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A Board Game to Enhance Understanding of Cell Cycle for Grade Ten Bhutanese Students

Tshering Lham¹ & Namkang Sriwattanarothai²

Abstract

Cell cycle is one of the essential topics fundamental to understand growth, reproduction and development in living organisms. It is a complicated process that postulates the ordered sequence of events for the successful self-replication of a cell. Most of the processes are abstract as they occur at the microscopic level. Also, there are different terminologies involved in cell cycle. These make students difficult to visualize and understand the processes involved in it. Thus this study is aimed to (1) develop a game-based learning to teach cell cycle and (2) study the effectiveness of a game-based learning in promoting conceptual understanding of cell cycle. A game-based learning entitled “GAD”, which stands for Game-Analogy-Debriefing, had been designed to help students visualize key events occurring in different phases of cell cycle. Initially groups/teams were given an analogy of opening a new shop through eight steps. Students were then invited to play board game similar to monopoly game. On rolling the dice, they moved along the board stepping on the squares that displayed the events occurring during cell cycle. Finally, carousel activity was conducted for more discussion followed by a video clip. A total of 25 grade 10 Bhutanese students (12 male and 13 female) participated in this study. Cell cycle conceptual test, students’ documents and semi-structured interview were used to assess students’ achievement on cell cycle. The paired-sample t-test indicated a significant enhancement of students’ conceptual understanding at $p < 0.05$. Results from students’ documents and interview also supported the result from the test.

Keywords: Cell cycle, cell division, mitosis, game-based learning, board game

1. INTRODUCTION

Multicellular organisms regulate the number of cells through processes of

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cell division and apoptosis. To enable a multicellular organism in growing to adult size and to repair the damaged cell, cells undergo the reproduction process or cell division. It is a key component of cell cycle where a genetically identical cell is produced from a pre-existing cell. It consists of two main stages: the growing stage (called interphase composed of G1, S and G2 phases), where cells enlarge and duplicate everything in both cytoplasm and nucleus, and the actual cell division (called the mitotic phase) where distribution and division of chromosome occur, and end by separating two identical cells. The process of cell division is an ordered sequence of events beginning from interphase, the mitotic phase (i.e., prophase, metaphase, anaphase and telophase) and cytokinesis. To control an accurate sequence of cell division, there are the regulatory proteins known as cell-cycle control system that work according to the feedback from the process being performed. The system allows cells to proceed to the next phase only if the cell is properly prepared. Until then, the control system would not trigger the cell to enter the next phase. This monitoring happens at three special points naming G1, G2 and M checkpoints. The G1 checkpoint ensures whether the environment is favorable for cell proliferation before entering S phase while G2 ensures that DNA replication process in nucleus has been completed before entering mitosis. The last checkpoint (M) ensures that spindle fibers have attached duplicated chromosome properly before separation. Failure in the coordination of these checkpoints may result in alteration of DNA and chromosome thus resulting in cancer cells (Taylor, Green & Stout, 1983)

Despite the fact that cell division constitutes one of the important topics in cell biology and it is being introduced right from middle schools and continue till university level, students still find the topic difficult to understand. According to many literatures the main problems leading to difficulties in learning cell division are due to misconceptions, terminology and visualization (Dikmenli, 2009) . Many studies reported misconceptions related to learning cell division. For instance, in the study carried out among young people aged 14-16 who had been taught to the 1991 National Curriculum for science in England and Wales, students did not have the idea of duplication of chromosome before cell actually divides rather believed that genetic information are shared (Lewis, Leach & Wood-Robinson, 2000). In another study done on 28 first grade (1st year after secondary education) students of Balikesir University in Turkey, it was found that they failed to notice the significance of S phase of interphase where DNA duplication occur before cell actually divides (Ozcan, Yildirim & Ozgur , 2012). Not only students but even student teachers (teacher trainees) were believed to possess alternative conceptions. Dikmenli (2009) carried out a study on student teachers at the faculty of education in Selcuk university in Turkey where they believed interphase as a resting phase and DNA duplication occurred in prophase. Misconceptions related to the topic are believed to have

been developed due to confusion of terms and terminology problems that arise in cell division teaching (Lewis et al., 2000; Oztap et al., 2003).

