lower secondary schools are mostly far from students’ homes, and thus to ensure personal security, young girls had to be accompanied by older family members from home to school (MoEYS, 2002). In the report of Cambodia on the School Dropout Prevention Program, it is shown that the issue of girls’ retention is most acute at lower secondary education compared with primary and upper secondary education. According to the report, there is a lower percentage of students staying in schools before completing an education program in the rural and remote regions of Cambodia, compared to the metropolitan areas (USAID, 2011).

The Education for All 2015 National Review (Cambodian Government, 2015) showed that gender parity in Cambodia is still an issue as the inequities in female education system still exist. These inequities are apparent from the decreasing number of girls’ enrolments in higher year levels in primary education. In the academic year 2013, the total enrolment of girls fell from 47% in year 1 to 45.1% in year 6. There are even fewer girls and women in secondary and tertiary levels. There are nearly twice as many men (over 25) than women who have a secondary education in Cambodia. Also it is claimed that "adult women's secondary and/or higher education attainment is lower by almost half (9 percentage points) of their male counterparts, indicating wide inequality between genders in education in Cambodia" (UNDP, 2013).

Even though Cambodia can claim gender parity at the primary school level, certain areas in Cambodia still reveal significant disparities (MoEYS, 2002). Girls account for 85% of the out-of-school primary children in Cambodia. Furthermore, girls’ education status in terms of enrolment is even worse for remote areas of the country, such as
Oddar Meanchey province. In this remote province, for example, at the primary school level, the enrolment of girls in school was 46.5% and this rate fell to 36.8% by year 6. In secondary schools, girls constituted only one third of the total number of enrolments.

In conclusion, women’s status in the Cambodian society is gradually changing, but not quickly enough. Solutions are needed and these require context-specific understandings as national policies and programs do not appear to be sufficient.

2.5.3 Girls’ status in employment

In terms of equality in employment, policies require that women are ensured equal pay for equal work. Based on Chapter III, Article 36 (The Rights and The Obligations of Khmer Citizens) of the Constitution of Cambodia, adopted on September 21, 1993, it is stated that “Khmer citizen of either sex shall receive equal pay for equal work” (p.12). However, in practice, salaries of men and women are not the same. Since the 1993 elections and the introduction of non-governmental organizations (NGOs) with large female participation, the situation is improving. There are considerable numerous NGOs working on women’s issues in relation to domestic violence, employment training for women, birth control and women’s health, prostitution and education. Women not only take the lead in many of these organizations focused on women, but also in other kinds of NGOs (Ledgerwood, 2013).

2.5.4 Girls’ status in politics

The 1993 Khmer elections were the first in Cambodia since the downfall of the Khmer Rouge regime. Despite women constituting 58% of the voters, however, only 5% of the total nominated candidates were women. As a result, only five women won seats in the National Assembly.
In summary, it is increasingly clear that the status of girls in all fields of participation, and especially in education, is still lower, when compared to men, and opportunities are limited. This requires change to help improve the situation.

2.6 Female students’ demographic characteristics

2.6.1 School age

The Institute of Statistics of UNESCO has identified the primary school starting age as the age that students start primary education, study full-time and progress within the system without repeating or skipping an academic grade (World Bank, n.d). Six is also the primary school starting age in Cambodia (UNESCO, n.d). However, having been negatively impacted by the genocide of the Khmer Rouge regime, this policy has not been well practised. The loss of Buddhist teachers, ethnic minorities, and the educated elite has left this country largely illiterate, with few educated people. Therefore, after the overthrow of the last regime, in order to gain education, both men and women had to go back to school at an older age for literacy classes. Furthermore, many uneducated parents, especially in rural areas of the country, kept their children, both sons and daughters, entirely at home. With regard to school age, a study by Angrist and Krueger (1992) found that children who enter school at an older age tend to discontinue their education earlier than children who enter at a younger age. Based on his study, it is useful for the present research to examine and check if this also happens in the Cambodian context, especially in relation with female students’ school age and their retention rates in lower secondary schools.

2.6.2 School access/ distance

The MoEYS (2014), Education Statistics and Indicators 2013/2014 reported that geographical distance to schools impacts negatively on school attendance. Hindered
by poor infrastructure and disadvantaged by geographical characteristics, some areas in Cambodia are more likely to suffer from such natural disasters as floods. The difficulty to reach school results in high repetition and dropout rate in adolescent females in primary and secondary education. Along the same lines, the limited number of schools is also considered to be another significant factor affecting girls’ education. For example, even though most of the 5,000 villages in the countryside areas have primary schools, almost half of them do not provide complete primary education (year levels 1 to 6). Also, there is considerable difference in access and quality of basic education services between rural and urban areas. For instance, only a few rural areas in Cambodia have a lower and upper secondary school in the villages. Therefore, in many rural communities, students are made to take long trips to reach the school closest to their houses. This is often done by walking for many kilometres, and usually at a very young age. Not only is this exhausting on a daily basis, but for unsupervised children it can be dangerous too. This is a concerning issue for parents who fear for the safety of their children, especially girls. Hence, young girls are not permitted to make the journey back and forth by themselves.

In some instances, the distance which young female students must travel between home and school discourages their attendance at school. For example, as reported in the Child Fund Australia report, for a 14-year-old girl named Veth in Cambodia, getting to school was very difficult. As her home was far from the main road, to get to school, Veth was forced to walk one hour there and one hour back each day (Child Fund Australia n.d). The longer the travel time to school, the more difficult it is for the student to attend school. Therefore, in the present study, the traveling distance between home and school will be considered as a relevant factor when investigating the context of female students’ school experiences that influence their attendance.
2.7 The family as an educational resource

Formal education is one of many forms that engage children in learning and development. However, learning initially begins well before children start school. There is also growing evidence that a decision to leave school is made by the family, not the child. (Valdez et al., 2008; Blasco, 2009). Therefore, the family becomes a significant factor in encouraging children to attend and to stay in the school.

The sections below explore types of family resources and how each resource impacts on children’s school attendance. Four types of resources will be discussed, including social, human, economic, and cultural capital (De Graaf & De Graaf, 2000).

2.7.1 Family social capital

A family’s social capital refers to the relationship between parents and children (Graaf & Graaf, 2002). In order to transfer resources from parents to children, effective interaction among family members is needed (Coleman, 1988). In this study, family social capital will be discussed in regard to the following characteristics and values. First, it refers to parents’ participation in children’s academic activities. Parental contribution to children’s school activities are categorised into five types, including (1) contacts between parents and school, (2) parental involvement in school activities, (3) parent-child communication about school, (4) parental supervision involving homework, and (5) parents' educational aspirations for their child (Fan & Chen, 2001; McNeal, 1999).

Jimerson et al. (2000) showed that the environment that children were surrounded by and the parenting style in the family played an important role in determining the children’s academic outcomes and their school attendance. Children who were from extended families were negatively affected by this family issue. This means that
children from large families were given less communication, attention, and resources from their parents and this increased the likelihood of early school leaving (McLanahan & Sandefur 1994; Bhrolcháin et al. 2000; Heard 2004). The parent-child relationship was also examined in a study by Potvin, Deslandes, Beaulieu, Marcotte, Fortin, Royer, and Leclerc (1999). The results showed that inappropriate or bad parenting practice, such as shortage of emotional support, less involvement in children’s school activities, affects their willingness to attend school. This finding was consistent with the studies of Dreyfoos (1990), Azzam (2007), and Jozefowicz-Simbeni & Hernandez (2008), which showed that children could maintain their school attendance when their parents offered enough school activity supervision.

The topic of parent-child relationship toward education has also been studied by Battin-Pearson et al. (2000) and Rumberger (1995). They reported that parents who showed little expectation and engagement with their children’s learning activities affect their children’s academic achievement at school and showed a strong correlation with their children’s retention. Parental involvement, including contacts between parents and school, parental involvement in school activities, parent-child communication about school, parental supervision involving homework, and parents' educational aspirations for their child are important to children’s school performance (Fan & Chen, 2001; McNeal, 1999).

The above findings support a study by Ziomek-Daigle (2010). His study found that when parents become proactive and monitored their child’s homework and assignments, it helped ensure that their children completed work and were able to earn graduation credits. It is also important that parents share responsibility, partner in their children’s study and set regular schedules to follow up the progress of study of their children and to communicate with school staff.
The parent-child relationship has been put into a deeper study and discussion known as “parenting style”. It is suggested that when talking about parents-children relationships, parenting style should be taken into account as it is an indicator of the likelihood of children’s retention in school. It tends to look deeper into the quality of the parent-adolescent relationship (Blondak & Adalbjarnardottir, 2009). There are four main types of parenting styles, namely authoritative, authoritarian, indulgent, and neglectful. Generally, parents who adopt an authoritative style are accepting, warm, and encouraging toward their children, but at the same time they exhibit hard control. They impose developmentally appropriate expectations regardless of being intrusive or restrictive (Blondak & Adalbjarnardottir, 2009). An authoritarian style is when parents are demanding and controlling without response or warmth. With clear rules set by parents, children whose parents are authoritarian are not supposed to question (Blondak & Adalbjarnardottir, 2009). Indulgent is a style of parents who are responsive and warm, and support self-regulation but not confrontation (Blondal & Adalbjarnardottir, 2009). The last type of parenting style is neglectful. With this style, parents are not requiring and reacting quickly and positively toward their children. Parents do not give children any support, monitoring, guidance, or warmth (Blondal & Adalbjarnardottir, 2009). This study suggested that young people whose parents adopt an authoritative style have better academic performance than those whose parents are authoritarian or neglectful (Blondal & Adalbjarnardottir, 2009). Based on this study, when investigating parent-child relationships, it is important to investigate the parenting styles that parents practise toward the children in general and in regard to their learning in particular.

Family social capital also include such family issues as lack of parental support (Fall & Roberts, 2013), parents getting divorced (Weng et al., 1988), stress in family
(Gamier et al., 1997), behavioural control and acceptance of parents (Steinberg, Elmen, & Mounts, 1989), disagreement or argument between parents and among family members (Gillock & Reyes, 1999; Walker et al., 1998), as well as parents’ jobs changes (Orthner & Randolph 1999).

Another form of family social capital is household size and traditional gender roles. The number of siblings is also known to be one of the important predictors of school dropout (Boyle et al., 2002; Chernichovsky 1985; Okumu & Nakajjo & Isoke 2008).

A study by Glick & Sahn, (2000) found that female students who have siblings younger than 5 years old had problems with school attendance as the presence of those younger children obstructively influences girls’ grade attainment, their current enrolment and their decision about early school leaving. In relation to traditional gender roles, Cambodia is one of many countries in Asia that have strong beliefs regarding the roles of men and women (Eng, 2013). In particular, women are expected by their families to behave politely, be obedient, be good housewives and responsible for domestic chores such as looking after the younger family members, cooking, cleaning, and shopping, and so on. These factors pull them out of school (Colclough, 2000; Keng 2003).

Therefore, in order to learn how the family background affects Cambodian girls’ decisions to stay in schools, especially in rural areas, features of family social capital need to be considered and put under examination.

2.7.2 Family as human capital

Human capital is defined as cognitively encouraging surroundings and is measured in terms of the educational level of the parents (Traag & Van der Velden, 2011). Parents who have completed high educational qualifications are better and more deeply
informed about schooling and tend to push their children to higher levels of education (Lamb 1994; Rumberger 1983).

A study by Tansel (2002) found that a significant predictor of school attainment is parents’ level of education. A higher level of parents’ education means a higher tendency for their children to continue their education. He also found that the impact of parental education level was greater on girls than boys, which could mean that a change of the social status (social mobility) without education is harder for girls than boys. In other words, the level of education of the parents’ impacts on their children differently. For example, studies by Ellickson et al. (1998), Janosz and Le Blanc (1996) and Kaplan (1994) demonstrated that the educational level of the parents affected their daughters’ achievement stronger than that of their sons. This may relate to the fact that uneducated parents tend to live in remote and under-resourced geographical areas, where access to schools is hampered, which then disadvantages the progress of young girls’ education.

It is also possible that parents’ education has a significant effect on their attitudes towards girls’ schooling. A study by Glick and Sahn (2000) identified a relationship between the parental level of education and that of their children. They found that this correlation was linked more to the education of the mother. Their findings showed that while the educational qualification of the father affects the education of both boys and girls at school, the educational qualification of mothers has strongly affects only daughters’ enrolment and school retention. In any case, the educational level of the parents plays a significant role in promoting their children’s school attainment, even though the fathers’ and mothers’ education affect their children’s retention differently according to their gender.
Therefore, when examining the retention of female students, it is important to investigate the level of educational qualification of the students’ parents.

2.7.3 Family economic capital

Another type of family resource is known as “economic capital”. This mainly refers to the financial resources of a family. Family economic capital influences children’s educational status in a wide variety of contexts (Buchmann & Hannum, 2001). Families with adequate financial resources can afford to support their children financially, so that their children can achieve good academic results in school (de Graaf 1986; Coleman 1988). Typically, the main source of family income comes from the parents’ paid work, with the salary depending on the type of the parents’ occupation. Research has shown that fathers who did manual labour (physical work done by people) had children at risk of leaving school early more than those whose jobs were skill-based occupations (Lamb 1994). Glick and Sahn (2000) have demonstrated that the growth of family income impacts on girls’ enrolment and their school retention. Higher family income also decreased the likelihood of girls’ dropping out from school.

The roles of poverty (Levison et al., 2008; Halpern-Manners, 2011; Lutz, 2007; Kandel, 2003) and father’s occupation (Kandel, 2003; Lutz, 2007) have all been shown to be related to children’s school attainment. Boyle, Brock, Mace & Sibbons (2002) demonstrated that children from a high socio-economic family background are more likely to continue their education, while other children are less likely to complete their schooling. Findings from a study by Tansel (2002) indicate that family permanent income has a greater impact on girls’ school achievement than in the case of boys. The United Nations observed that "children and adolescents from the poorest households are at least three times more likely to be out of school than children from the richest
households” (UNDP, 2013, p. 5). In Cambodia, in particular, the main issue concerning family economic capital is a high demand for child labour. Owing to low domestic income, girls in rural areas in particular are expected to be responsible for domestic works and contributing to the family income (MoEYS, 2002).

Therefore, in the present study, in order to investigate the experience and the willingness of girls to continue education, the occupation of female students’ parents will be considered.

2.7.4 Family cultural capital

In *Distinction*, Bourdieu (1984) defines cultural capital as characteristics which, by virtue of being unequally distributed, secure profits of distinction (p. 113). In terms of the family cultural capital, such distinctions may reveal themselves in the form of attitudes, preferences, formal knowledge, behaviours, goods, and credentials that are given sufficient symbolic value to promote social mobility by other than economic means. In different societies and circumstances the same qualities may be given different symbolic values. The benefits acquired by the holders of cultural capital may include children benefitting from access to schools, family support to stay in school, and similar.

Bourdieu’s (1984) findings are consistent with studies by Yamamoto and Brinton (2010) and Byun, Schofer, and Kim (2012). Their research illustrated that cultural capital is an important determinant of children’s education (e.g., DiMaggio 1982; Dumais 2002; Jaeger 2011). The cultural capital of the parents affects children’s lives in terms of their academic success and the way of thinking about the value of education. This correlates with the earlier findings which showed that when parents prefer investing in boys’ education at the expense of their female children, girls too
are likely to give less value to their own education in much the same way. This culture of thinking will then pass from one girls’ generation to the next.

Therefore, in order to investigate girls’ values in life, and especially their attitudes toward the importance of their own schooling, the family cultural capital of female students will be taken into account. This will be done by juxtaposing attitudes which examine girls’ various preferences. This will include their willingness to follow their parents’ opinions, the degree of importance they give education, their willingness to contribute financially to their family from the early years of adolescence, and their decisions regarding pursuing love and personal relationships.

In relation to cultural values/priorities, a study by Jannette et al. (1992) on gender differences toward life values in the US indicated that males gave higher value to six life qualities, namely comfort and excitement, pleasure, social recognition, obedience, politeness, and self-control, with the motivation clusters of hedonism, stimulation, and conformity ranking higher than for females. In turn, females gave higher value to seven different life qualities, namely the world at peace, equality, inner harmony, self-respect, broad-mindedness, independence and being loved, self-direction, and universality. This study looked at value priorities of both males and females, graduating seniors from Lewis-Clark State College in Lewiston, but did not investigate the attitudes of adolescent girls, especially toward their education.

Looking deeply into the literature of family resources, it can be seen that various kinds of family capital (economic, human, social and cultural) impact on the willingness of a family (and its girls) to invest in education. In the context of this study, each type of family resource will be examined in order to gain a fuller picture.
2.8 School Environment

School is generally recognised as a very important institution in a child’s development. This is due to the fact that students, when reaching school age, have to spend a great deal of time to be educated and socialised into the broader community. School engagement, student school-related behaviours, and thought and feelings have attracted research which points to school as a critical factor in shaping students’ well-being, especially that of the girls. Previous research has demonstrated a relationship between students’ educational retention and teacher-student relationship, school building/facilities conditions, and access to technology at school. However, the findings cannot be always implemented in the context of Cambodia. Furthermore, there appear to be less research examining the financial resources available for students within Cambodian schools.

Therefore, the next sections review the literature on the above-mentioned school environment related factors.

2.8.1 Financial support within school in Cambodia

School is one of the settings where students are offered access to opportunities to develop knowledge necessary to succeed in future jobs and to develop strategies to support their wellbeing. In order to gain knowledge, different schools in different parts of the world support their students differently. For a developing country like Cambodia, financial support for the school plays a very important role in sharing educational expense with the students’ parents. For example, as mentioned earlier (section 2.4.4), even though it is officially claimed that education in Cambodia is free, in practice, money is often needed to pay for school fees, books, clothes, transport and pocket money. A report from UNESCO on EFA Global Monitoring (2014) states that
inadequate financing has been one of the main obstacles to achieving the goal of the Education for All. According to the National Plan of Education for All 2003-2015 (MoEYS, 2002), in Cambodia, the overall expense for education primarily depends on households' own private contributions. This means that parents are the ones who are responsible for any expense when sending their children to school. According to the report, the unofficial average family expense for children’s schooling is 3500 riels per student at the primary level, 8000 riels per student at the lower secondary level, and 10,200 riels per student at the upper secondary level. This expense does not cover the money spent on uniforms and stationery. This shows that financial support from the school plays a very important role in encouraging students to stay at school and to progress to higher educational levels. Therefore, in this study, the forms of financial assistance provided for child’s education will be examined.

2.8.2 Teachers’ support and teacher-student relationship

Conceptualisations of school engagement are different (Appleton, Christenson, & Furlong, 2008; Finn, 1989; Fredricks et al., 2004; Jimerson, Campos, & Greif, 2003). It was found that poor school involvement obstructs students’ learning outcome (Caraway, Tucker, Reinke, & Hall, 2003; DiPerna, Volpe, & Elliott, 2005; Finn & Rock, 1997; Wu, Hughes, & Kwok, 2010) and gradually increases the probability of student attrition from schools (Alexander, Entwisle & Horsey, 1997; Sinclair et al., 2003). Teacher-student relationship plays a significant role in promoting school engagement, and much research has been conducted in order to identify ways in which this relationship affects the motivation of the students and their learning experiences (Davis, 2003). Samdal, Nutbeam, Wold, and Kannas (1998) looked at teacher support, student support, disturbance in class, justice in school, safety in school, unreasonable job demands, bullying, and loneliness during break times.
It is believed that teachers play very important roles in providing support to their students. The support is not solely academic, but also experiential, social and intellectual. It includes providing motivation and a good classroom atmosphere, as well as responding to children’s needs and to the development of their emotional, behavioural, and academic skills (Resnick et al., 1997). In addition, as transition from primary to secondary school is a critical academic stage. Supportive relationships from teachers play a major role in reducing this stressful academic shift of students (Eccles et al., 1993; Oldfather & McLaughlin, 1993). For example, students in middle schools are said to complain that their teachers are less friendly, less supportive, and less caring compared to those in elementary schools (Feldlaufer, Midgley, & Eccles, 1988; Lynch & Cicchetti, 1997; Midgley, Feldlaufer, & Eccles, 1989). Studies of teacher-student relationships show that their quality significantly affects children’s social participation (Ladd, Birch, & Buhs, 1999), behavioural problems (Graziano, Reavis, Keane, & Calkins, 2007), academic performance (Skinner, Wellborn, & Connell, 1990), and learning outcomes (Valiente, Lemery-Chalfant, Swanson, & Reiser, 2008). Some other researchers also found that students at high school level who had supportive teacher-student relationships showed high motivation toward their study (Davis, Davis, Smith, & Capa, 2003; Davis, Schutz, Chambliss, & Couch, 2001), perceived classrooms in more positive ways (Davis et al., 2003), and received higher academic grades (Davis, 2003; Davis, H. A., & K. N. Couch, 2001; Davis, Davis, Smith & Capa, 2003).

From the teachers’ perspective, supportive teacher-student relationships are believed to improve classroom learning and student motivation because students feel secure about communicating with teachers. Teachers believe that students work harder for the teachers they like and that teachers could push those students to do more challenging
work at school (Davis & Ashley, 2003; Davis & Couch, 2001). Similarly, Potvin and Paradis (2000) found that good quality teacher-student relationships had a positive impact on students’ learning outcomes and their attainment in school. Vallerand and Senecal (1991) found that when teachers were controlling, unsupportive and showed no interest in their students, students tended to be at risk in regard to their school attendance. Fortin et al. (2004) also found that teachers’ attitudes toward their students influence student dropout. Moreover, it is indicated that teacher support enhanced students’ focus on mastery of their academic goals (Patrick et al., 2007), feelings of academic efficacy (Patrick et al., 2007; Ryan & Patrick, 2001), and self-regulated learning (Ryan & Patrick, 2001), which in turn facilitated students’ cognitive and behavioural engagement (Patrick et al., 2007; Ryan & Patrick, 2001). Azzam (2007) proposed some strategies to help improve student retention. They included promoting a good teacher-student relationship, reducing class sizes, giving more attention to individualised instruction, increasing teacher support, allowing students additional time with teachers, reaching out to parents to improve their relationship with the school, and ensuring that students had close ties with one adult in the building. A more recent study by Cheryl, Sarah M & Kathleen M (2014) showed that teachers fostering a caring connection and responding to students’ needs may help promote young adolescents’ sense of school belonging.

Teacher support is not the only thing that helps strengthen students’ willingness to stay at school. Their friends or peers are also important, because school is where students meet them, as well as their teachers. Besides teacher-student relationships, connections between peers have an important influence on the development and behaviour of students and their academic performance (You, 2011). Therefore, responsive student-student relations, where young adolescents feel known and accepted by peers and
receive academic and emotional peer support, may also be another way to increase students’ sense of belonging to their school community. Students with friends who drop out early from school showed a greater likelihood to leave school prematurely as well (Cairns et al., 1989; Fagan & Pabon, 1990; Rumberger, 1983). As teachers and peers are the groups of people who have close interactions with female students in their daily school activities, this study will consult these two groups in order to gain a better understanding of the learning environment of girls in rural school of Cambodia.

2.8.3 School’s physical condition, facilities and environment

In order to improve children’s development, the quality of school’s physical environment should be examined (Rogoff & Morelli, 1989; Rogoff, Paradise, Arauz, Correa-Chavez, Angelillo, 2003). Physical environment in this context refers to the location of school, school design, school facilities, and conditions of school building. Research shows that there is an important relationship between the condition of educational facilities and students’ academic outcomes (Cash, 1993; Hines, 1996; Lemasters, 1997). According to Schneider (2002), school facilities can be categorised in terms of the quality of the air inside the building, the provision of air to a room, heating standards, lighting, sound, the condition and quality of the buildings, the size of school, and the size of classrooms. The school environment affects children’s minds and behaviour through crowding (Evans, Lepore, Shejwal, & Palsane, 1998), noise (Evans & Maxwell, 1997), the amount of greenness at school (Wells, 2000), school safety and disciplinary policy (Frendenberg & Ruglils, 2007). A study by O’Neil and Oates (2001) found that there was a significant relationship between the condition of school buildings and student achievement, behaviour, and attendance, as well as teacher turnover. He found that students perform better academically in newer school buildings. Poor physical condition of school buildings contributed negatively to
children’s progress and success in school because of their danger. For example, a bad condition of pipes would contribute to students’ breathing problems, and other types of broken features may distract the teaching process. Children showed limited interest to study in ugly, scary, and dangerous schools (Noguera & Akoma, 2000).

With regard to school facilities in Cambodia, it is reported that 41.8% of primary schools are without water and 17.2% are without latrines (MoEYS, 2014). When all schools are taken into consideration, including secondary schools, these figures are much higher. Nearly half (49.1%) of all schools in Cambodia have no water and one third (33.5%) of all schools have no latrine. Rural schools in Cambodia have less access to latrines than urban schools (MoEYS, 2014).

When discussing school facilities, the library cannot be ignored. Many studies have found a positive impact of school library on students’ performance. For example, one study investigated the amount of borrowing material in the library versus new students’ grades and school attainment (Kramer, 1968). The findings showed that there was a positive correlation between borrowing and higher grades, and between borrowing and retention. A study by Williams, Wavell and Coles (2001) found that the school library had a positive impact on students’ academic results, broadening of learning, service provision, and professional expertise of teachers. In addition, Yoo (1998) found a significant educational impact of the school library on academic achievement, reading skills, student attitudes towards reading and second language acquisition in the case of students from immigrant backgrounds. Also, Haycock (1995) found that students did well on a basic research skill test, reading comprehension, and referencing material when they could access good libraries operated by effective librarians in comparison with students whose school was not equipped with library facilities. His results also
showed that with good libraries, students tend to read more as they have easier access to information.

Research on the importance of library in education is ongoing. However, much of this research looked mainly at higher education (Emmons & Wilkinson, 2011; Gratch-Lindauer (2006), 2007; Kuh & Gonyea, 2003; George et al., 2008; Mezick, 2007). Also, instead of looking at library services and learning outcomes in connection with school retention rates, research investigated library use in connection with students’ grades (Goodall & Pattern, 2011; Hiscock, 1986; Wong & Webb, 2011).

As can be seen, most research in this area focused mainly on the link between the library and students’ success in higher education and less on the connection between the library and school attendance rates school attendance rates at the lower secondary level, especially in the rural regions (Haddow, 2013). In the present study, access to library and library resource will be examined in relation to school attendance.

2.8.4 Access to technology

The world is currently experiencing an information explosion, with everyone connected and benefiting from this (Lian, 2011, Baum & Rowley 2008; Castells 2004; Chen and Wellman 2004; Hite et al. 2010). In the recent global economy, Information Communication Technologies (ICT) help improve learning and teaching qualities also in less developed countries by giving opportunities to young people to access to knowledge and skills they need. However, the inequality of access to technology and teachers’ inability to use it effectively and efficiently contributes to the divide between developed and less developed nations (Newby et al. 2013). With regard to the unequal access to technology, Chen and Wellman (2004), Keniston (2002) and James (2001) conceived the term “digital divide” to describe the difference in access to computers,
the internet and the capacity to use them. This unequal access negatively affects individuals and families in the least developed countries, as they have less chance to be informed on the new developments in a number of key research and professional areas (Evoh 2007; Busch 2011; Jhurree 2005; Hawkins 2002; Kozma et al. 2004).

The shortage of ICT resources in schools and the limited capabilities of teachers to use them thus affect the education system in the developing countries (Uzunbolyu & Tuncay, 2010). They also impact on the students in terms of their personal and social returns on their investment (Kozma et al. 2004; Gholami et al. 2010), their ability to compete in the workforce (Busch 2011; Jhurree 2005), and their inability to use ICT to support their life-long learning (Newby, Hite et al. 2013). With ICT, learning environments can be enhanced by simplifying complex learning processes (Alexander, 1999; Jonassen, 2000), advancing co-operative learning and reflection on content (Susman, 1998), and offering differential learning support (Lian, 2011; Mooij, 1999; Smeets & Mooij, 2001). A study by Evoh (2007) in South Africa showed that collaborative partnerships built with the help of ICTs can enhance the quality of education at the secondary level.

These earlier studies in other parts of the world have looked at ICT in relation to infrastructure, how it was effectively used in strengthening quality learning in secondary education, and how to sustain such improvements. However, the Cambodian government and educators face a different issue in regard to ICT. The uneven distribution of ICT is considered a major problem for Cambodian education. With financial constraints and poverty, a great number of public schools in Cambodia, regardless of their rural or urban locality, cannot afford ICT equipment. This is a significant drawback for the Cambodian students, especially for those who attend under-serviced and poorer schools in the country.
Therefore, this present study is going to investigate the availability of ICT within school in the rural community in relation to an understanding of girls’ learning experience and their retention at school.

2.8.5 Academic performance

It is widely recognised that academic performance plays a very crucial role in determining students’ retention (Phelan, 1992; Connell, Spencer, & Aber, 1994; Skinner et al., 2008; Wang & Holcombe, 2010). Poor academic achievement and learning difficulties show a very strong correlation with high school dropout levels (Cairns, Cairns, & Neckerman, 1989; Ekstrom, Goertz, Pollack, & Rock, 1986; Krohn, Thornberry, Collins-Hall, & Lizotte, 1995; Rumberger, 1983; Battin-Pearson, Newcomb, Abbot, Hill, Catalano, & Hawkins, 2000; Gamier et al., 1997; Worrell, 1997; Jimerson, Anderson, & Whipple 2002). These studies found that academic results affect students’ retention in many ways, such as through their learning experience, emotions, encouragement, commitment, and eventually their decision whether to continue their learning altogether. Another significant reason to pursue or abandon education is the link between education and students’ expectations regarding their future employment. For example, the participants in studies by Rumberger & Lamb (2003) and Rumberger & Thomas (2000) believed that without the upper secondary level education, they would receive low-paid jobs or remain unemployed.

Academic performance also depends on the students’ individual (true or perceived) abilities, self-efficacy beliefs and their personal preferences. Students’ investment in education was affected by their (real or perceived) cognitive abilities, school performance and their motivation (Traag & Van der Velden, 2011). Three characteristics have been identified as significant in relation to academic performance,
namely cognitive, emotional, and behavioural characteristics. Cognitive characteristics refer mainly to learning difficulties (Battin-Pearson, Newcomb, Abbot, Hill, Catalano, & Hawkins, 2000; Gamier et al., 1997; Worrell, 1997), which impact on grades, retention and academic outcomes (Jimerson, Anderson, & Whipple 2002). Students having emotional problems show low or no motivation to study (Alexander, Entwisle, & Horsey, 1997). Withdrawal from society and high levels of anxiety and depression are often problems of students who experience emotional difficulties (Marcotte, Fortin, Royer, Potvin, & Leclerc, 2001). Lastly, behavioural problems also impact on students’ retention (Jimerson, Egeland, Sroufe, and Carlson, 2000). Students with behavioural problems may become aggressive (Royer, Desbiens, Bitaudeau, Maltais, & Gagnon, 1999) and are prone to misconduct (Fortin & Picard, 1999) and/or drug or alcohol abuse (Younge, Oetting, & Deffenbacher, 1996).

Research reviewed in this section shows a strong relationship between academic performance and school attrition. In this study, therefore, academic performance will be included as a factor impacting on girls’ learning experiences.

2.8.6 Students’ learning experiences in schools

In order to promote educational achievement, schools need to promote children's happiness or subjective well-being (Huebner 2010). Students’ negative feelings toward school affect their school retention (Shannon & Bylsma 2006). A study by Martin, Huebner and Valois (2008) in the US found that students can have a positive experience, or at least less negative experiences, in schools when schools integrate well-being strategies such as positive student engagement, interpersonal relationships, problem coping skills, and support with academic achievement. While examining student well-being, a study by Randolph, Kangas, and Ruokamo (2009) in the US
identified four types of happiness characteristics. These are: (1) a student's overall quality of life; (2) lower order components such as frequency of positive and negative emotions and general life satisfaction; (3) satisfaction with specific life aspects such as with oneself, family, friends, living environment, and school; and (4) school satisfaction. Relationship between school climate factors and school satisfaction was examined by Samdal, Nutbeam, Wold, and Kanas (1998).

The results showed that the strongest predictors of student satisfaction with school were justice (fairness), safety of the school environment, teacher and peer support, and lowering of disturbances in class. Nativig, Albrektsen, and Qvarnstrom’s (2003) study in Norway and one by Cheryl, Kiefer, and Alley (2014) examined the relationship between student happiness and their negative experiences at school. Their findings showed that teacher and peer social support was an important predictor of students’ happiness. Suldo and Huebner’s (2006) study also demonstrated that students who had high levels of general life happiness tended to achieve higher academic performance at school than those who had an average level of life satisfaction. They also looked at the school climate in relation to adolescents’ general happiness. Their main finding was that academic self-efficacy and high social support from both classmates and teachers affected student satisfaction. Regarding students’ happiness in school, findings in Chen and Lu’s (2009) study in Taiwan showed that teachers’ and classmates’ academic support, organisational processes, and satisfactory feelings at school had a positive association with students’ general happiness, while classroom disturbance had a negative impact on their happiness at school.

In conclusion, based on the literature review, it is clear that students’ well-being in school impacts on their academic achievement and their decision to pursue their education. However, the outcomes of the studies cannot always be taken to apply in
the Cambodian context. Therefore, following the ecological theory of Bronfenbrenner, the present study will investigate the relationship between girls’ education status and their beliefs and life values, their experiences at school and their school environment, and how these factors affect their decision to continue their education at the upper secondary level.

2.9 Development of research questions

The literature review in this chapter discussed a great deal of research on the question of student attrition and their learning experiences. However, relatively few researchers looked at successful students and the experiences which contributed to their success. Also, insufficient attention is given by research to the subject of girls’ retention in rural schools. Instead, the subject is dealt with in general terms, with studies focusing on specific aspects of student attribution, persistence, and graduation. Still, the studies discussed in this literature review offer the present study a wealth of points for consideration for investigating adolescent girls’ experiences of education and their learning environments in Cambodia. This study is timely as the gap between the wealthy and less wealthy countries continues to grow, with Cambodian students facing lesser chances to compete successfully in the increasingly global employment market and with the need for females to be rightfully recognised as equal participants in the global market economy and the knowledge society.