The other reason for the difficulty in learning this topic is from the abstract concept. Due to its microscopic nature, students are not aware of the ultra-structure of cells that make them difficult to visualize (Oztap et al., 2003; Ozcan et al., 2012). Moreover the interview results from preliminary study carried out prior to this study also revealed that teachers and grade 10 Bhutanese students have the same issues as previously described. They have difficulties in understanding not only the terminologies but also in the process involved in mitosis. These problems might have been from the traditional method of teaching such as lecturing where students are encouraged more to memorize than to learn and construct their own knowledge. Thus they fail to link the concept with their prior knowledge. Moreover the learning environment enables students to develop alternative concepts. For example teachers teach cell cycle and mitosis topic from the textbooks where some incorrect statements are still being reflected such as 'interphase is known as resting phase.' They memorize the wrong concept that lead to the development of alternative concepts. Therefore there is a need to develop an alternative way of teaching, especially an approach to create concrete concept that would enhance their understanding on the topic.

There are two kinds of strategies used in teaching cell cycle concept, a strategy without technology such as role play (Wyn & Stegink, 2000; Chinnici, Yue, & Torres, 2004; Kreiser & Hairston, 2007), model (Mickle, 1990; Clark & Mathis, 2000; Luo, 2012; Koc & Turan, 2012), demonstration (Locke, 2005) and the other is a learning incorporated with technology, such as animation (Bogiages & Hitt, 2008, Kamp & Deaton, 2013), computer mediated simulation (Wekesa, Kiboss, & Ndirangu, 2006), online game (Nobelprize.org, 2001) and online learning module (Williams, Linn, & Hollowell, 2008). Despite to the equal learning difficulties in interphase as well as mitosis, these strategies, however, mainly focus on mitosis with less emphasize on interphase (Ozcan, Yildirim, & Ozgur, 2012). Moreover Smith and Kindfield (1999) recommended to teach mitosis and meiosis cell Therefore it is necessary to teach the whole process of cell cycle with an appropriate teaching approach.

A game-based learning, one of the alternative approaches currently used in 21st century, can offer various learning experiences to fulfill the 21st century way of learning. In such learning environment students are not only interested in learning but also enjoy to learn (Charlier & De Fraine, 2013). The amusement provided by the experiences of comfortable learning environment could promote students motivation to learn the concepts through active participation (Cardoso et al., 2008; Kirikkaya, Iseri, & Vurkaya, 2010). They are also motivated to learn through group interactions, competition and enjoyment (Charlier & De

Fraine, 2013). Educational games can ensure students' active participation by engaging and involving the entire class. Moreover several literatures reported that students who had experienced in game-based learning not only showed a higher level of interest in the course material but also showed greater retention of memory resulting in better comprehension as compared to those students who learned the content through conventional method of learning (Cowen & Tesh, 2002; Chang, Yuan, Lee, Chen, & Huang, 2013). With these attributes, a game-based learning approach could facilitate students' learning of academic subjects by making learning easier, interesting, enjoyable and effective (Prensky, 2003) and also ensure students' positive perception towards learning (Ibrahim, Yusoff, Omar, & Jaafar, 2011; Honeycutt, 2005). Therefore this study thus aimed to develop an instruction employing game-based learning, GAD (Game-Analogy-Debriefing approach) to help students visualize the events occurring in different phases of cell cycle. The developed unit constitutes of an educational board game adapted from monopoly game that employs role playing strategy and also incorporates engagement and debriefing activities.

2. METHODOLOGY

2.1 Participants

This pilot study was implemented in a biology class in one of the higher secondary schools in western region of Bhutan. The intervention was done by the author. A total of 27 (15 female and 12 male) grade 10 Bhutanese students, aged between 15 – 18 years old, who had already studied the cell cycle in their regular class through lecture method participated in the study. Not only the cell cycle concept, they had also learned types of cell division and fundamental of genetics. All these students voluntarily participated in the normal class setting to provide their suggestions for further improvement of the learning unit developed to carry out this study.

2.2 Research design

The scheme of research design for this study is shown in Figure 2.1.