This study therefore seeks to examine the factors which impact on female students’ retention in lower secondary school in rural Cambodia. It will do so by investigating demographic characteristics, family resources, and student girls’ opinions and attitudes toward their school environment. There features belong to the micro and mesosystems in Bronfenbrenner’s (1994) model. The categories of the micro and mesosystems focus
the study on the more immediate environment of the students and make it possible for the students to describe to engage with, albeit in the context of a questionnaire. The following research questions will inform the focus of the study:

**Central Question:**

What factors relating to the school environment and students’ learning experiences impact on the decision of the adolescent girls in rural Cambodia whether to continue and complete their education through to the upper secondary level?

**Sub-questions:**

1. What are the values of the young female students engaged in this study and living in the rural areas of Cambodia?

2. What are the opinions and the attitudes of the young female students engaged in this study toward their school environment?

3. What are the opinions and the attitudes of the young female students engaged in this study toward their learning experiences?

4. Do the opinions of the young female students engaged in this study regarding their school education environment and their learning experiences impact on their life values?

5. To what extent do the opinions of the young female students engaged in this study regarding their school education environment, their learning experiences and their life values impact on their decision to continue and complete their education?
2.10 Summary

This chapter described Bronfenbrenner’s ecological theory and its five descriptive layers which were developed in order to capture and analyse child development in ways that account for a child’s personal experiences. The layers have been shown to provide the study with a conceptual framework which makes it possible to contextualise the school experiences of young girls in rural Cambodia.

Following Bronfenbrenner’s framework, the chapter reviewed the literature relevant to the present study. It examined issues identified by research as impacting on student retention. First, it presented findings from the literature on programs and initiatives undertaken to support girls’ education in under-privileged countries. This also included Cambodia, with numerous programs and initiatives funded by international banks and programs. The literature review showed what is believed to be the desirable conditions to support students’ education and what therefore should be addressed to improve girls’ situation. The chapter discussed the links between the female student demographic characteristics, family resources, school environment, students’ learning experiences, and their reciprocal impact on students’ learning experiences. Numerous studies, which were reviewed, showed a strong correlation between these categories and student retention.

The chapter also offered a brief description of the political history of Cambodia and showed that the geographical position of the country and its ASEAN membership place additional challenges on its education system, as global competition and market forces challenge its infrastructure and the capacity to respond with adequately trained human resources. Finally, the chapter outlined the research questions.
Regrettably, from the perspectives offered by Freire (1990) and Gadotti (1996, 2010), the studies and the reports presented in this chapter frame education as a function of the properties of a child’s environment (parents, teacher quality, money, school and community infrastructure) or a child’s characteristics (self-efficacy). Much less, if at all, attention is given to the power of the community to transform its own condition. Arguably, issues such as the quality of roads, access to school busses, or parent/school relationships are symptoms of problems, but not necessarily the actual cause of low retention of female students in schools. For example, a school bus will solve little when a mother wants her daughter to beg on the streets, instead of going to school.

Addressing the cause is not easy as, frequently, it is not possible for external parties to understand the factors that influence individual and local belief systems and practices. Nevertheless, the methodology of this study draws on the literature and seeks to establish whether the programs conducted thus far to support education of girls resulted in any observable changes.

CHAPTER 3: METHODOLOGY
This chapter presents the research methodology of the study. A questionnaire was selected as a tool for data collection on the basis that it provided the study with multidimensional and structured data for quantitative analysis. The questionnaire was administered to two hundred and six (206) female students of the Pursat Lower Secondary School in the Pursat province of Cambodia in the academic year 2013-2014. The questionnaire consisted of three main sections which explored (1) the participants’ backgrounds, (2) their understanding of the support available within the school environment, and (3) their opinions about their learning experiences in school.

There is a total of five sections in this chapter. First, the chapter offers an overview of the research questions. Second, it describes the research method. The description includes five sub-sections which describe the rationale, the participating school and the students, the research instruments, procedures, and data analysis. Third, the chapter explains the ethical issues of the research. Fourth, it identifies the limitations of the research. Fifth, it provides a summary of the chapter.

### 3.1 Overview of the research questions

The literature review in Chapter 2 provided the study with the global and local context of the conditions which shape education in Cambodia and the factors which impact on the quality of students’ learning in general. It was shown that governments and different organisations develop multiple interventions in order to alleviate the numerous difficulties which prevent children from accessing education in Cambodia and around the world. In Cambodia, many challenges continue to persist and children in rural regions appear to be mostly disadvantaged due to many factors, including poor infrastructure and traditional cultural biases.
This study is designed to investigate factors which impact on girls’ positive school experience and their decision to continue their schooling in rural Cambodia. It was hypothesised that an examination of these factors should enable the study to construct a better understanding of the contexts which influence these decisions (Figure 2). The study also seeks to reveal weaknesses in the support programs and identify aspects which call for improvement.

The research project was organised in relation to five research questions which sought to explore the following dimensions of school experience in relation to the students’ decision to complete their education at lower secondary school level and continue the study through to the next levels: (1) the young female students’ life value priorities, (2) their opinions towards their school education environment, (3) their learning experience in schools, (4) the impact of their life values on their learning and school experiences, and (5) the relationship between the three key factors (school environment, school experience, and life value priorities).

The research question regarding the life values of the students was investigated by looking at five aspects, including parents’ opinions, relevance of education, earning money, love and relationships, and housework.

As for school environment, the present study looked at support within school in relation to financial support, teacher support, access to the use of technology within school, and other form of support that students think they were given within their school.

Students’ feelings toward their school were examined by exploring the positive and negative words they chose to describe their feelings at school. Furthermore, for a deep
understanding of the students’ experiences, specific favorite and least favorite experiences of students at school were also investigated.

Figure 2: Research questions diagram.
3.2 Research methods

This section is divided into five sub-sections describing the (1) research rationale, (2) the participating school and students, (3) research instruments, (4) procedures, and (5) data analysis.

3.2.1 Rationale

Questionnaire was chosen as a method of data collection in order to elicit students’ more immediate or spontaneous feelings about their condition and contexts. The questions were constructed around issues which research showed to be relevant when designing educational systems in developing countries which are student friendly and which support female students in completing their schooling. They include:

(1) Expectations of girls – The researcher explored the general cultural values of each young female student and her individual family background in order to investigate factors that shape her life values.

(2) Pathways for girls – The researcher explored the educational environment and the young female students’ learning experiences in lower secondary schools in rural Cambodia.

(3) Success for girls - The researcher explored different types of support within school environment, including financial support, teacher support, access to technology, and other kind of support within school.

The participants were asked to complete the questionnaire on their own and, in so doing, reflect on the context of their education. Questionnaire was selected as the most appropriate instrument for the following reasons (Fraenkel & Wallen, 1996):
(1) It is a means of collecting data from a relatively large number of subjects within the constraints of a given time frame;

(2) It offers anonymity, allowing participants to provide accurate information about their own practice and workplace; and

(3) It provides the method and the data for answering the questions to be studied.

(4) In addition, it may be a positive experience for female students by encouraging self-reflection and adding value to education.

This kind of approach and method was appropriate to the present study as this project was conducted to as a two-year master degree by research. By using a questionnaire, the researcher could collect large amount of information from a large sample of population in a short period of time and in a relatively cost-effective way.

All information on the above mentioned matters was effectively collected and analysed using procedures described in this chapter.

3.2.2 Participating school and students

The school that was selected for the research project was located in a rural community in Cambodia and had a relatively large number of female students in each year level. With the recommendation of the Director of the Department of Education, Youth and Sport, Pursat, a lower secondary school was chosen to be the participating school since it included an adequate numbers of female students with diverse family demographical characteristics, it was accessible, the students were willing to participate and the girls were in the critical time of their study program, i.e. before they were to move to the higher secondary school level. Table 2 shows the student numbers in Pursat lower secondary school as compared with those in other schools in Pursat province.
Table 2: Numbers of lower secondary school students in Pursat provincial town

<table>
<thead>
<tr>
<th>N</th>
<th>Name of School</th>
<th>Grade 7</th>
<th></th>
<th>Grade 8</th>
<th></th>
<th>Grade 9</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Class</td>
<td>Female</td>
<td>All</td>
<td>Class</td>
<td>Female</td>
<td>All</td>
</tr>
<tr>
<td>1</td>
<td>Pursat</td>
<td>15</td>
<td>225</td>
<td>489</td>
<td>13</td>
<td>216</td>
<td>426</td>
</tr>
<tr>
<td>2</td>
<td>Prek Sdey</td>
<td>5</td>
<td>92</td>
<td>175</td>
<td>4</td>
<td>68</td>
<td>119</td>
</tr>
<tr>
<td>3</td>
<td>Teachomrat</td>
<td>3</td>
<td>46</td>
<td>90</td>
<td>3</td>
<td>39</td>
<td>68</td>
</tr>
<tr>
<td>4</td>
<td>Kraingtasen</td>
<td>2</td>
<td>46</td>
<td>84</td>
<td>1</td>
<td>16</td>
<td>38</td>
</tr>
<tr>
<td>5</td>
<td>Watluong</td>
<td>2</td>
<td>30</td>
<td>67</td>
<td>2</td>
<td>25</td>
<td>48</td>
</tr>
<tr>
<td>6</td>
<td>Oroka</td>
<td>1</td>
<td>30</td>
<td>45</td>
<td>1</td>
<td>18</td>
<td>25</td>
</tr>
<tr>
<td>7</td>
<td>Keosovan</td>
<td>1</td>
<td>18</td>
<td>36</td>
<td>1</td>
<td>14</td>
<td>34</td>
</tr>
<tr>
<td>8</td>
<td>Toulkrous</td>
<td>1</td>
<td>15</td>
<td>36</td>
<td>1</td>
<td>16</td>
<td>31</td>
</tr>
<tr>
<td>9</td>
<td>Thmorbeidom</td>
<td>1</td>
<td>8</td>
<td>13</td>
<td>1</td>
<td>11</td>
<td>22</td>
</tr>
</tbody>
</table>

The study targeted 210 female students from lower secondary education level (years 7, 8, 9). The researcher asked for assistance from the local teacher to help randomly select 70 students from each of the three year levels. All female students from each year level (year 7, 8, 9) were asked to write down their names on small pieces of paper and put them in the closed box. From each year level, the local teacher then randomly collected 70 pieces of those paper from that box. After the selection, the researcher administered the questionnaire to the students. However, four participants were withdrawn from the study due to the fact they were absent during the questionnaire completion session. The final total number of the student who participated in the study was 206, age 12-15-years old, all females, attending the Pursat lower secondary school in Pursat Province of Cambodia in the 2013-2014 academic year.

3.2.3 Research instruments

The design of the questionnaire was based on a study by CWCC (Cambodian Women Crisis Center) (2007). The questionnaire was structured to inform the central research question and the sub-questions of the study (Section 1.3). In order to answer the research questions aiming at investigating the school environment and female
students’ learning experiences which influence their school retention, the questionnaire examined four main factors, including: (1) the school environment, (2) students’ personal characteristics, (3) their family characteristics, and (4) female students’ suggestion on improving their learning experiences.

School environment was investigated by examining the support within school, including financial support, teacher support, and access to technology. The learning experiences of the female students were investigated by looking into the students’ personal and family characteristics. They were the students’ opinions on education, their life priorities and the characteristics of their family, including their family economic, human, social and cultural resources which were hypothesised to increase students’ opportunities to learn and thus enhance their chances to continue their education.

To learn about the students’ personal characteristics, the questionnaire asked about the students’ age, their academic performance, their most and least favourite experience in the school, and their three-year plan for education. To learn about students’ family characteristics, the questionnaire asked about the distance the students travelled to the school, the number of their siblings, their parents’ educational qualifications and occupations, and their life value priorities (Figure 3).
The three key sections of the questionnaire consisted of 18 questions written in Khmer language (Appendix 3). In Section I (Demographic Background), nine questions were designed to elicit the background information. The first five questions asked about the students’ demographic characteristics, while questions 6 to 9 investigated their life value priorities, their academic performance, and its relationship to their three-year plan for their education. In order to answer the questions, the participants were asked to place a tick (√) or to write numbers in the spaces that were provided (an English version of the questionnaire can be seen in Appendix 2).

Section II of the questionnaire consisted of five questions designed to elicit the young female students’ opinions on the forms of support available in the school which they
were attending. Again, the participants were asked to respond to all the questions by placing a tick (√) in the spaces provided.

Questions 10, 11, 12 13 and 14 asked the participants to identify their opinions on their education and the support within their school environment. This included financial support, support from teachers, access to the use of technology, and other kinds of support which they believed that they were given.

Section III of the questionnaire consisted of three questions designed to elicit the students’ understandings and opinions about their feelings and experiences in the school. In question 15, the participants were given a choice of 18 words to choose from to describe these experiences. The words were divided into two categories, 9 words representing positive experiences (Struggling, Proud, Confident, Encouraging, Brave, Joyful, Exciting, Rewarding, and Meaningful) and 9 words representing negative experiences (Difficult, Worried, Tired, Complicated, Confused, Hopeless, Passionate, Scared, and Boring). To answer this question, the participants were asked to tick three words which best described their feelings about their learning in their school. Two blank spaces were also given for the participants to write their own words, just in case the given words did not correspond to any of their feelings.

In question 16, the participants were provided with an opportunity to illustrate their positive and negative experiences in a more detailed way by writing them down, using their own words. Finally, question 17 provided an opportunity for the students to make any suggestions they had to improve their learning experiences in the school. The purpose of this last question was to extract any kind of students’ opinions on their learning that the questionnaire did not cover.
The first draft of the questionnaire was designed in Australia in November 2013. This draft was intensively discussed with the supervisors. To ensure that the wording on the information sheet and the questions themselves were relatively easy to comprehend, a pilot study was conducted in December 2013. The text was written in English and was then translated into the national language of Cambodia, Khmer. The English and the Khmer versions were sent out to 10 people to complete. This included a number of researchers at Charles Darwin University, Darwin, Australia and lecturers at a university in Cambodia. After one week, the pilot questionnaires were returned. According to the feedback, the following changes needed to be made:

- First, in question 14 of section II, participants were asked to determine whether she or her friends gave more value on their study (“Do your friends value studying more or less than you do?”). To answer this question, participants were given only two options, namely “less” and “more”. The feedback from the pilot study suggested giving participants an additional option of “same”, meaning “I and my friends’ value studying the same way.”

- Second, in question 15 of section III, participants were given 18 options (9 positive words and 9 negative words) to describe their feelings at school. The participants in the pilot study suggested that two more blank spaces should be given to allow participants to freely choose other answers in case none of the given 18 words represented their own feelings.

The experience of this pilot study helped the researcher to further improve the questionnaire.
3.2.4 Procedure

The questionnaire was administered anonymously by the researcher with an assistant who was a classroom teacher living in Pursat province and working as a teacher in the school which was chosen as the research site. That assistant was introduced to the researcher by the school principal. The assistant was selected based on his professional profile and pleasant working manner. He had an adequate knowledge to help the researcher. He knew the geography of the research area and had good relationships with other teachers and with the students’ parents/guardians in the community. During the fieldwork, he provided transportation, introduced the researcher to the teachers and the participating students, and facilitated some other aspects of organisation, including collecting the questionnaire consent forms.

During the data collection process, the participants were divided into three different groups in order to avoid overcrowding as they were completing the questionnaires. Each group met on a different day, so it took the researcher a total of three days to collect all the data. Before distributing the questionnaire to each of the participants, the researcher and the classroom teacher made sure that the classroom was quiet. The researcher then introduced herself and the purpose of the questionnaire to the students. After explaining all questions in the questionnaire, the participants were asked to start completing the questionnaire. The researcher and the classroom teacher did not influence nor disturb the process. Once the questionnaires were completed, the researcher thanked all the participants and asked them to hand in all the questionnaires. After the questionnaire was completed, the data was reviewed carefully in the field to make sure the researcher had received all the questionnaire copies. Then all the data was taken back to Australia by the researcher. In order to quantify and sort the data, it
was entered into Microsoft Excel before using the Statistical Package of Social Science (SPSS). Data input and related processes took the researcher one week. Then the researcher took another week to make sure the data were correctly entered by looking for inconsistencies and comparing the data with the information in the questionnaire.

3.2.5 Data analysis

The researcher used statistical methods to analyse the data obtained from the questionnaire. The statistical methods used were frequency, mean, standard deviation, Cross tabulation, and One-Way ANOVA.

To answer the research questions, the data was organised into six main sections, namely: (1) demographic characteristics of sample, (2) family background, (3) school environment, and (4) participants’ life value priorities, (5) participants’ three year plans and (6) participants’ suggestions on their learning improvements.