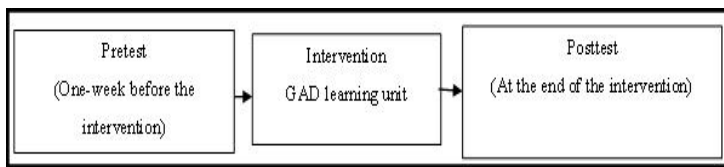


FIGURE 2.1. Research design for the GAD learning unit on cell cycle implementation.

The pretest was conducted before the intervention. Then GAD learning unit was implemented to teach cell cycle concept. During an intervention, worksheets were administered to help in developing poster on cell cycle. At the end of the intervention, posttest was conducted. The difference between pretest and posttest on cell cycle was conducted to evaluate students' knowledge gain on cell cycle after the intervention. Worksheets and semi-structured interview were conducted to gather supporting information to cell cycle conceptual test.

2.3 Data collection and analysis

The instruments used for data collection consisted of both quantitative and qualitative tools. Data were collected using cell cycle conceptual test, worksheets and semi-structured interview.

2.3.1 Cell cycle conceptual test

The test consisted of 11 multiple-choice questions (MCQ) and 3 open-ended questions to assess events taking place in phases of cell cycle, meaning of cell cycle, importance of cell cycle and mitosis. Rubric was set to give scores for the open-ended questions of the test. Two experts in the biology field validated the test and the alpha reliability for overall items was 0.61. The test was administered one week before the implementation as pre-test for 25 minutes. The same test was conducted after intervention as post-test for 25 minutes. The data collected from pre-test and post-test were then analyzed by descriptive statistics (mean and standard deviation). Paired sample t-test was used to determine the difference between pre- and post-test scores.

2.3.2 Worksheets

There were two worksheets gathered. Worksheet 1 was the note-taking worksheet (Fig. 2.2) gathered while playing game and worksheet 2 (Fig. 2.3) was the diagrammatic illustrations of cell cycle concepts after playing the game. Rubric score was developed to evaluate worksheets. Scores from these worksheets were analyzed by mean scores and standard deviation. Worksheets consisted of worksheet 1 and worksheet 2 that were employed during and after the game. Marking criteria was developed for giving the scores for both the worksheets. The data collected from the worksheets were then analyzed by finding mean and standard deviation.

Group No: Worksheet 1

Record the events taking place in each phase

Phase	Events
Station 1a	
Station 1b	
Station 1c	
Station 2a	
Station 2b	
Station 2c	
Station 3a	
Station 3	
Station 4	

FIGURE 2.2. Worksheet 1.

Group No: Worksheet 2

Refer worksheet 1 to prepare a neat poster of a cell undergoing cell cycle. Show the distinct events taking place at each station.

FIGURE 2.3. Worksheet 2.

2.3.3 Interview

For evaluating conceptual understanding on cell cycle, three students voluntarily participated in the semi-structured interview for 10 minutes each after the implementation. For example, students were shown with diagrams of a cell at different phases of cell cycle (Fig. 2.4) and were asked to identify and arrange those diagrams in the correct order for a cell to undergo cell division. Moreover they were asked to describe the key events taking place in each phase. In addition, they were also asked about the importance of cell cycle in our daily life. The responses collected through audio recordings were first transcribed and then analyzed through thematic approach (Braun & Clarke, 2006).

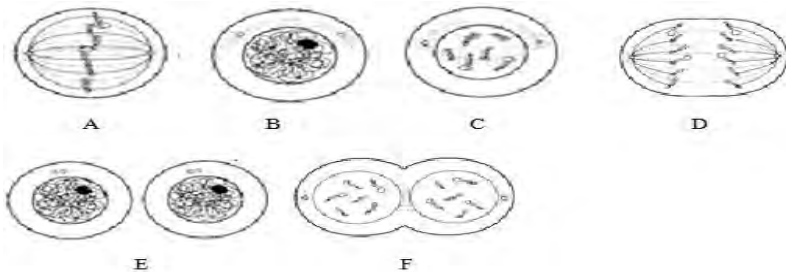


FIGURE 2.4. An example of interview questions.

3. DEVELOPMENT OF GAD- LEARNING UNIT

3.1 Development of Mega Board game

The game was adapted from an American-originated board game named

“Monopoly” with the similar idea of developing the player’s properties by moving the token around the game board buying houses or hotels. Here in this board game, players acted as the token and used mineral or enzyme cards to move forward on the board to undergo different events in cell cycle. The board consisted of 42 squared frames with different descriptions of cell cycle events mentioned on each frame. These 42 squared frames were arranged on the classroom floor (that represented the main board) to form a squared track on which students could walk. The track actually represented the route that a cell need to take during cell cycle. Additionally the different phases in cell cycle were demarcated by placing different station signs at eight different positions on the game board as shown in Figure 3.1. These eight stations represented eight key phases of cell cycle: G1 phase, S phase, G2 phase, prophase, metaphase, anaphase, telophase and cytokinesis. A member of each group/team had to act as a cell that moved along the board by stepping on the squared frames on rolling a dice. The players/cells had to demonstrate the events mentioned on the frames while the other members noted on worksheet 1. An example of one such event is as shown in Figure 3.2. At this frame (Cell has proper size without DNA damage. Enter station 1a), a player had to move and step on station 1a (end of G1 phase).

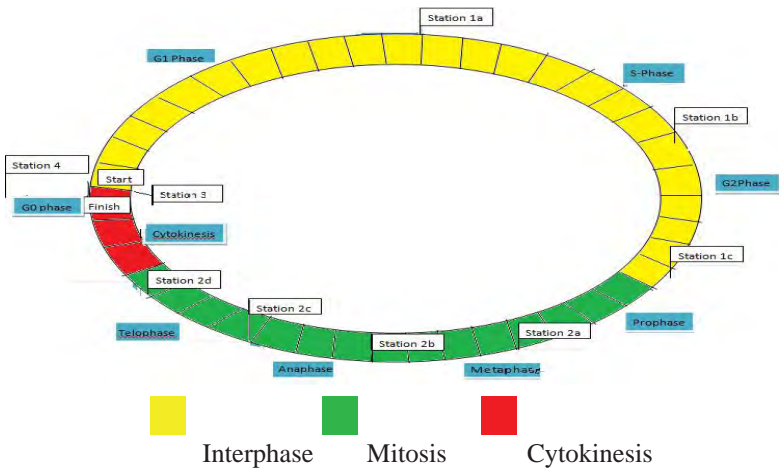


FIGURE 3.1. Cell Cycle Board Game.



FIGURE 3.2. An example of a frame used in the board game.

3.2 Implementation of GAD (version 1) in the classroom

There are three main steps of implementing GAD (version1) unit. The overview of cell cycle was given by using analogy (A), followed by game (G) playing session to learn an orderly sequence of events in cell cycle and ending with debriefing (D) session to link between experiences in the game to the concept. Overall class time of this learning unit was for 60 minutes.

Students were firstly divided into heterogeneous groups of five. They were given an analogy of eight steps to duplicate a shop. They finally related eight steps of the shop duplication to eight phases of cell cycle (G1, S, G2, prophase, metaphase, anaphase, telophase and cytokinesis).

Before starting the game, members in the group had to decide their roles in the game as a player, a speaker, a dice roller and two recorders. Groups took turn to play the game. For instance, a dice roller from first group rolled the dice. According to the number displayed on the dice, the player/cell from same group moved along the frames performing the events displayed on each frame; for example, for 'cell big enough' student demonstrated with a gesture to show the increase in size. Then the speaker of the group had to read out loud the event mentioned on the frames as and when the player halted. Finally recorders of the group noted information provided by the player and the speaker in worksheet 1. Once all the members in the group finished performing their roles, next group took the turn to play the game. In this way the groups competed among themselves to make their cell to divide by reaching the 'END' point.

After playing the game, students were asked to conclude the gathered information as steps within cell cycle through illustrations (worksheet 2). They

posted their group posters on the classroom wall and then moved like a carousel to learn from peer posters. Finally, teacher and students discussed together for a summary of the cell cycle concept. A short video clip “Mitosis” by NDSU VCell was used to summarize the concept gained from analogy and game.

4. RESULTS AND DISCUSSION

The results obtained from this study revealed that GAD learning unit was effective in promoting students’ knowledge on cell cycle. They showed better conceptual understanding after participating in GAD learning unit. Evidence for better conceptual understanding after the participation were from the significantly higher performance in posttest mean score as compared to pretest mean score that was revealed by paired-sample t-test (Table 4.1).