The analysis of the data in relation to demographic and family characteristics, life value priorities, and participants’ three year plans informed the research sub-questions 1, 4 and 5 about participants’ life values, the relationship of their life value priorities and learning experiences at the school and how these factors affect their retention in the school. Data from Section 1 on demographic characteristics were analysed by identifying the frequency of the participants’ answers and by calculating the means and standard deviations of participants’ age, their travel distance, and number of siblings. One Way ANOVA was used to find out the link between participants’ age and travel distance.

In order to analyse participants’ parents’ education and jobs, data from Section 2 on family characteristics were analysed by identifying the frequency of the participants’ answers and calculating the means and standard deviations. In this section, Cross tab
was used to analyse the relationship of participants’ parents’ education and the relationship of their parents’ jobs and education.

The analysis of the data in relation to the school environment in section 3 informed the research question 2 and 3, which related to participants’ academic performance, their feeling toward the importance of education, their personal feeling and experience toward school life, the relationship of participants’ academic performance and their feeling toward school life, and the support from school. To analyse the data in this section, frequencies were calculated. Furthermore, to find out the overall feelings of the participants, a new variable called “Experience” was created by calculating students’ choices of negative and positive experiences. The participants who choose all 3 words out of the 9 positive words in Section 3 of the questionnaire were categorised as “very positive experience”. The participants who chose two words out of the positive words and one word out of the negative words were categorised as “positive”. The participants who chose one words out of the positive words and two words out of the negative words were categorised as “negative”; and participants who chose three words out of the negative words were categorised as “very negative”.

The data regarding the students’ life value priorities in section 4 was analysed by calculating the most and the least frequently chosen life value priorities indicated by the students. One Way ANOVA was also used to find out the link between the students’ life value priorities and their feelings about the school, their academic performance, their demographic characteristics, and their family characteristics. This section was designed to inform the research question 1 on students’ life value priorities. At the same time, this section also informed the research question 4 which looked at the impact of the students’ life value priorities on their feelings about the school environment and their learning experiences.
The data concerning the students’ three-year plan, reason(s) for their plan, and the types of jobs that are possible with and without completing upper secondary education were analysed in terms of frequency. Additionally, Cross tab was used to identify the link between the participants’ three-year plans and their family characteristics, the relationship between the participants’ three-year plan and their academic performance at school. This analysis was to inform the research sub-question 5, which investigated the link between the students’ life value priorities, the school education environment and their learning experiences in relation to the impact they had on the female students’ plan to continue and complete their education.

Finally, Section 6 was designed to give an opportunity to the participants to mention any issues that the questionnaire did not mention in terms of the suggestions that they may have had on how to improve their school experiences. It was an open-ended question. The responses to this question were considered to be a qualitative data and were analysed by categorising the answers into different themes.

The answers to all sub-questions eventually informed the overall research question regarding the factors which impact on the students’ perception of their school environment and their learning experiences. It was expected that the information that was collected should provide the researchers with insights regarding the students’ context and how it impacts on their decision whether to continue and complete their education.

3.3 Ethical issues

As per the university requirements, before the data collection, the researcher obtained ethics clearance. Therefore, the researcher completed the National Ethics Application Form (Version 2008 – V 2.0) and submitted it to the Charles Darwin University (CDU)
Human Research Ethics Committee. The ethics application was approved by the CDU Human Research Ethics Committee on the 10th of February 2014. After the ethics approval was obtained, the researcher then contacted the Director of the Department of Education Youth and Sport of Pursat Province in Cambodia to introduce the project with the purpose of conducting a research study and to collect data.

After a discussion, consultation and a recommendation from the Director of the Department of Education in Pursat, an agreement regarding the research site was reached and an arrangement was made for the researcher, the school principal and the teachers to administer the questionnaire. With the formal written permission from the school principal, consent forms were obtained from the parents or guardians of the participants.

All the hard copies of consent forms of the Director of the Department of Education, Youth and Sport, the school principal, the teachers, the parents/guardians, and the students, and the completed questionnaires were stored in a locked cabinet in the Graduate Office in the School of Education, Charles Darwin University, according to the regulations of its Office of Research and Innovation. All the data stored in the computer were secured and only the researcher and her supervisors had access to it.

3.4 Limitations of the research

The research had several limitations which impacted on the findings.

First of all, the sample of the study was limited to only one school in one village in a province of Cambodia. Thus, despite the large number of participants, the study was too small in scope and too concentrated in one geographical area and location to allow for drawing any generalisations about the Cambodian educational system and the students’ learning experiences. The small sample is one limitation.
Secondly, the choice of the school was identified by the Department of Education. Therefore, it is not clear if the school was representative of other rural schools in Cambodia.

Thirdly, the questionnaire was based on the findings reported by the previous studies. Those studies looked for correlations between school enrolment retentions and factors that are typically addressed in the “First World’ countries. A critical assessment of the rationale which motivated the methodology of those studies is needed to better understand their relevance to the Cambodian context and, especially, to the mechanisms which inform and generate change. An in-depth analysis of this kind was outside the scope of the present study.

Fourthly, too little data is reported in the studies conducted thus far for the questionnaire to be based on data relevant to female students only. More information is needed to understand better the context of adolescent females living in rural Cambodia.

Fifthly, the time constraints prevented the study from gathering data from a greater range of stakeholders, a factor which would add more information regarding the impacts of the policies and programmes on the community as a whole and the career prospects and ambitions of young Cambodian females.

Also, in terms of statistical data, without examining the students’ Grand Point Average (GPA) or academic annual score results, the response to question 7 of Section I of the questionnaire, about the students’ academic performance in class, was obtained only by asking the students to self-assess. While some may argue that this form of assessment is quite telling, nevertheless, other forms of assessment, including the
students’ GPA, could have provides the study with richer dimensions of the students’ academic performance.

It is important to note that the participants are young and, as a result, their responses to the questionnaire will reflect the world in which they live. Therefore, their responses cannot be taken to reflect the world “accurately”, as they may not be able to supply the information in the way in which it is expected to be read by researchers.

Last but not least, as pointed by Taleb (2007), every statistical study needs to be aware of the limitations of the predictive value of its data. According to Taleb, correlations alone carry no predictive value. Taleb warns of “the problem of self-reference of statistical distribution” (p. 1). In other words, if the framework for obtaining data is the same as the framework used for its interpretation, the study has a problem.

So we can state the problem of self-reference of statistical distributions in the following way. If (1) one needs data to obtain a probability distribution to gauge knowledge about the future behavior of the distribution from its past results, and if, at the same time, (2) one needs a probability distribution to gauge data sufficiency and whether or not it is predictive outside its sample, then we are facing a severe regress loop.

Taleb, 2007, p. 1

3.5 Summary

This chapter described the methodology used to address the objectives of the present study and its limitations.

The selection of the participants was assisted by the local Department of Education and required the researcher to identify a school which was willing to participate and which also had a large number of female students. Data was collected in March 2014 using a standardised and formal questionnaire. It was administered to 206 randomly selected female students attending Pursat lower secondary school in Pursat province, Cambodia. In line with the research objectives, the questionnaire was informed by
previous studies and the correlations they reported between students’ enrolment retention rates and the features of their immediate environment.

The questionnaire was designed to investigate three main issues which included the participants’ background, their understanding of the support which was available to them in the school environment and their experiences in the school. To inform the research questions (Section 1.3), the analysis of the data was categorised into four sections, namely, family characteristics, personal characteristics, the school environment, and the students’ suggestions. The researcher applied statistical methods that included One-Way ANOVA, frequency, mean and standard deviation, and cross-tabulation. The qualitative data obtained from the questionnaire in response to an open-ended question was thematically categorised.

The next chapter presents the findings from the questionnaire.
CHAPTER 4: FINDINGS

This chapter presents the findings from the questionnaire. There are three sections in the questionnaire. The first section reflects the participants’ demographic characteristics, including their age, time spent to commute from home to school, the number of participants’ siblings, their parents’ educational levels, their parents’ jobs, their priorities in life, academic performance, their three-year plans and its justification, and the types of job that are possible with and without upper secondary school. The second section shows the participants’ understandings/opinions about the support available to them in their schools and participants’ values regarding education. Lastly, the third section illustrates the participants’ reflections on their positive and negative learning experience in the school.

The findings of the research study are organised and described in relation to six major categories, namely, (1) demographic characteristics of sample - participants’ age, traveling distance from home to school, number of siblings, and the relationship of each variables; (2) family background – students’ parents’ jobs, students’ educational level, the relationship of parents’ education, and the relationship of parents’ educational level and their jobs; (3) the school environment– the participants’ academic performance, the link between their academic performance and their learning experiences at the school, the participants’ values regarding education, the participants’ feelings and experiences in the school, the support within school, including the financial support, teacher support, access to technology, and other types of support within the school; (4) the participants’ life value priorities – link between the students’ life value priorities and their feelings about the school, their academic performance, their demographic characteristics, and their family characteristics, including the number of siblings, travel distance, age, and their parents’ education and
jobs; (5) the participants’ three-year plans - the justifications, the types of jobs that they believe are available with and without upper secondary school, the link between the participants’ three-year plans and their academic performance at school; the link between the students’ life value priorities, the school education environment and their learning experiences in relation to the impact they had on the students’ plans to complete their education; (6) improvement points suggested by the participants.

4.1 Demographic characteristics of sample

This section reports the findings linking the age of the participants, their time spent for traveling to and from the school, and the numbers of sibling they had in the family.

4.1.1 Age of the participants

There were 206 female students who participated in this study. Out of the 206 total female participants, 20 participants (9.7%) were 12 years old; 50 participants (24.3%) were 13 years old, 82 participants (39.8%) were 14 years old; and 54 participants (26.2%) were 15 years old. Table 3 shows the mean and standard deviation of participants’ age.

Table 3: Mean and standard deviation of item “age of the participants”.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of the participants</td>
<td>13.84</td>
<td>0.93</td>
<td>206</td>
</tr>
</tbody>
</table>
Figure 4 indicates that among all the 206 female students, 82 students were 14 years old, which was the highest number, followed by students who were 15 years old and 13 years old. The youngest female students were 12 years old.

4.1.2 Travel distances

Out of the 206 female participants, there were 105 students (51.0 %) who travelled less than 10 minutes from the house to the school. Ninety-one females (44.2%) spent between 10 to 30 minutes daily traveling to the school, while 10 students (4.9%) travelled between 30 to 60 minutes. It was found that no participant travelled more than 1 hour to their school. Table 4 shows the mean and standard deviation of travel distance back and from school.

Table 4: Mean and standard deviation of “travel distance”.

<table>
<thead>
<tr>
<th>Distance of travelling to school</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.54</td>
<td>0.59</td>
<td>206</td>
</tr>
</tbody>
</table>

*Note: A four-point scale was used: 1 = less than 10 minutes; 2 = 10-30 minutes, 2 = 10-30 minutes, 3 = 30-60 minutes, 4 = over 60 minutes*
4.1.3 Number of participants’ siblings

Out of the total 206 participants, there were 5 participants (2.4%) who had up to eight siblings and there were 4 females (1.9%) who were the only child in the family. It was found that around half of the participants (50%) had 2 to 4 siblings in their families. Table 5 shows the mean and standard deviation of participants’ number of siblings.

Table 5: Mean and standard deviation of item “number of participants’ siblings”.

<table>
<thead>
<tr>
<th>Amount of Siblings</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3.49</td>
<td>1.52</td>
<td>206</td>
</tr>
</tbody>
</table>

Figure 5 shows that, predominantly, the students had two or three siblings. Also, out of 206 participants, 81 students, 45, 19, 10 and 7, had 4, 5, 6, 7 siblings respectively.

Figure 5: Number of siblings.
4.1.4 Participants’ age and travel distance

A One-Way ANOVA was used and it was found that there was no significant relationship between the participants’ age and their travel distance, \( p = \text{ns} \).

4.2 Family background

This section reports the findings on the educational level and job categories of the participants’ parents and the link between the education and the jobs of the parents.

4.2.1 Parents’ educational level

4.2.1.1 Fathers’ level of education

Out of the total 206 participants, there were 102 participants (49.5%) who did not know the educational level of their fathers. It was shown that the fathers of 40 participants completed upper secondary education and the fathers of 35 participants completed tertiary education (17.0%). The fathers of 20 participants (9.7%) finished lower secondary education. The fathers of 9 participants completed primary education only (Table 6).

Table 6: Frequency and percentage of “fathers’ educational level”.

<table>
<thead>
<tr>
<th>Participants’ fathers’ level of education</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not know</td>
<td>102</td>
<td>49.5</td>
</tr>
<tr>
<td>Tertiary</td>
<td>35</td>
<td>17.0</td>
</tr>
<tr>
<td>Upper secondary school</td>
<td>40</td>
<td>19.4</td>
</tr>
<tr>
<td>Lower secondary school</td>
<td>20</td>
<td>9.7</td>
</tr>
<tr>
<td>Primary school</td>
<td>9</td>
<td>4.4</td>
</tr>
</tbody>
</table>
Table 7 shows the mean and the standard deviation of the education of the fathers of the participants who could provide the data. In Table 7, the reported fathers’ level of education is close to tertiary education.

Table 7: Mean and standard deviation of “fathers’ educational level”.

<table>
<thead>
<tr>
<th>Father Educational Level</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.02</td>
<td>1.21</td>
<td>104</td>
</tr>
</tbody>
</table>

*Note: 1 = Primary school, 2 = Lower secondary school, 3 = Upper secondary school, 4 = Tertiary school*

### 4.2.1.2 Mothers’ level of education

There were 105 students (51%) who did not know their mothers’ level of education. The mothers of 41 participants (19.9%) completed lower secondary school level. The mothers of 28 participants (13.6%) completed upper secondary school level. The mothers of 13 participants (6.3%) completed the tertiary level of education. The mothers of 19 participants (9.2%) finished their education at the primary level (Table 8).

Table 8: Percentage of “mothers’ educational level”.

<table>
<thead>
<tr>
<th>Mothers</th>
<th>n</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not know</td>
<td>105</td>
<td>51.0</td>
</tr>
<tr>
<td>Tertiary</td>
<td>13</td>
<td>6.3</td>
</tr>
<tr>
<td>Upper</td>
<td>28</td>
<td>13.6</td>
</tr>
<tr>
<td>Lower</td>
<td>41</td>
<td>19.9</td>
</tr>
<tr>
<td>Primary school</td>
<td>19</td>
<td>9.2</td>
</tr>
</tbody>
</table>

Table 9 shows the mean and standard deviation of the educational level of the participants’ mothers.
Table 9: Mean and standard deviation of “mothers’ educational levels”.

<table>
<thead>
<tr>
<th>Mother Educational Level</th>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.35</td>
<td>1.48</td>
<td>101</td>
</tr>
</tbody>
</table>

Note: 1 = Primary school, 2 = Lower secondary school, 3 = Upper secondary school, 4 = Tertiary school

4.2.2 Parents’ jobs

4.2.2.1 Fathers’ Jobs

Figure 6 shows the sample question in the questionnaire regarding the job of the participants’ fathers.

Figure 6: Sample question participants’ fathers’ job in questionnaire.

Q: 5. ប្រាគាអ្វីប្រឹត៍មនុស្សរបស់បាល់បៃតងម្នេស្រួល? (what is your father’s job? If they do not work at the moment or you do not know, please leave it blank.)

Participant # 127: ការប្រឹត៍មនុស្សរបស់បាល់ (Father’s job) កសិករ (Farmer)

All the 206 participants provided answers regarding their father’s jobs. Table 10 indicates the occupations and the frequencies of the fathers’ jobs.

Table 10: Frequency of “fathers’ jobs”.

<table>
<thead>
<tr>
<th>Father’s Job</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmer</td>
<td>41</td>
</tr>
<tr>
<td>Businessman</td>
<td>37</td>
</tr>
<tr>
<td>Policeman/Soldier</td>
<td>30</td>
</tr>
<tr>
<td>Teacher</td>
<td>28</td>
</tr>
<tr>
<td>Government Official</td>
<td>21</td>
</tr>
<tr>
<td>No Job</td>
<td>11</td>
</tr>
<tr>
<td>Motor Taxi</td>
<td>7</td>
</tr>
</tbody>
</table>
Based on the job category, “Skilled Trades Jobs” included taxi drivers, construction worker, sculptor/carpenter, businessman, electrician, motor taxi driver, mechanician, tailor, taxi driver, and security guard. Teachers and government officers were categorised as “Academic Jobs”, farmers as “Manual Labour Jobs”, company staff as “Professional Jobs”, and do not have job as “Jobless”.

Table 11 shows that the fathers of 69 participants (33.5%) were categorised as Skilled Trade Jobs followed by 48 fathers (23.3%) in Academic Jobs. There were 41 fathers (19.9%) whose jobs were categorised as Manual Labour Job and 37 of them (18.0%) were categorised as Professional Job. Out of 206 fathers, there were 11 (5.3%) who were jobless.

Table 11: Percentage of the categories relating to “fathers’ jobs”.

<table>
<thead>
<tr>
<th>Fathers’ Jobs</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skilled Trade Job</td>
<td>69</td>
<td>33.5</td>
</tr>
<tr>
<td>Academic Job</td>
<td>48</td>
<td>23.3</td>
</tr>
<tr>
<td>Manual Labour Job</td>
<td>41</td>
<td>19.9</td>
</tr>
<tr>
<td>Professional Job</td>
<td>37</td>
<td>18.0</td>
</tr>
<tr>
<td>Jobless</td>
<td>11</td>
<td>5.3</td>
</tr>
<tr>
<td>Total</td>
<td>206</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Note: N = 206*
4.2.2.2 Mothers’ jobs

Figure 7 shows the sample question in the questionnaire regarding the job of the mother.

Figure 7: Sample question of participants' mothers’ job in questionnaire.

Q: 5. តើឪពុកម្ដាយរបស់បអូនប្បកបរបរអ្វី? បានស្លាប់សារការងារវាណាទៅៗ ឬ បានស្លាប់សារការងារទឹកកស្សុះ  (what is your mother’s job? If they do not work at the moment or you do not know, please leave it blank.)
Participant # 136 : មុខរបរ (Mother’s job) អំពិល (Hair Dresser)

Out of the 206 participants, all of the participants indicated their mothers’ jobs. The jobs were: Jobless, Businesswoman, Teacher, Farmer, Cook, Hair Dresser, Tailor, Doctor, Government Officer, and Company Staff (Table 12).

Table 12: Frequency of “mothers’ jobs”.

<table>
<thead>
<tr>
<th>Mother’ Jobs</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business woman</td>
<td>77</td>
</tr>
<tr>
<td>Jobless</td>
<td>60</td>
</tr>
<tr>
<td>Farmer</td>
<td>40</td>
</tr>
<tr>
<td>Teacher</td>
<td>17</td>
</tr>
<tr>
<td>Doctor</td>
<td>5</td>
</tr>
<tr>
<td>Government Official</td>
<td>2</td>
</tr>
<tr>
<td>Cook</td>
<td>2</td>
</tr>
<tr>
<td>Hair Dresser</td>
<td>1</td>
</tr>
<tr>
<td>Tailor</td>
<td>1</td>
</tr>
<tr>
<td>Company Staff</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>206</td>
</tr>
</tbody>
</table>

Based on occupation categories, businesswoman, cook, hairdresser, and tailor were categorised as “Skilled Trades Jobs”, teachers and government officers as “Academic Jobs”, farmers as “Manual Labour Jobs”, company staff as “Professional Job”, and do not have job as “Jobless”.
Table 13 shows that out of 206 mothers, 60 mothers (29.1%) were jobless. The jobs of 81 mothers were categorised as Skilled Trade Job, the jobs of 6 mothers (2.9%) as Professional Jobs, the jobs of 40 mothers (19.4%) as Manual Labour Jobs, and the jobs of 19 mothers (9.2%) as Academic Jobs.

Table 13: Percentage of categories of “mothers’ jobs”

<table>
<thead>
<tr>
<th>Type of Job</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skilled Trade Job</td>
<td>81</td>
<td>39.3</td>
</tr>
<tr>
<td>Jobless</td>
<td>60</td>
<td>29.1</td>
</tr>
<tr>
<td>Manual Labour Job</td>
<td>40</td>
<td>19.4</td>
</tr>
<tr>
<td>Academic Job</td>
<td>19</td>
<td>9.2</td>
</tr>
<tr>
<td>Professional Job</td>
<td>6</td>
<td>2.9</td>
</tr>
<tr>
<td>Total</td>
<td>206</td>
<td>100.0</td>
</tr>
</tbody>
</table>

In summary, in terms of family background, the result shows that the majority of the participants’ fathers completed upper secondary education, while the majority of the participants’ mothers completed lower secondary education.

**4.3 School environment**

In order to investigate the link between the female students’ learning experiences and their school environment, six school-related factors were put into analysis. They included (1) students’ academic performance, (2) individual student feelings about education, (3) students’ feelings about the school life, (4) students’ experiences at the school, (5) links between the students’ academic performance and their learning experiences, and (6) support from the school.

**4.3.1 Academic performance**

The participants were asked to self-assess their academic performance at the school. Out of 206 participants, 122 students (59.2%) self-rated their academic performance
as “Good”, while 75 females (36.4%) rated themselves as “Fair”. Also, 8 participants (3.9%) rated their academic performance as “Very Good” and only 1 student (0.5%) rated herself as having “Poor” academic performance. Table 14 shows the mean and standard deviation of item “academic performance”.

Table 14: Mean and standard deviation of "participants' academic performance".

<table>
<thead>
<tr>
<th>Mean</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.66</td>
<td>0.55</td>
<td>206</td>
</tr>
</tbody>
</table>

Note: 1 = Poor, 2 = Fair, 3 = Good, 4 = Very good

Figure 8: Participants' academic performance.

4.3.2 Individual participant feelings about education

Students were asked to identify their feelings about education and compare with their peers (Questionnaire: Do your friends value studying more or less than you do? More: ... Less: ... Same: ...). The data showed that 194 participants (94.20%) said they valued education equally high as their friends did. Among the students, 11 females (5.3%) said they placed higher value on education than their friends did. Only 1 student (0.50%) said that their friends gave higher value to education than she did.
4.3.3 Personal feelings toward school life

206 participants were asked to choose three words out of the total 18 words to describe their feelings at school. These were: 9 positive words - Exciting, Encouraging, Proud, Brave, Passion, Joyful, Meaningful, Rewarding, Confidence and 9 negative words - Complicated, Struggling, Worried, Confused, Hopeless, Tired, Difficult, Boring, Scared. None of the participants chose to write their own words in the two blank spaces given. The data showed that 142 times (22.9%) they chose “struggling”, followed by “proud” which was 98 times (15.8%) and 65 times (10.5%) “confident”. “Encouraging” was chosen 63 times (10.1%) while “brave” appeared 60 times (9.7%). There were 57 (9.2%) selections of “joyful” and 46 (7.4%) choices of “exciting”. “Rewarding”, “meaningful”, “difficult”, “worried”, “tired”, “complicated”, “confused”, “hopeless”, “passionate”, and “scared” were chosen 25 (4.0%), 12 (1.9%), 11 (1.7%), 10 (1.6%), 8 (1.2%), 7 (1.1%), 6 (0.9%), 5 (0.8%), 4 (0.6%), and 2 (0.3%) respectively. Not one participant chose “boring” (Table: 15).

Table 15: Percentage of “participants’ personal feelings toward school life”.

<table>
<thead>
<tr>
<th>Experiences</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Struggling</td>
<td>142</td>
</tr>
<tr>
<td>Proud</td>
<td>98</td>
</tr>
<tr>
<td>Confident</td>
<td>65</td>
</tr>
<tr>
<td>Encouraging</td>
<td>63</td>
</tr>
<tr>
<td>Brave</td>
<td>60</td>
</tr>
<tr>
<td>Joyful</td>
<td>57</td>
</tr>
<tr>
<td>Exciting</td>
<td>46</td>
</tr>
<tr>
<td>Rewarding</td>
<td>25</td>
</tr>
<tr>
<td>Meaningful</td>
<td>12</td>
</tr>
<tr>
<td>Difficult</td>
<td>11</td>
</tr>
<tr>
<td>Worried</td>
<td>10</td>
</tr>
<tr>
<td>Tired</td>
<td>8</td>
</tr>
<tr>
<td>Complicated</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>-------</td>
</tr>
<tr>
<td>Confused</td>
<td>6</td>
</tr>
<tr>
<td>Hopeless</td>
<td>5</td>
</tr>
<tr>
<td>Passionate</td>
<td>4</td>
</tr>
<tr>
<td>Scared</td>
<td>2</td>
</tr>
<tr>
<td>Boring</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>618</td>
</tr>
</tbody>
</table>

In order to identify the overall learning experience of the participants in the school, a new variable called “Experience” was created. The participants who choose all 3 words out of the 9 positive words in Section 3 of the questionnaire were categorised as “very positive experience”. The participants who chose two words out of the positive words and one word out of the negative words were categorised as “positive”. The participants who chose one word out of the positive words and two words out of the negative words were categorised as “negative”; and participants who chose three words out of the negative words were categorised as “very negative”. For example:

- Participant #15 checked two positive adjectives and one negative adjective to express her feeling at the school. Therefore, her overall feeling at the school is “Positive”.
- Participant #160 checked one positive word and two negative adjectives that expressed her feelings. Therefore, her overall feeling at the school is “Negative”.
- Participant #152 checked three positive words and no negative word to express her feelings. Therefore, her overall feeling at the school is “very positive”.
- Participant #31 checked no positive adjective, only the negative words. Therefore, her overall feeling at the school is “very negative”.


From the above calculating sample, it was found that out of the total 206 participants, 42 participants (20.4%) had a “very positive experience”, 143 participants (69.4%) had a “positive experience”, 3 participants (1.5%) had a “very negative experience”, and 18 participants (8.7%) had a “negative experience” (Table 16).

Table 16: Frequency of “participants’ feelings”.

<table>
<thead>
<tr>
<th>Experience</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very positive</td>
<td>42</td>
<td>20.4</td>
</tr>
<tr>
<td>Positive</td>
<td>143</td>
<td>69.4</td>
</tr>
<tr>
<td>Negative</td>
<td>18</td>
<td>8.7</td>
</tr>
<tr>
<td>Very Negative</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>Total Number</td>
<td>206</td>
<td>100.0</td>
</tr>
</tbody>
</table>

To check the overall perception of the students’ feelings toward their school lives, frequency of positive feelings and negative feelings was calculated. To this end, the numbers of the students who had “very positive” and “positive” feelings were combined together. Also, the numbers of the students who had “very negative” and “negative” feelings were combined. By doing the comparison, the results showed that there were more students who had positive feelings (185) than students who had negative feelings (21) toward their school lives (Table 17).

Table 17: Frequency of “participants’ overall feelings about school”.

<table>
<thead>
<tr>
<th>Positive feeling about the school</th>
<th>Negative feeling about the school</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very positive</td>
<td>Very negative</td>
</tr>
<tr>
<td>Positive</td>
<td>Negative</td>
</tr>
<tr>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td>42</td>
<td>3</td>
</tr>
<tr>
<td>143</td>
<td>18</td>
</tr>
<tr>
<td>185</td>
<td>21</td>
</tr>
</tbody>
</table>

4.3.4 Participants’ experiences in the school
To investigate the female students’ learning experiences in the school, the students were asked to identify their most and least favorite experiences by writing down words in the space provided.

4.3.4.1 Participants’ positive experiences

In the first part of the questionnaire, participants were asked to describe their most favorite experiences in the school. Based on the data, the students’ most favorite experiences were categorised into four different themes. They were: Obtaining Knowledge, Good Relationship with Teachers and Friends, Teachers Encouragement, and Good Academic Results.

- “Obtaining knowledge” includes students who said that they felt that they learnt something new every day at the school. They realised that they were given knowledge by their teachers and in the context of the school activities.

- “Good relationships with teachers and friends” signifies students who said they got along well with their teachers and friends both in academic relationship and personal relationship.

- “Teachers’ encouragement” includes students who appreciated all kinds of praises and words of motivation.

- “Good academic results” covers all students who favoured achievement and high scores on tests. This included monthly and yearly academic tests results in class.

For example:

Participant # 5:
When at school, students encounter both good and bad experiences. Personally, one of my good experiences was when my teachers praised me. Also, I found myself in a good mood when I could quickly understand my teachers’ explanation about the lessons. Another happy moment in my academic life was when I received a high score on my study.

Participant # 157:

My good experiences at the school are when I can meet good people like my teachers and friends. When I see these people, I feel happy. They make my life cheerful and meaningful.

Participant # 197:

What really makes a good time for me at the school is that I feel like I gain more and more knowledge which makes me give high value on education. Moreover, I have a good relationship with my friends and my teachers too.

Once the responses were categorised into individual themes, the data showed that “Obtaining knowledge” was the most favourite experiences at the school expressed by 112 participants (51.1%). 54 students (24.6%) identified “the good relationship with teachers and friends”. Also, 27 students (12.3%) stated “teachers’ encouragement” was their good experience and 26 participants (11.8%) indicated that “good academic results” was their most favourite experience in the school (Table 18).

Table 18: Frequency of “participants’ positive experiences in school”.

<table>
<thead>
<tr>
<th>Positive Experience</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obtaining Knowledge</td>
<td>112</td>
</tr>
<tr>
<td>Good Relationship with Teacher and Friends</td>
<td>54</td>
</tr>
<tr>
<td>Teachers Encouragement</td>
<td>27</td>
</tr>
<tr>
<td>Good Academic Result</td>
<td>26</td>
</tr>
</tbody>
</table>
4.3.4.2 Participants’ negative experiences

The second part of the same question was to investigate the negative experiences. Based on the data, the students’ answers were categorised into 10 different themes.

- The first theme is “Against School Rules”. This theme covers any students who disliked when students were destroying school and classroom properties, did graffiti, and fought with friends.
- Second theme is “Bad Punctuality”. This theme covers any students who identified coming to class late from home or from their break time as a negative experience.
- Third theme is “Bad Peers”. This theme covers any students who did not like students who did not work hard on their study, played truancy, or were associated with bad activities.
- Fourth theme is “Class Chaos”. This theme covers any students who were disturbed by students who were noisy during the class hours and who disturbed their concentration.
- Fifth theme is “Got Lost with Lesson”. This theme covers any students who identified their inability to catch up with the lesson from textbooks and from their teachers’ explanations as a negative experience.
- Sixth theme is “Buying too many Handouts”. This theme covers any students who identified the need to buy handouts (in the form of lesson summary or exercises) from their teachers for every learning subject as a negative experience.
• Seventh theme is “Dirty Toilet”. This theme covers any students whose answers referred to the low level of sanity and cleanliness of the school facilities.

• Eighth theme is “Bad Relationship with Friends”. This theme covers any students whose answers referred to the students who did not get along well with their peers or classmates.

• Ninth theme is “No Lesson”. This theme covers any students commenting that when they did not note down the lesson from the textbook, they were punished.

• Tenth theme is “Poor Academic Performance”. This theme covers any students whose identified their low monthly and yearly achievements levels as a negative experience.

For example:

Student # 5:

Personally, what really annoyed me was that my teachers always sell too many handouts in class and I do not like it.

Student # 158:

Individually, the thing that is considered as my bad experience is when my friends ask me to play truant and want me do things which are useless for my study.

Student # 169

I find myself in a very unpleasant situation at the school when most students in my class talk and make noises. Sometimes, they just play around during the study time which really turns the classroom into a real chaos.
The analysis shows that 81 participants (35.5%) identified activities against-school rules as negative. In turn, 39 students (17.1%) said their bad experience was their bad time management, while 27 participants (11.8%) said classroom chaos was considered as their bad time at the school. 16 females (7.0%) said they dislike getting confused during the lessons. 12 students (5.2%) disliked having to buy too many handouts from teachers. 11 students (4.8%) indicated having bad relationships with friends, or dirty toilets as unpleasant. Lack of homework and poor academic performance in class were the negative experience for 4 participants (1.7%) and 3 participants (1.3%) respectively (Table 19)

Table 19: Frequency of “participants’ negative experiences in school”.

<table>
<thead>
<tr>
<th>Negative experiences in the school</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Against School Rules</td>
<td>81</td>
</tr>
<tr>
<td>Bad Punctuality</td>
<td>39</td>
</tr>
<tr>
<td>Bad Peers</td>
<td>27</td>
</tr>
<tr>
<td>Class Chaos</td>
<td>24</td>
</tr>
<tr>
<td>Got Lost with Lesson</td>
<td>16</td>
</tr>
<tr>
<td>Buy Many Handout</td>
<td>12</td>
</tr>
<tr>
<td>Dirty Toilet</td>
<td>11</td>
</tr>
<tr>
<td>Bad Relationship with Friends</td>
<td>11</td>
</tr>
<tr>
<td>No Lesson</td>
<td>4</td>
</tr>
<tr>
<td>Poor Academic Performance</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>228</td>
</tr>
</tbody>
</table>

4.3.5 Support from school

To investigate the female students’ experiences and their school environment, different kinds of support were examined. They included financial support, teachers’ support, access to technology and other kinds of support available in the school.
4.3.6 Financial support

No participants in this present study received financial support from their school.

Reasons whether the financial support is sufficient

There were 186 females (90.3%) who did not answer this question. Figure 9 shows that 17 students (8.3%) thought that the amount of money spent on the school was too high for their families. One participant (0.5%) said that all expenses were covered by her parents. Concerning this, 2 students (1.0%) suggested that some financial support from school would be good to alleviate costs. In summary, three major reasons were reported by the students for the school to offer some financial support. They were: high amount of money spent at school, parents’ financial burden on academic expense, and the suggestion on the shared of financial support from school (Figure 9).

Figure 9: An example of answer on reasons whether the financial support is sufficient.

Q: 10. Does your school provide you or your family with financial support for your study?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>134</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

Student #134

6. ប្រការិយាយប្រការិយាយពីសាលារបស់បអូនផ្ាល់ឲ្យបអូននូវការឧបថមផ្ផ្ែកថវិការតលើការសិកាយក្រុងរឺតទ (If yes, do you believe it is enough to support your study? Why?)