4.1 Cell cycle conceptual test and worksheet

Result from cell cycle conceptual test (Table 1) showed that the posttest average scores (14.80 points out of 20 points) were significantly higher than those of the pretest average scores (11.62 points out of 20 points) in all three sub concepts ($p < 0.05$). The highest gained scores were in events occurring in phases of cell cycle. It might be because the mega board game and debriefing session had been focused on those ordered sequence of events in cell cycle. Results from the worksheets also supported this finding. The average scores for the two worksheets provided for students to record and represent their understanding of events of cell cycle through diagrams (Fig. 4.1) were above 60%. It can be concluded that GAD learning unit could help in promoting the understanding of the concept of cell cycle. The game might have motivated students in learning the concept as games have been useful method for learning course material in a fun manner that actually made learning easier (Robinson, 2013). This result is in line with the study carried out by Spiegel and colleagues (2008) where they found the suitability of the game as an additional strategy in teaching complex themes in cell and molecular biology. However, the gained scores of mitosis sub concepts was not very high. The further study should be more concerned with the process of chromosomal separation. Game and/or debriefing should represent more details in this sub topic.

TABLE 4.1

Average scores gathered from cell cycle conceptual test

Sub concept	Total score of each concept (points)	Pre-test		Post-test		Gained Average Score (points)
		Average Score (points)	Standard Deviation	Average Score (points)	Standard Deviation	
Events occurring in phases of cell cycle	7	2.04	0.455	3.80	0.499	1.76
Meaning and importance of cell cycle	8	6.10	1.047	7.22	0.976	1.12
Mitosis	5	3.50	1.145	3.78	1.197	0.28
Total	20	11.64	1.001	14.80	1.001	3.16

According to Table 4.1 the result of the normalized gain showed that students had a high level of understanding of those conceptual dimensional in cell cycle. This could be used as evidence to support the enhancement of conceptual understanding after the intervention.

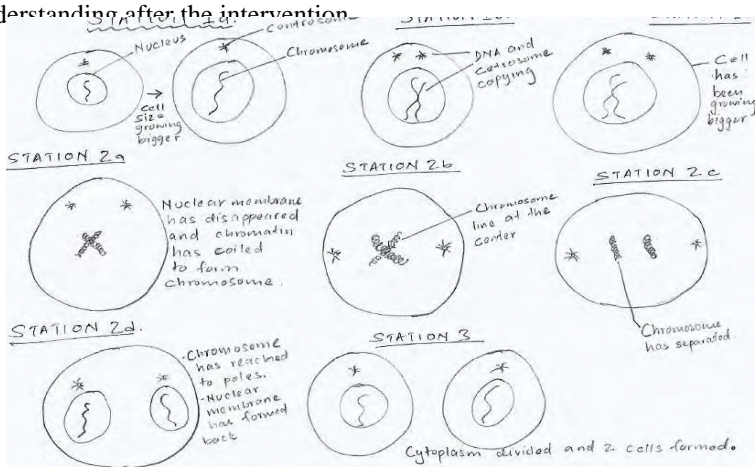


FIGURE 4.1. An example of cell cycle poster from students.

4.2 Students' overview on cell cycle

Three students voluntarily participated in semi-structured interview . They were asked to arrange and explain the diagrams (fig.) representing different phases of cells. All three arranged the phases in correct sequence and explained each phase correctly. The responses clearly indicated their understanding and an example excerpt from the interview is as follows:

B- is the first phase of cell cycle because chromatin are all messed up. C- prophase chromosome formed, A- chromosome line at the middle, chromosome then separated in D, in F- Chromosome reach at the end and E is the last phase of cell cycle because two same cells are formed.

They also could describe the interphase of cell cycle by focusing on the chromatin structure and the size of the cell, for example:

Cell enlarged, chromatin fiber not coiled, nuclear membrane present, so it is in interphase.

This indicated that students could build a mental model of the interphase as the phase prior to mitosis where chromatins are still in the form of uncoiled thread like structure.