1. ការចំ្យតលការសិកាម្ដន ំផ្លផ្ថលតពក  (the amount of money spent on coming to school is very high.

   ➢ ប្រការិយាយប្រការិយាយពីសាលារបស់បអូនផ្ាល់ឲ្យបអូននូវការឧបថមផ្ផ្ែកថវិការតលើការសិការបស់បអូនរឺតទ (If yes, do you believe it is enough to support your study? Why?)

ប្រការិយាយប្រការិយាយពីសាលារបស់បអូនផ្ាល់ឲ្យបអូននូវការឧបថមផ្ផ្ែកថវិការតលើការសិការបស់បអូនំផ្លផ្ថលតពក - I suggested for some financial support from school to share with my family expense burden.
4.3.7 Teacher support

All 206 students (100%) said that they had received support from their teachers within the school on academic-related issues, learning consultations and advice on personal issues. They said that their teachers want them to gain knowledge and do well in class.

4.3.8 Technology support

Out of 206 students, 186 students (90.30%) said they had no access to technology, while 20 females (9.70%) did not answer this question.

4.3.9 Other types of support in school and summary

86 females (41.7%) did not answer this question. More than half of the total participants (58.3%) said that the school offered home education skills (cleaning, cooking and sewing) and tree planting activities (vegetable planting, tree watering).

In summary, no participants received financial support from the school. However, all students received support from their teachers, which included academic support, learning and consultations on personal issues. 186 females (90.30%) said that there was no ICT support given to the students. Also, 120 students (58.3%) indicated that they were provided by their school with home education skills and tree planting skills.

4.4 Participants’ life value priorities

4.4.1 Participants’ life value priorities

The participants were asked to identify their life value priorities according to the level of importance (“1” is the most important and “5” is the least important). The five items
were 1) their parents’ opinion, 2) the opportunity to go to school, 3) earning money, 4) love and relationships, and 5) doing household chores.

Table 20 shows that the most popular choices were “opportunity to go to school” (114 times) followed by “parents’ opinion” as also very important. “Doing household chores” was thought to be moderately important (98 times), while “earning money” was chosen to be not so important (94 times). “Love and relationships” was considered to be the least important value (187 times).

Table 20: Frequency of “level of importance of participants’ life priority”.

<table>
<thead>
<tr>
<th>Priority</th>
<th>Level of Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very Important</td>
</tr>
<tr>
<td>Opportunity to go to school</td>
<td>114</td>
</tr>
<tr>
<td>Parents’ Opinion</td>
<td>107</td>
</tr>
<tr>
<td>Doing Household chores</td>
<td>2</td>
</tr>
<tr>
<td>Earning Money</td>
<td>8</td>
</tr>
<tr>
<td>Love and Relationships</td>
<td>0</td>
</tr>
</tbody>
</table>

4.4.2 Relationship between participants’ life value priorities and parents’ education

One Way ANOVA was used and it was found that there was no significant relationship between the participants’ parents’ education and their life value priorities; \( p = \text{ns} \).
4.4.3 Relationship between participants’ life value priorities and parents’ jobs/education

One Way ANOVA was used and it was found that there was no significant relationship between the participants’ parents’ jobs/education and their life value priorities; \( p = \text{ns}. \)

4.4.4 Relationship between participants’ life value priorities, feelings, academic performance, siblings, school distance, and age

One Way ANOVA was used. However, there was no significant relationship found; \( p = \text{ns}. \)

4.5 Participants’ three-year plans

4.5.1 Participants’ three-year plans

Out of the 206 participants, 200 (97.1%) participants stated that they would continue their studying for the next three years. 2.9% (6 students) reported that they would stop their schooling.

4.5.2 Reasons behind the decision to stay at school

Participants were asked to justify their three-year plans. The answers were divided into two categories: (1) reasons to continue the study and (2) reasons to stop the study.

The reasons to continue the study were categorised into four themes:

- Reason 1: Better job opportunity in the future.
- Reason 2: Gaining higher knowledge
- Reason 3: Parents’ expectations
- Reason 4: Family’s reputation
Table 21 shows that from the 200 students who said they would continue their study, 176 students (88%) said they would do so because this would enable them to find better jobs in the future, while 22 students (11%) want to increase their personal knowledge. One participant (0.5%) indicated that she would continue education to meet her parents’ expectations. One other student (0.5%) indicated that her decision to continue her study was to support her family’s reputation.

Table 21 shows the different reasons and the frequency of the participants’ decision to stay in schools and to complete their study.

Table 21: Frequency of “reasons to stay in school”.

<table>
<thead>
<tr>
<th>Reasons</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reason 1: Good Job</td>
<td>176</td>
</tr>
<tr>
<td>Reason 2: Better Knowledge/Knowledge is</td>
<td>22</td>
</tr>
<tr>
<td>important</td>
<td></td>
</tr>
<tr>
<td>Reason 3: Family Reputation</td>
<td>1</td>
</tr>
<tr>
<td>Reason 4: Parents’ Expectations</td>
<td>1</td>
</tr>
</tbody>
</table>

The reasons for stopping the school were categorised into two themes:

Reason 1: Poor living standards

Reason 2: Making money to share family burden

There were 6 participants who planned to discontinue their study. Out of the 6 participants, 4 (66.7%) identified poor family living standards as a reason and the other 2 (33.33%) wanted to make money to alleviate family burdens.

Table 22 shows the two reasons that motivated female students to leave school and its frequency.
4.5.3 Types of jobs without upper secondary school

Participants were asked to make their own statements about the types of jobs that did not require further education. The data shows that out of 206 participants, 9 girls (4.4%) could not answer this question (“no idea”). 193 females (93.7%) indicated that without upper secondary education they would have low paid jobs in the future. Four participants (1.9%) said that they would run their family’s business if they stopped their study at lower secondary school.

Table 23 shows the types of jobs that students identified that did not require school completion.

Table 23: Percentage of “types of jobs without upper secondary education”.

<table>
<thead>
<tr>
<th>Type of Job after Quitting</th>
<th>N</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Idea</td>
<td>9</td>
<td>4.4</td>
</tr>
<tr>
<td>Job 1: Low paid and hard job</td>
<td>193</td>
<td>93.7</td>
</tr>
<tr>
<td>Job 2: Run Family Business</td>
<td>4</td>
<td>1.9</td>
</tr>
<tr>
<td>Total</td>
<td>206</td>
<td>100.0</td>
</tr>
</tbody>
</table>
4.5.4 Relationship between participants’ three-year plans and age, travel distance, number of siblings, parents’ education, parents’ jobs, life value priority, academic performance, support within school, feelings at school

A crosstab was used and it was found that there was no significant relationship between the participants’ three-year plans and participants’ age, travel distance, number of siblings, parents’ education, parents’ jobs, their parents’ opinion, academic performance, feelings at school; \( p = ns \).

4.6 Participants’ suggestions on their learning improvements

Participants were asked to write in their own words suggestions that would improve their learning experiences in the school. All 206 participants answered this question. As the question was an open-ended question, participants were asked to answer it by using their own words. For example:

Participant # 123:

*I feel so fortunate to be sent to school so that I can obtain knowledge and meet good people. However, I think school alone is not enough to make a good academic life experience, but I want my parents to be more involved in my studies when I am at home.*

Participant # 191:

*What really makes a bad moment for me in the school is when I need to go to the toilet because the toilets are so dirty. I want my school to have cleaner toilets.*

Participant # 190:

*It irritates me when my teachers sell too many lesson handouts. I want them to stop selling handouts.*
Participant # 168:

*I feel like there are too many students in my classroom. This, I feel, is not convenient for the study. I want less students in one classroom. Moreover, I wish the school used more discipline.*

Participant # 206:

*I think that I would enjoy my academic life more if my school applied more discipline than it does today. There is too much chaos in classrooms or noise made by naughty students.*

Altogether, fifteen different suggestions were made by the participants. “Having hygienic toilets” was given by 70 female students (25.4%). 43 participants (15.6%) asked to reduce the number of handout sold to them by their teachers. 34 students (12.3%) wanted “a better library”. 30 participants (10.9%) asked for “strict/serious disciplines in the school”. 27 students (9.8%) suggested having “smaller numbers of students in class”. 22 females (8%) suggested “parents’ participation in their study”. 18 students (6.5%) asked for “up-to-date technology”. 9 students (3.7%) proposed team work activities. 7 participants (2.5%) asked that teachers used better words. Gender equality was mentioned by 4 students (1.4%). 2 participants wished to have “more English classes”. One student (0.3%) mentioned having “more classrooms” and another wanted “more learning hours” (Table 24).

Table 24: Frequency of “suggestions on learning improvements”.

<table>
<thead>
<tr>
<th>Learning improvement suggestion</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hygienic Toilets</td>
<td>70</td>
</tr>
<tr>
<td>Less Handouts Sold</td>
<td>43</td>
</tr>
<tr>
<td>Better Library</td>
<td>34</td>
</tr>
<tr>
<td>Strict Discipline</td>
<td>30</td>
</tr>
<tr>
<td>Smaller Student Numbers</td>
<td>27</td>
</tr>
</tbody>
</table>
The participants’ suggestions were categorised into three main themes:

Theme 1: Family Level. This included: parents’ participation in school activities.

Theme 2: School level. This included: hygienic toilets, a better library, updated technology, more classrooms, strict discipline, smaller student numbers, more English classes, more learning hours.

Theme 3: Teacher level. This included less handouts sold, no corruption in regard to grades, more team work activities, better word use from teachers, same treatment of boys and girls, better treatment of poor students.

Table 25 shows the suggestions made by the participants according to the themes and their frequency.

Table 25: Themes and frequency of “suggestion on learning improvements”.

<table>
<thead>
<tr>
<th>Theme 1: Family</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Parents’ to participate in students’ school activities</td>
<td>22</td>
</tr>
</tbody>
</table>
4.7. Summary

This chapter presented the findings of this research study obtained from the questionnaire. They are listed below.

**Students’ background information**

- Finding 1: The majority of the female students in the present study were between the ages of 13 to 14.
Finding 2: Regarding school distance, the data showed that more than half of the participants spent less than 10 minutes traveling to the school.

Finding 3: The highest number of siblings was eight. Most of the participants had 2 to 4 siblings.

Finding 4: Concerning, parents’ educational qualifications, the full data account is missing, as only 50% of the students provided information in here. The information reported by these students shows that most of their fathers completed upper secondary school level, whilst most of their mothers completed lower secondary school. Therefore, the educational qualifications of the participants’ fathers were generally higher than those of their mothers.

Finding 5: Regarding the parents’ occupations, most of the participants’ parents had skilled trade jobs.

Finding 6: In relation to academic performance, on the scale ranging from poor, through to fair, good and very good, most of the participants self-rated their performance as good. Also, majority of the participants saw themselves valuing education as much as they thought their friends did.

Finding 7: Regarding life value priorities, it was found that participants gave the highest level of importance to the “opportunity to go to school” then “parents’ opinion” as the second priority, “earning money” as the third, “household chores” as the fourth, and the least importance was given to “love and relationships”. Furthermore, these evaluations did not show any significant relationship to the participants’ demographic characteristics such as their age, school distance, number of siblings, their parents’ education, their parents’ jobs or their school environment.

School environment
Finding 8: All students received support from their teachers, which included academic support, learning and personal issues consultations. No ICT support was given to the students. Also, the students were provided home education and tree planting skills. No students were receiving any financial from the school.

Female students’ learning experiences in the school

Finding 9: Concerning participants’ feelings in the school, “struggling” was the most frequent answer chosen by the participants. However, in general, the participants showed to feel “positive”.

Finding 10: In relation to participants’ personal experiences in the school, their favourite experiences were: (1) opportunity to get knowledge, (2) good relationships with teachers and friends, (3) teachers’ encouragement, and (4) good academic results. On the other hand, their least favourite experiences were: (1) violation of the school rules, (2) their own bad time management, (3) bad behaviour of other students, and (4) noisy and crowded classrooms.

Students’ three-year plans

Finding 11: In regard to the participants’ three-year plans, almost all participants were willing to continue their study, whilst only 6 females planned to stop their education. The main reasons for staying in school were (1) the expectation of better job opportunities in the future, (2) gaining knowledge, (3) family’s reputation, and (4) parents’ expectations. On the other hand, the reasons for leaving school were (1) poor living standards and (2) the duty to earn money to support the family. There was no significant correlation between the three-year plans and the participants’ demographic characteristics, their
academic performance, their life value priorities, school support, or their feelings in the school.

**Students’ suggestion for the improvement of their learning experiences in the school**

- Finding 11: Fifteen suggestions were made. The top ten suggestions were toilet hygiene, less handouts to be sold in classrooms, a better library, strict school disciplines, smaller number of students in classroom, parents’ participation in school activities, access to technology, team work activities, better word use from teachers, and gender equality.

The next chapter discusses these findings in relation to the research questions. It also discusses their implications to future research on educational change in Cambodia.
CHAPTER 5: DISCUSSION AND CONCLUSION

This chapter discusses the results of the present study and reviews their relevance in relation to the research questions outlined in Chapter 3. Implications of the results are proposed.

The research sought to investigate the impact that the national and international programs have had on the dispositions and attitudes to education of adolescent female students in a rural school in Cambodia as reflected through the perspectives they offer on their own context. Following Freire (1973, 1990) and Gadotti (2010), as well as Kell & Kell (2014), the study began with an understanding that for change to work for the community on which it is to impact, the community needs to be engaged in its formulation and implementation. The ecological model of Bronfenbrenner (1994) was adopted as a framework in order to account for the complexity of the forces which shape the more immediate environment of female students in a rural Cambodia.

The literature review illustrated the relationship between the global and local forces which shape the current context of Cambodian education and the factors which thus far have been shown to support and the quality and the motivation of young Cambodian girls to complete their upper secondary education. The factors identified in those studies informed the present research. It was also noted that the research reviewed in the present study focused more on the characteristics of the students’ immediate environment, while the proactive role of the community in managing their own future was not addressed. This omission impacted on the present study and its findings. As shown in Chapter 4 and discussed in the sections that follow, while the study was successful in reflecting the immediate environment of the participating students, in order to provide any direction for future action, the findings must be
interpreted in relation to frameworks which look at education as a process which takes place in the community, for the benefit of the community and with the community. It follows that a change in the perspective on the problems of education is needed in order to provide the Cambodian government with constructive suggestions.

5.1. A brief recapitulation

The study was conducted as a response to the on-going injustice that is taking place in the rural areas of Cambodia, which continue to suffer from the devastation that for decades was inflicted upon the Cambodian people by the totalitarian regimes since the 1970s. The impacts of the genocide, the total destruction of the economy, the annihilation of the middle class and the low status being given to females are together still hard felt in those areas. Poor economy, limited access to schools and, especially, differences in the expectations that are placed on adolescent boys and girls continue to perpetuate the poverty cycle and the culture of gender discrimination.

To recapitulate, Chapter 2 provided the study with a historical, social and educational context. It showed that the Cambodian government is not indifferent to the conditions which generate high rates of school attrition. As a member of the United Nations and the ASEAN community, Cambodia, at least formally, is ready for change. Still, for reasons that are not clear, the impact of the educational and social programs that were put in place by different national and international institutions on female student attrition rates in rural Cambodia is not clear. It was proposed that to assess this impact, it is necessary to evaluate the process of strategy development at each level of the system. Due to the scope of the study, this methodology was not possible. Instead, the study sought to obtain data on the immediate environment of young female students living in rural Cambodia and their feelings about education and future plans.
The ecological systems theory by Bronfenbrenner (1994) was used as the theoretical framework to identify and organise research data. The literature review in Chapter 2 illustrated the complexity of factors which research shows to impact on children’s academic success and their ability to complete their education. It revealed that financial stability of the parents is only one dimension of this context. Other forms of capital that parents provide identified as equally important included parenting styles, parents’ own education and values, their readiness to share active interest in child’s life, its interactions with others and the presence of the support systems such as childcare.

Other factors included school environment and its capacity to support student wellbeing, safety, trust and confidence in their teachers, their professional conduct and the system in general. Also aspects such as cultivated peer comradeship and a sense of belonging to the school community were important and impacted on students’ self-efficacy beliefs and motivation. Access to technology was seen as relevant, transport to schools was also mentioned.

Drawing on Freire (1973, 1990) and Gadotti (1996, 2010), it was noted that the studies discussed in Chapter 2 said next to nothing about the power of the community to transform its own condition. According to Freire, change requires a conscientisation process which allows communities to identify issues and negotiate solutions. Externally imposed solutions address problems which are framed externally. This can make policies and programs appear irrelevant and, at times, oppressive.

While drawing on the literature, the study identified the following questions as its focus: (a) What are the family backgrounds of adolescent female students in rural Cambodia?; and (b) What does the school environment in rural Cambodia look like
and what learning experiences might influence female student attrition rates, especially in lower secondary schools, in rural Cambodia?