Students also understood the importance of cell division for growth, repair, reproduction and replacement in cells. However, they displayed some confusion between cell cycle and coagulation of blood in healing a wound. This could be because both the natural processes have the similar function i.e in healing a wound. An excerpt from the interview is as follows:

The importance of cell cycle is that we have four benefits in our life that is growth, repair, replacement and reproduction. Mitosis make us grow bigger, due to cell cycle we are having changes in our body which is related to growth and not only growth, whenever we have cuts in our body the coagulation take place because of cell cycle to heal our cuts.

Results from semi-structured interview indicated that students had better understanding of cell cycle after they had gone through GAD learning activity.

In summary, results from test, worksheets and semi-structured interviews indicates that GAD learning unit has been effective in enhancing students' understanding of cell cycle especially with regard to the events occurring in cell cycle. The GAD learning unit might have motivated students to learn by creating an amusing learning environment where students could visualize the events and engage themselves in learning. It can help students easily understand

the concepts via analogy. It might have been effective in relating scientific ideas to the ideas that are familiar to the students, therefore leading to a meaningful learning where students can visualize and connect between newly taught concept and pre-concept. Moreover, GAD might have also helped construct cooperative learning via playing game together as a team. Although most of the students showed better understanding of the concept after intervention, however, there were some students who had some difficulties in understanding few sub concepts. This might be because only one member from each group could actively participate in the game while rests of the members were there to assist the player. Therefore if equal opportunity could be provided for all the members in each group then they would learn better and understand more. However this is time consuming. Other limitation we found from the game was students were slightly confused about the game as they felt that they missed few important events before reaching each station. They moved forward according to the number displayed on rolling a dice thus failing to notice important events on the passing frames. This made them difficult to connect the events in sequence since they missed the events displayed on the frames between the start and end point during each play. A clear explanation on how to play the game should be provided before playing the game. All these limitations would have impacted the research findings.

CONCLUSION

With many difficulties and alternative conceptions on cell division, and with such drawbacks in prevailing methods used in teaching cell cycle, Game-Analogy-Debriefing (GAD): a game based learning was developed to make students understand cell cycle by making them visualize key events taking place in different phases of cell cycle. This process made abstract concept more concrete, introduced the concept meaningfully and made students understand the relationship between chromatin and chromosome during cell cycle. Students were also motivated and engaged in learning by immersing them in the material and by encouraging them to learn from their peers. Therefore, the results obtained from the test, worksheet, and semi-structured interviews indicated that the GAD learning unit achieved its main goal. It could be used to enhance conceptual understanding of the cell cycle. Above all GAD learning unit was developed from cheap and locally available materials and it can be easily implemented by teachers to teach cell cycle in their regular class to help students understand various concepts of cell cycle.

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Appendix

Cell cycle conceptual test

This section is divided into two parts. Part A contains Multiple Choice Questions (MCQ) and part B contains open-ended questions. Please attempt both the parts.

Part A: Given below are 10 Multiple Choice Questions (MCQ). Please select the best option out of the four alternatives given by indicating a tick mark (✓) in the square against each option.

1. What is cell cycle?
 - It is a process where a cell prepares for growth
 - It is a process where cell divides to increase its size
 - It is the orderly sequence of events taking place in a cell leading to its growth and division
 - It is the sequence of events taking place inside the nucleus leading to its growth and division
2. Which of the following combination of cells divide and increase in their number resulting into daughter cells with similar genetic materials?
 - Skin cell and white blood cell
 - Egg Cell and white blood cell
 - Sperm cell and white blood cell
 - skin cell and sperm cell
3. When you scrape the skin off your hands or knees due to some accidents, how does your body make new skin cells to replace them?
 - The cells will get replaced by themselves
 - The cells surrounding the injured spot become bigger
 - The cells surrounding the injured spot divide to replace the cell