Chapter 3 described the research design and the methods for data collection and analysis. A mixed methods research was selected in order to identify a multiplicity of factors which interact with students’ school experiences and their capacity to complete schooling. Questionnaire were chosen as a method of data collection. The questions were constructed around issues which research showed to be relevant when designing educational reforms in developing countries. The participants included 206 female students from year 7 to year 9 at Pursat lower secondary school in Pursat province. Appropriate ethical and methodological processes were shown to have been implemented to ensure participants’ safety and comfort. Findings in Chapter 2 informed the design of the questionnaire. In order to answer the research questions, the following sub-questions were proposed:

1. What are young female students’ life values in rural Cambodia?
2. What are young female students’ opinions about their school education environment in rural Cambodia?
3. What are young female students’ opinions about their learning experiences in schools?
4. Do these opinions impact on their life values in rural Cambodia?
5. To what extent all these perspectives influence their decision to complete or abandon their education?

Chapter 4 described the findings from the questionnaire. The data was organised into six categories which were constructed in order to include aspects of the participants’ context which could be reflected in “raw” data and those which are reported by the girls themselves. They included, demographic characteristics, family impact, school-
related data, students’ life values, their long-term plans and recommendation for (school) improvements.

Chapter 5 presents a brief discussion of these findings and their implications for future research and planning. Limitations of the study are discussed.

5.2. Research findings

The following points describe the five major findings which emerged from data.

**Finding 1 – Life priorities and values**

The analysis showed that the participants gave the highest level of importance to the “opportunity to go to school”, with “parents’ opinion” as the second priority, “earning money” as the third, “household chores” as the fourth, and the least importance was given to “love and relationship”.

This finding is at odds with what traditionally has been regarded as standard Cambodian culture. As shown in Chapter 2 (Eng, 2013), Cambodian women are expected to be obedient to their parents, be good housewives and responsible for household chores like cooking, cleaning, and looking after the family members. However, this finding suggests a change in values among adolescent females who give the highest priority to their “opportunity to go to school” and placed “love and relationships” as least relevant.

It seems that despite their young age, the participants showed astute awareness of the value of education. This conclusion is also confirmed by Finding 5, with the participants linking better education with better jobs.

**Finding 2 – School environment**
All students reported positively on their teachers’ support. In terms of financial support, none of the students received any support from the school. The students felt that it would have been welcomed if school provided them with some amount of money so that to alleviate the hidden cost that education placed on their families. Regarding access to technology, the schools offered no ICT equipment or Internet connection. Finding 2 also confirmed the data discussed in Chapter 2 that influences, such as teacher support, were critical in promoting students’ motivation, encouragement, and creativity (Davis & Ashley, 2003; Davis & Couch, 2001).

Regarding the use of technology and school cost, a study by Sugata Mitra (Mitra & Dangwal, 2010) needs to be mentioned where Mitra, then a business in India, showed that students can make significant learning improvements with minimal infrastructure investment. This is very important when assessing Finding 2. Innovation and a greater community involvement can solve a lot of problems. Education does not always benefit from costly investments and smaller classrooms. The same applies to teacher support, Mitra and Dangwal’s research shows that minimal teacher support can generate equal, if not greater, gains than classrooms in prestige schools, provided it allows for collaboration and empowering forms of learning. Again, the engagement of the community as a resource provided children with solution which, possibly, were more effective than financial investment alone. It also questions an excessive reliance on the teacher.

Furthermore, Cambodian educators are frequently supported in their professional learning. This study is a product of a scholarship scheme which helped to fund this project. Greater connections between schools and the academic community could certainly help innovation. Local governments could assist in this process, as well as the universities themselves.
Finding 3 – Students’ school and learning experiences

The data analysis showed that ‘struggling’ was the most frequently used word by the students to describe their feelings at school. However, the participants expressed also positive feelings about their school. They saw school as the opportunity to get knowledge, build good relationships with teachers and friends, and receive teachers’ encouragement and good academic results. At the same time, they mostly disliked students who broke the school rules, lacked punctuality, generated bad relationships with peers and were noisy. They disliked crowded classrooms.

As shown in Chapter 2, in order to promote educational achievement, schools need to promote children's happiness, i.e. their subjective well-being (Huebner, 2010). The studies in Chapter 2 linked students’ wellbeing to factors such as academic achievement (Phelan, 1992; Connell, Spencer, & Aber, 1994; Skinner et al., 2008; Wang & Holcombe, 2010), good teacher-student and peer relationships (You, 2011; Davis, 2003), encouragement (Davis, Schutz, Chambliss & Couch, 2001), and other. Much less is said about empowerment.

Yet, studies in building children’s resilience (Prilleltensky, Nelson & Peirson, 2001) emphasise empowerment as the key to wellbeing. Also, in the context of second language pedagogy, Lian, Hoven and Hudson (1993) discuss learning models where students’ personal achievement is the driving force of learning, not the arbitrarily selected learning content. Both the resilience studies and the learner-centred teaching models help reframe the concept of wellbeing by identifying students’ sense of their power as the key to their academic achievement. As Prilleltensky, Nelson & Peirson (2001) propose, power is both social and political. It follows that students’ wellbeing hinges on the extent to which schools engage students as a community member and
allow them to gauge their own power in relation to the impact they have on that community.

Finding 4 – The school environment, student learning experiences and the life values

The analysis showed that negative experiences in the school had no relationship to the life values of the participating students. In other words, despite the financial difficulties and lack of technology, their most important value in life was access to education and school.

The results show that while a positive school environment and learning experiences do matter, it seems that the students are able to discern between the conditions of their local school and education as a life value. Still, students should be made feel welcomed, accepted, respected, and nurtured, in order strengthen their positive school experiences and the belief in education as a life value. As discussed in Finding 3, when students link school with their personal and social success through links with the community, the objective of making school relevant to their lives becomes attainable.

Finding 5 – Decisions to stay or to leave the school?

The data analysis indicates that from the 206 female student participants, only six (3%) students planned to discontinue their study at lower secondary school due to low family living standards and the need to earn money to support their family. The rest of the participants indicated that they would complete their education, which should then result in better job opportunities, better future, knowledge acquisition, good family reputation and also would allow them to fulfil the expectations of their families.
When school retention is discussed as a problem and assessed in terms of statistics, the 3% of the students can be debated in terms of the size of the study sample, the status of the school itself and its, possibly, exceptional context, and so on. This form of analysis tells nothing and forces the researcher to look for increasingly more detail to (hopefully) identify the answer. However, if studies looked at education as a tool for community engagement, adolescent females who must work to support their family may be seen as a resource to the community, not the problem for the government. Innovative solutions need to be sought but their impact will depend on the framework which informs the interpretation of the problem they are to resolve.

5.3 Implications and study limitations

In Chapter 3, following Taleb (2007), it was suggested that in order to interpret data, it is critical to engage frameworks which draw on concepts which help to expand the perspectives on the problem at hand. Otherwise, the study becomes tautological and its findings self-referential and therefore uninteresting (Latour, 1999). To this end, in order to obtain a broader perspective on the issue of retention of female students’ enrolments, the present study adopted the frameworks by Freire (1990) and Gadotti (2010) who proposed that community problems require community solutions. In order to understand better the problem of high dropout rates of female students in rural schools in Cambodia as a community problem, the study explored its findings from the perspective of the frameworks which looked at social phenomena as factors of engagement, power and communication.

The discussion of the findings leads to a proposal of the following framework for supporting female students in rural Cambodia in their decision to continue their education through to the upper secondary level.
1. Education is primarily a social engagement and, as such, its policies and practice must make clear links with community when addressing the context of learning, the impact and the participants.

2. Cambodia has a strong commitment to the ongoing development of its professionals. It is critical that these professionals engage with the broader community and provide communities with knowledge and expertise needed to support innovation and strong community connections.

3. When community is the site of learning, not the school, the learning needs, the resources and the impact are negotiated and assessed with the community. Community needs knowledge in order to act and be informed.

4. Education, like other activities, engages people in developing sense of their personal power in order to effectively engage with others. When education allows students to be present in the community, they develop (political) presence in the community and a sense of self-value. School then becomes one of the meeting points where students explore informed ways to be “present”.

5. Community is a resource. Education is not a process with value in and of itself. Without a reference to the community, learning does not build capacity, but takes away from the community. Problems, when they emerge, are then narrowly assessed and poorly addressed.

Although the proposed framework makes no direct mention of adolescent female students, its community context generates an environment where girls are present, rather than disconnected due to financial restrictions or other. As a result, girls can continue their education in ways that are less orthodox, but which may in fact be of greater value to them and the community as a whole.
The proposed framework is new and needs projects which would learn to implement its principles and learn from that experience.

5.4 Conclusion

In relation to the findings of this study, it is apparent that a single policy change, or a series of scattered initiatives, are unlikely to change the system as a whole. Children’s lives develop within a system, not in isolated pockets of success stories and short-lived projects.

Drawing on theories of Freire (1973, 1990) and Gadotti (2010), the study identified a need for a more integrated, community-based approach to girls’ education, with government programs and initiatives supporting change by building community social capital through strategies which focus less on problems and more on the mechanisms by which communities can negotiate, envisage and address the needs and resources that are appropriate for their well-being and sustainable futures. Girls’ education can only benefit from such a reflective, critical and constructive process.
REFERENCES


**APPENDIX 1**

**Consent forms**

Invitation for Female Students’ Participation in the Research on Investigating School Environment and Female Students’ Learning Experience to Support Female Students’ Retention in Lower Secondary Schools in Rural Cambodia

**1. Consent form for Director of Department of Education Youth and Sport**

Dear Director of Department of Education Youth and Sport,
My name is Tithchanbunnamy (Namy) Lor. I am an English Instructor at Pannasastra University of Cambodia, and I am doing Master by research program at Charles Darwin University, Australia.

My research is to investigate what things within school environment and their learning experience encourage and support young female students to continue and complete their education from lower secondary schools in rural Cambodia.

Your school is selected as a possible location of this study because it is at a rural community school. This study will use a questionnaire, and will involve a total 200 female students in your school.

There are three sections in this questionnaire:
(a) the participants’ background,

(b) participants’ understanding/opinions towards the support within school education environment and

(c) understanding/opinions towards their learning experience in schools.

I would like to invite participants at one school at your province to participate in this study. Their participation is free and voluntary and they can withdraw from the study at any time without consequences of any kind by contacting me. If they withdraw from the study, all information will be returned or destroyed at their request. All information in this study will be kept strictly confidentially. No other person will access the information except me.

I would appreciate if you give me your permission to conduct this research project. For further queries, please feel free to contact my phone at +81 234 555 or email:
You may also contact my Supervisor, Dr. Gretchen Geng via email at Gretchen.geng@cdu.edu.au; or phone at +61 8 8946 7623. If you have any concerns about this project, you are invited to contact the Executive Officer of the Charles Darwin University Human Research Ethics Committee by email: cduethics@cdu.edu.au, phone +61 8 8946 6498 or mail: Research Office, Charles Darwin University, Darwin NT 0909. The Executive Officer can pass on any concerns to appropriate officers within the University.

Thank you very much for your kind assistance.

Yours faithfully,

Tithchanbunnamy (Namy) Lor

PARENT(s)/GUARDIAN(s) CONSENT FORM

Research project: Investigating School Environment and Female Students’ Learning Experience to Support Female Students’ Retention in Lower Secondary Schools in Rural Cambodia

Supervisor: Dr. Gretchen Geng

Researcher: Tithchanbunnamy (Namy) Lor

I acknowledge that:
• I have read and I understand the information provided about this research project.
• I understand that students will complete a questionnaire in the class.
• I voluntary and freely give my consent to the school participanption in my department in the study.
• I agree to allow students at the school in my department to take part in this research with their consent.

Name of Director : ___________________________________

Signature : __________________________________________

Date : _____________________________________________

2. Consent for school principal

Dear School Principal,

My name is Tithchanbunnamy (Namy) Lor. I am an English Instructor at Pannasastra University of Cambodia, and I am doing Master by research program at Charles Darwin University, Australia.

My research is to investigate what things within school environment and their learning experience encourage and support young female students to continue and complete their education from lower secondary schools in rural Cambodia.

Your school is selected as a possible location of this study because it is at a rural community school. This study will use a questionnaire, and will involve a total 200 female students in your school.
There are three sections in this questionnaire:

(a) the participants’ background,

(b) participants’ understanding/opinions towards the support within school education environment and

(c) understanding/opinions towards their learning experience in schools.

I would like to invite your participants at your school to participate in this study. Their participation is free and voluntary and they can withdraw from the study at any time without consequences of any kind by contacting me. If they withdraw from the study, all information will be returned or destroyed at their request. All information in this study will be kept strictly confidentially. No other person will access the information except me.

I would appreciate if you give me your permission to conduct the research project at your school. The Department of Education Youth and Sport of Pursat Province has been introduced the project and purpose of conducting the research. For further queries, please feel free to contact my phone at +81 234 555 or email: Tithchanbunnamy.Lor@cdu.edu.au. You may also contact my Supervisor, Dr. Gretchen Geng via email at Gretchen.geng@cdu.edu.au; or phone at +61 8 8946 7623.

If you have any concerns about this project, you are invited to contact the Executive Officer of the Charles Darwin University Human Research Ethics Committee by email: cduethics@cdu.edu.au, phone +61 8 8946 6498 or mail: Research Office, Charles Darwin University, Darwin NT 0909. The Executive Officer can pass on any concerns to appropriate officers within the University.

Thank you very much for your kind assistance.
Yours faithfully,

Tithchanbunnamy (Namy) Lor

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**SCHOOL PRINCIPAL CONSENT FORM**

<table>
<thead>
<tr>
<th>Research project</th>
<th>: Investigating School Environment and Female Students’ Learning Experience to Support Female Students’ Retention in Lower Secondary Schools in Rural Cambodia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervisor</td>
<td>: Dr. Gretchen Geng</td>
</tr>
<tr>
<td>Researcher</td>
<td>: Tithchanbunnamy (Namy) Lor</td>
</tr>
</tbody>
</table>

I acknowledge that:

- I have read and understand the information provided about this research project.
- I understand that students will complete a questionnaire in the class.
- I voluntary and freely give my consent to school participation in the study.
- I agree to allow students at this school to take part in this research with their consent.
3. Consent form for parents

Dear Parent(s), Guardian(s)

My name is Tithchanbunnamy (Namy) Lor. I am an English Instructor at Pannasastra University of Cambodia, and I am doing Master by research program at Charles Darwin University, Australia.

My research is to investigate what things within school environment and their learning experience encourage and support young female students to continue and complete their education from lower secondary schools in rural Cambodia.

Your daughter is selected as a possible participant of this study because she is a female student who is studying at a rural community school. This study will use a questionnaire, and will involve a total 200 female students.
There are three sections in this questionnaire:

(a) the participants’ background,

(b) participants’ understanding/opinions towards the support within school education environment and

(c) understanding/opinions towards their learning experience in schools.

Your child’s participation in the questionnaire is free and voluntary and there is no payment for the participation. Your child can withdraw from the study any time at any stage by contacting me. If your child withdraws from the study, I will return all information to them or destroy it at their request, and your child will not be included in list of participants. Their answers in this study will be treated strictly confidentially. No other person will access your child’s information except me. The participants and non-participants in this study will not influence the child’s grade in school.

I would be grateful if you could give your permission for your child to participate in this study. Your kind assistance will definitely facilitate my study.

For further queries, please feel free to contact my phone at +81 234 555 or email: Tithchanbunnamy.Lor@cdu.edu.au. You may also contact my Supervisor, Dr. Gretchen Geng via email at Gretchen.geng@cdu.edu.au; or phone at +61 8 8946 7623. If you have any concerns about this project, you are invited to contact the Executive Officer of the Charles Darwin University Human Research Ethics Committee by email: cduethics@cdu.edu.au, phone +61 8 8946 6498 or mail: Research Office, Charles Darwin University, Darwin NT 0909. The Executive Officer can pass on any concerns to appropriate officers within the University.

Thank you very much for your kind assistance.
Yours faithfully,

Tithchanbunnamy (Namy) Lor

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PARENT(s)/GUARDIAN(s) CONSENT FORM

Research project : Investigating School Environment and Female Students’ Learning Experience to Support Female Students’ Retention in Lower Secondary Schools in Rural Cambodia

Supervisor : Dr. Gretchen Geng

Researcher : Tithchanbunnamy (Namy) Lor

I acknowledge that:

- I have read and I understand the information provided to me about the research project.
- I understand that my child can withdraw my permission at any time by contacting the researcher.
- I understand that if my child withdraws from the study, all information will be returned to them or destroyed at their request, and my child will not be included in list of participants.
• I voluntary and freely give my consent to my child to participate in the study to complete the questionnaire about young female students’ retention in schools in rural Cambodia

Name of parent(s)/guardian(s) : ________________________________

School : ________________________________

Signature of Parents/Guardians : ________________________________

Date : ________________________________

4. Consent form for teacher

Dear Teacher,

My name is Tithchanbunnamy (Namy) Lor. I am an English Instructor at Pannasastra University of Cambodia, and I am doing Master by research program at Charles Darwin University, Australia.

My research is to investigate what things within school environment and their learning experience encourage and support young female students to continue and complete their education from lower secondary schools in rural Cambodia.