- The cells surrounding the injured spot are not responsible in replacing the cells
4. Which of the following choices is **not** the result of cell cycle?
- Healing of wound Growth of the hair root
 Secretion of mucus Formation of new layer of cells
5. What would happen if chromosome fails to duplicate during cell cycle?
- Daughter cells formed will not be identical
 Cell will not proceed further in cell cycle
 Only one daughter cell will be formed
 Cell will wait for a while
6. Given below are the different events taking place during cell cycle. Choose the correct order of the sequence?
1. Chromosome line up at the center
 2. Chromatin duplicates
 3. Chromosome separates
 4. Chromatin become thick and condense
 5. Chromosome reach the opposite poles
 6. Cytoplasm division
- 2 → 4 → 1 → 3 → 5 → 6
- 2 → 4 → 3 → 1 → 5 → 6
- 4 → 2 → 3 → 1 → 5 → 6
- 4 → 2 → 1 → 3 → 5 → 6
7. Which of the following statement is **true**?
- Chromosome loosely coiled during interphase
 Separation of chromatin will take place during anaphase
 Condensation/ thickening of chromosome take place during prophase
 Nuclear membrane is formed back to cover chromosome during telophase
8. When do you think growth of a multi cellular organism take place?
- When cells in an organism divide

- When cells in an organism enlarge
 - When cells in an organism enlarge and divide
 - When cells in an organism divide but do not enlarge
9. What will cell do if there is damaged DNA found in the cell before dividing?
- The cell will die
 - The cell will copy another DNA
 - The cell will proceed further any ways
 - The cell will pause to repair its DNA to proceed further
10. Why does cell undergo cytokinesis?
- To prepare cell for cell division
 - To prepare cell for cytoplasmic division
 - To divide nucleus to produce two daughter cells
 - To divide cytoplasm to produce two daughter cells
11. Which of the following is **not true** regarding cell cycle?
- Spindle fibre pulls the chromosome apart
 - Cell growth should occur before its division
 - Chromosome duplication occur after cytoplasmic division
 - Chromatin gets coiled, become thick and short for easy separation

Part B: Answer the following questions in your own words

12. Why is cell cycle important for us? Give an example of cell cycle taking place in youbody.
13. Explain the meaning of mitosis with the steps or phases involved in it.
14. Does mitosis occur in a fully grown adult? Support your answer with reason.

Life Skills Education as a Positive Disciplining Intervention for Students with Disciplinary Issues in the School

Phub Dorji¹ & Yangzome²

Abstract

The purpose of this research was to examine the impact of Life Skills Education (LSE) as a positive disciplining intervention for the students with disciplinary issues in one of the schools in Trongsa, Bhutan. A total of ten students with disciplinary issues reported to the School Discipline Committee were chosen using purposive sampling technique as research participants to examine the effect of LSE as a positive disciplining intervention. Similarly, to check students' perception of Life Skills Education as a means to combat disciplinary issues in the school, a total of 96 students selected through simple-random sampling took part in the survey. Mixed-method research approach was used to collect the data. Questionnaires were used to examine the students' attitude towards the LSE. In addition, semi-structured interviews were conducted to draw participants' reflections on LSE. Descriptive analysis was performed on these data collected from the questionnaire while content analysis technique was used to analyse the data gathered from semi-structured interview and observation. The study found that the LSE helped in promoting positive behaviour while the use of corporal punishment, verbal abuse, and suspension as disciplining techniques impacted students negatively. In view of the findings from this study, the researchers recommend that all educators, regardless of the subject they teach, should be trained in life skills to understand and address learners' needs and problems. Schools must create opportunities for students to practice life skills within and outside the classroom. Finally, enough time must be allocated for LSE classes in the schools to encourage evidence based practices of life skills.

Key Words: Life skills education, positive discipline

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Introduction

To create a safe and fun learning environment disciplining children has become very important in the schools. The introduction of positive disciplining programs and interventions help in teaching the young people to become responsible, respectful and resourceful members of their communities. Recent studies show that children who feel a sense of connection to their community, family, and school are less likely to misbehave (Adams, 2010; Muller, 2001). To be successful, contributing members of their community, children must learn necessary social and life skills. Positive Discipline is based on the understanding that discipline must be imparted to inculcate life skills to become productive person in the society.