Your students are selected as possible participants of this study because they are female students who are studying at a rural community school. This study will use a questionnaire, and will involve a total 200 female students.

There are three sections in this questionnaire:
(a) the participants’ background,
(b) participants’ understanding/opinions towards the support within school education environment and
(c) understanding/opinions towards their learning experience in schools.

Your assistance for your students’ participation in the questionnaire is free and voluntary. There is no payment for participating in this survey. Your students can withdraw from the study any time at any stage by contacting me. If your students withdraw from the study, I will return all information to your students or destroy it at their request, and your students will not be included in list of participants. Your students’ answers in this study will be treated strictly and confidentially. No other person will access your students’ information except me. The participants and non-participants in this study will not influence the students’ grade in school.

I would be grateful if you could give your permission for your students to participate in this study. Your kind assistance will definitely facilitate my study.

For further queries, please feel free to contact my phone at +81 234 555 or email: Tithchanbunnamy.Lor@cdu.edu.au. You may also contact my Supervisor, Dr. Gretchen Geng via email: Gretchen.geng@cdu.edu.au; or phone at +61 8 8946 7623. If you have any concerns about this project, you are invited to contact the Executive Officer of the Charles Darwin University Human Research Ethics Committee by email: cduethics@cdu.edu.au, phone +61 8 8946 6498 or mail: Research Office, Charles Darwin University, Darwin NT 0909. The Executive Officer can pass on any concerns to appropriate officers within the University.

Thank you very much for your kind assistance.
TEACHER CONSENT FORM

Research project: Investigating School Environment and Female Students’ Learning Experience to Support Female Students’ Retention in Lower Secondary Schools in Rural Cambodia

Supervisor: Dr. Gretchen Geng
Researcher: Tithchanbunnamy (Namy) Lor

I acknowledge that:

- I have read and I understand the information provided to me about the research project.
- I understand that my students can withdraw my permission at any time by contacting the researcher.
• I understand that if my students withdraw from the study, all information will be returned to them or destroyed at their request, and my students will not be included in list of participants.

• I voluntarily and freely give my consent to my students’ participation in the study to complete the questionnaire about young female students’ retention in schools in rural Cambodia

Name of Teacher : __________________________

School : ________________________________

Signature of Teacher : __________________________

Date : ________________________________

5. Consent form for pilot study

Dear participant,

My name is Tithchanbunnamy (Namy) Lor. I am an English Instructor at Pannasastra University of Cambodia, and I am doing Master by research program at Charles Darwin University, Australia.

My research is to investigate what things within school environment and their learning experience encourage and support young female students to continue and complete their education from lower secondary schools in rural Cambodia.

I would like to invite you to involve in a pilot study survey through completing a questionnaire about School Environment and Female Students’ Learning Experience
to Support Female Students’ Retention in Lower Secondary Schools in Rural Cambodia.

There are three sections in this questionnaire:

(a) the participants’ background,

(b) participants’ understanding/opinions towards the support within school education environment and

(c) understanding/opinions towards their learning experience in schools.

This pilot study is to provide validity and reliability for the questionnaire for 200 female participants in rural Cambodia to avoid any confusion or misunderstanding for the participants.

Your participation is free and voluntary and you can withdraw from the study any time at any stage by contacting me. If you withdraw from the study, I will return all information to you or destroy it at your request, and you will not be included in list of participants.

Your answers and suggestions in this study will be treated strictly and confidentially. No other person will access your information except me. I would be grateful if you could participate in this study. Your kind assistance will definitely facilitate my study.

I would appreciate if you give me your permission to conduct this pilot study. For further queries, please feel free to contact my phone at +81 234 555 or email: Tithchanbunnamy.Lor@cdu.edu.au. You may also contact my Supervisor, Dr. Gretchen Geng via email at Gretchen.geng@cdu.edu.au; or phone at +61 8 8946 7623. If you have any concerns about this project, you are invited to contact the Executive
Officer of the Charles Darwin University Human Research Ethics Committee by email: eduethics@cdu.edu.au, phone +61 8 8946 6498 or mail: Research Office, Charles Darwin University, Darwin NT 0909. The Executive Officer can pass on any concerns to appropriate officers within the University.

Thank you very much for your kind assistance.

Yours faithfully,

Tithchanbunnamy (Namy) Lor

PARTICIPANTS CONSENT FORM

Research project : Investigating School Environment and Female Students’ Learning Experience to Support Female Students’ Retention in Lower Secondary Schools in Rural Cambodia

Supervisor : Dr. Gretchen Geng

Researcher : Tithchanbunnamy (Namy) Lor

I acknowledge that:

- I have read and understand the information provided about this research project.
• I understand that I will complete a questionnaire.
• I voluntary and freely give my consent to my participation in the PILOT study.

Name of Participant : ________________________________

Date : ________________________________

6. Consent form for student

Dear Student,

My name is Tithchanbunnamy (Namy) Lor. I am an English Instructor at Pannasastra University of Cambodia, and I am doing Master by research program at Charles Darwin University, Australia.

My research is to investigate what things within school environment and their learning experience encourage and support young female students to continue and complete their education from lower secondary schools in rural Cambodia.
You are selected as a possible participant of this study because you are a female student who is studying at a rural community school. This study will use a questionnaire, and will involve a total 200 female students.

There are three sections in this questionnaire:

(a) the participants’ background,

(b) participants’ understanding/opinions towards the support within school education environment and

(c) understanding/opinions towards their learning experience in schools.

Your participation in the questionnaire is free, voluntary and there is no payment for participating in this survey. You can withdraw from the study any time at any stage by contacting me. If you withdraw from the study, I will return all information to you or destroy it at your request, and you will not be included in list of participants. Your answers in this study will be treated strictly confidentially. No other person will access your information except me. The participants and non-participants in this study will not influence your grade in school.

I would be grateful if you could participate in this study. Your kind assistance will definitely facilitate my study.

For further queries, please feel free to contact my phone at +81 234 555 or email: Tithchanbunnamy.Lor@cdu.edu.au. You may also contact my Supervisor, Dr. Gretchen Geng via email at Gretchen.geng@cdu.edu.au; or phone at +61 8 8946 7623. If you have any concerns about this project, you are invited to contact the Executive Officer of the Charles Darwin University Human Research Ethics Committee by email: cduethics@cdu.edu.au, phone +61 8 8946 6498 or mail: Research Office,
Charles Darwin University, Darwin NT 0909. The Executive Officer can pass on any concerns to appropriate officers within the University.

Thank you very much for your kind assistance.

Yours faithfully,

Tithchanbunnamy (Namy) Lor

STUDENT CONSENT FORM

Research project : Investigating School Environment and Female Students’ Learning Experience to Support Female Students’ Retention in Lower Secondary Schools in Rural Cambodia

Supervisor : Dr. Gretchen Geng

Researcher : Tithchanbunnamy (Namy) Lor

I acknowledge that:
I have read and I understand the information provided to me about the research project.

I understand that I can withdraw my permission at any time by contacting the researcher.

I understand that if I withdraw from the study, all information will be returned to me or destroyed at my request, and I will not be included in list of participants.

I voluntary and freely participate in the study to complete the questionnaire about young female students’ retention in schools in rural Cambodia

Name of Student : ______________________________

School : ______________________________

Signature of student : ______________________________

Date : ______________________________

APPENDIX 2: Questionnaire (English version)

Section I Background

There are 9 questions in this section that seek background information about you. Please respond to all the questions by placing a √ in the appropriate box or typing/writing numbers in the spaces provided. This section would take about 5 minutes of your time.

1. By placing a √ against one of the following, please indicate the age group to which you belong:
2. How long do you normally travel every day to school by placing √ against one of the following?

<table>
<thead>
<tr>
<th>Less than 10 minutes</th>
<th>10-30 minutes</th>
<th>30 minutes to 1 hour</th>
<th>More than 1 hour</th>
</tr>
</thead>
</table>

3. Including you, how many children are there in my family? Please indicate how many girls and how many boys by writing a number in the boxes.

Boys [ ]  Girls [ ]  4.Total: .................................................

Do you know about your parents’ educational qualifications? Please place √ against one of the following.

<table>
<thead>
<tr>
<th></th>
<th>Primary school</th>
<th>Middle school</th>
<th>High school</th>
<th>University</th>
<th>Do not know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Father</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. What are your father and mother’s jobs? If they do not work at the moment or you do not know, please leave it blank.

   Father’s job ____________________
   Mother’s job ________________

6. Please put 1 to 5 against these items according to their importance. “1” is most important and “5” is least important.

   | My parents’ opinion |  |
   | Going to school and study |  |
   | Earning money |  |
   | Love and relationship |  |
   | Doing housework |  |

7. In terms of comparing yourself to your classmates, are you normally

   | A struggling student |  |
   | An average student |  |
   | A bit above average |  |
   | Well above the average |  |

8. What are you going to do for the next three years? Are you going to complete your studying in high school? Why and why not?

________________________________________________________________
________________________________________________________________
________________________________________________________________
__________________________________________________________________
9. If you are going to work, what do you believe will be your future job once you leave high school? Will your studying at high school help you get this job?

________________________________________________________________
________________________________________________________________
________________________________________________________________

Section II Your understanding/opinions towards the support within school education environment

There are 5 questions in this section that seek background information about you. Please respond to all the questions by placing a √ in the appropriate area or typing/writing numbers in the spaces provided. This section would take about 5-10 minutes of your time.

Does your school provide you or your family with financial support for your study?

| Yes | No |

If yes, do you believe it is enough to support your study and why?

________________________________________________________________
________________________________________________________________
________________________________________________________________

10. Do you think your teachers provide academic support for your learning? Why or why not?

________________________________________________________________
________________________________________________________________
________________________________________________________________

11. Do you think you have access to technology in your school?

| Yes | No | I do not know |

12. Other than financial support, teachers’ academic support and technological support, does your school provide you with additional assistance/support for your studying?

Yes
No

What is the additional assistance/support?

________________________________________________________________
________________________________________________________________
________________________________________________________________

13. Do your friends value studying more or less than you do?

More
Less
Same

Why do you think it is so?

________________________________________________________________
________________________________________________________________
________________________________________________________________

Section III Your understanding/opinions towards your learning experience in schools

There are 3 questions in this section that seek background information about you. Please respond to all the questions by placing a √ in the appropriate area or
typing/writing numbers in the spaces provided. This section would take about 5-10 minutes of your time.

14. Please tick the **three** words that best describe your learning experience in schools.

<table>
<thead>
<tr>
<th>Exciting</th>
<th>Complicated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encouraging</td>
<td>Struggling</td>
</tr>
<tr>
<td>Proud</td>
<td>Worried</td>
</tr>
<tr>
<td>Brave</td>
<td>Confused</td>
</tr>
<tr>
<td>Passion</td>
<td>Hopeless</td>
</tr>
<tr>
<td>Joyful</td>
<td>Tired</td>
</tr>
<tr>
<td>Meaningful</td>
<td>Difficult</td>
</tr>
<tr>
<td>Rewarding</td>
<td>Boring</td>
</tr>
<tr>
<td>Confidence</td>
<td>Scared</td>
</tr>
<tr>
<td>Other</td>
<td>....</td>
</tr>
</tbody>
</table>

15. What is your favourite experience in your schools?

________________________________________________________________
________________________________________________________________
________________________________________________________________

16. What is your least favourite experience in your schools?

________________________________________________________________
________________________________________________________________
________________________________________________________________

17. What do you think can improve your learning experience in schools?

________________________________________________________________
________________________________________________________________
________________________________________________________________
APPENDIX 3: Questionnaire (Khmer version)

កប្រែសំណួរ

កូរ៊ី: ដូចនេះ

ប្រល័យាថោយប្រធានរបស់ប្រធានាធិបតីតាមវិធីសាស្រ្តៈប្រកួត (✓) កុំព្យូទ័រ ការអភិវឌ្ឍន៍មនុស្សនៃការអោយលើសម្រាប់ប្រសិនបុរៈ

1. កុំព្យូទ័រ (✓) កុំព្យូទ័រតាមត្រូវរបស់ប្រុស កុំព្យូទ័រតាមត្រូវរបស់ប្រសិនបុរៈ

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<tr>
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<tr>
<td>ប្រសិនបុរៈ</td>
<td>✓</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

2. កុំព្យូទ័រ (✓) កុំព្យូទ័រតាមត្រូវរបស់ប្រុស កុំព្យូទ័រតាមត្រូវរបស់ប្រសិនបុរៈ

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<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

3. កុំព្យូទ័រ (✓) កុំព្យូទ័រតាមត្រូវរបស់ប្រុស កុំព្យូទ័រតាមត្រូវរបស់ប្រសិនបុរៈ

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<th>10 ឆ្នាំ 10 ឆ្នាំ</th>
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<tbody>
<tr>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

4. កុំព្យូទ័រ (✓) កុំព្យូទ័រតាមត្រូវរបស់ប្រុស កុំព្យូទ័រតាមត្រូវរបស់ប្រសិនបុរៈ

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<tr>
<th>ឈ្មោះ</th>
<th>កុំព្យូទ័រ 10 ឆ្នាំ</th>
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5. កុំព្យូទ័រ (✓) កុំព្យូទ័រតាមត្រូវរបស់ប្រុស កុំព្យូទ័រតាមត្រូវរបស់ប្រសិនបុរៈ

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6. កុំព្យូទ័រ (✓) កុំព្យូទ័រតាមត្រូវរបស់ប្រុស កុំព្យូទ័រតាមត្រូវរបស់ប្រសិនបុរៈ
7. ការការងារផ្សំរកប្រភេទអាកាសធាតុ ម៉ើលីរ៉ុន

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8. សិសសម្រាប់អ្នកសិក្សាដ៏ទូលំទូលរក្សាពុត្តម្តេច? សិសសុខភាពអាកាសធាតុតំណាងឈ្មោះសិសសុខភាព? ប្រកប

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9. សិសសម្រាប់អ្នកសិក្សាដ៏ទូលំទូលរក្សាពុត្តម្តេច? សិសសំខាន់អាកាសធាតុតំណាងឈ្មោះសិសសំខាន់? ប្រកប

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អនុវត្ត ការបញ្ជាក់ថាជាពាក្យច្រប្រេក នៅក្នុងឈ្មោះបរិបទ

10. សិសសំខាន់អាកាសធាតុតំណាងឈ្មោះ សិសសំខាន់អាកាសធាតុតំណាងឈ្មោះ? ប្រកប

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ប្រកបដោយ មូលន័យអំពីវិធីសាស្ត្រប្រកបដោយប្រវត្តិសា�្រស់ប្រកបដោយ
11. តើប៉ុណ្ណោះអ្នកអាចមានចំណុចស្តង់ដារអំពីការសិការបប្តីេលសោជ្រើសូរគ្នាជាងមិនអាចកើតឡើងជាមួយរូប? មានទេ?

12. តើអ្នកប្រការបង្ហាញសិកាទីនធន៍ដែលអាចទទួលបានពីការសិការបប្តីេលសោជ្រើសូរលើការសិការបប្តីេលសោជ្រើសូរគ្នាជាងមិនអាចកើតឡើងជាមួយរូប?

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កុប្បុការបង្ហាញសិការធន៍ មានទេ?

13. អ្នកប្រការបង្ហាញសិកាប្រឈមសំខាន់ដែលអាចទទួលបានពីការសិការបប្តីេលសោជ្រើសូរលើការសិការបប្តីេលសោជ្រើសូរគ្នាជាងមិនអាចកើតឡើងជាមួយរូប?

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ជីតុំ មានរបៀបអំពីជីតុំដែលកុរៀសទេ?

14. មានបន្ទាត់ដំបូងបញ្ហាមិនអាចកើតឡើងពីការសិការបប្តីេលសោជ្រើសូរគ្នាជាងមិនអាចកើតឡើងជាមួយរូប?

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កុប្បុការសិកាប្រឈមសំខាន់ មានទេ?
ការយល់ដឹងតលើបទពិតសាកលនការសិកាប់សាលា

15. សូមត្លើយសំនួរខាងតប្កាមតោយគូសសញ្ញា ( ) ឬសតសរចំតលើយកែុងចត្លោះខាងតប្កាម។

<table>
<thead>
<tr>
<th>ទូរទស្សន៍</th>
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<td>បាទសុបិស្ត</td>
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</table>

16. តើបទពិតសាកលនិងមិនលាកាល់ខលោះប៉ុន្តែបាទរំតភើបសមុកសាមញម្ដនការជំរុញទឹកចិសូម្ដនតម្ដទនភាពប្ពួយបារមភកាលហានប្ចបូកប្ចបល់ជក់ចិអ្ស់សងឹមសបាយតនឿយ់ម្ដនន័យពិបាកម្ដនសំណាងគួរឲ្យ្ុញប្ទន់ម្ដនទំនុកចិគួរឲ្យខាលចតផ្សងៗ: .................. ..................

17. តើបាទអូនគិថាចំនុចអ្វីខលោះផ្ដលជួយផ្កលំអ្បទពិតសាកលនិងតារៀនរបស់បាទអូនតៅសាលា?
សូមអ្រគុណសំរាប់ការចំ្យតពលបំតពញការសទង់ម ិតនោះ។