There is an emerging agreement among the researchers that LSE enhances the wellbeing of the school and promotes students' positive outlook and healthy behavior (Ramesht & Farshad, 2004; Battistich & Horn, 1997; Perry & Kelder, 1992). It is effective for developing self-awareness, decision-making skills, managing emotions, and strengthening relationship for the students. It enables them to transform their knowledge and skills into action; display positive behaviour; develop positive attitude; promote the state of mental wellbeing; communicate effectively; develop negotiation skills, and improve self-perception (Vranda & Rao, 2011; Mangrulkar, Whitman, & Posner, 2001). LSE is a positive disciplining technique that supports students' healthy development (Battistich & Horn, 1997). The goal of positive discipline is to guide the students to behave in socially acceptable ways as it promotes self-control, becomes responsible for their actions, and help them make thoughtful choices about how they treat themselves and others (Perry & Kelder, 1992). As outlined by World Health Organization (WHO, 1996), there are ten core life skills such as:

Self-awareness includes recognition of 'self', our character, our strengths and weaknesses, desires and dislikes. Developing self-awareness can help us to recognize when we are stressed or feel under pressure. It is often a prerequisite to effective communication and interpersonal relations, as well as for developing empathy with others.

Empathy – To have a successful relationship with our loved ones and society at large, we need to understand and care about other peoples' needs, desires and feelings. Empathy is the ability to imagine what life is like for another person.

Critical thinking is an ability to analyze information and experiences in an objective manner. Critical thinking can contribute to health by helping us to recognize and assess the factors that influence attitudes and behaviour, such as values, peer pressure and the media.

Creative thinking is a novel way of seeing or doing things that is characteristic of four components – fluency, flexibility, originality and elaboration.

Decision making helps us to deal constructively with decisions about our lives. This can have consequences for health. It can teach people how to actively make decisions about their actions in relation to healthy assessment of different options and, what effects these different decisions are likely to have.

Problem solving helps us to deal constructively with problems in our lives. Significant problems that are left unresolved can cause mental stress and give rise to accompanying physical strain.

Interpersonal relationship skills help us to relate in positive ways with the people we interact with. This may mean being able to make and keep friendly relationships, which can be of great importance to our mental and social well-being. It may mean keeping, good relations with family members, which are an important source of social support. It may also mean being able to end relationships constructively.

Effective communication means that we are able to express ourselves, both verbally and non-verbally, in ways that are appropriate to our cultures and situations. This means being able to express opinions and desires, and also needs and fears. And it may mean being able to ask for advice and help in a time of need.

Coping with stress means recognizing the sources of stress in our lives, recognizing how this affects us, and acting in ways that help us control our levels of stress, by changing our environment or lifestyle and learning how to relax.

Coping with emotions means involving recognizing emotions within us and others, being aware of how emotions influence behaviour and being able to respond to emotions appropriately. Intense emotions like anger or sadness can have negative effects on our health if we do not respond appropriately.

Rational of the Study

With rapid development and globalization taking place in Bhutan, there is a rise in crime rate in the country. Similarly, teacher-student problem, student peer pressure, students' behavioural issues, depression, rejection, and interpersonal relationship conflict and failure amongst the students have become rampant. In response, with the institution of zero tolerance policy toward corporal punishment (Ministry of Education [MOE], 2017; Parliament of Bhutan, 2011; MOE, 2008) positive disciplining approach is sought after by all the teachers in the schools. It provides students with an environment that helps them grow with healthy social behaviours draw clear goals and develop effective skills, and attitude to become a better person (World Health Organization, 1993). However, classroom practitioners and educationists are dilemma of the skills that could best stand for a positive disciplining technique. This study investigated the impact of LSE as an intervention to curb students' disciplinary issues in the schools. In addition, it addresses the importance of LSE as one of the positive disciplining techniques in the school.

Research Objectives

LSE can be implemented as an intervention to curb disciplinary problems in the school. This study has two objectives:

1. To investigate the impact of existing disciplinary interventions (Corporal punishment, Verbal abuse, and Suspension) as the interventions to curtail disciplinary issues.
2. To evaluate the effect of LSE as an intervention to curb disciplinary issues.

Research Questions

The following research questions were explored to achieve the research objectives:

1. What are the impacts of existing disciplinary interventions (Corporal punishment, Verbal abuse, and Suspension) as the interventions to curtail disciplinary issues?
2. What is the effect of LSE as an intervention to curb disciplinary issues?

Research Setting and Participants

This study was conducted in one of the schools at Trongsa, Bhutan. Ten students (5 male and 5 female) who reported to the School Discipline Committee with disciplinary issues were selected as the research participants using purposive sampling technique. The researcher arranged time and space for each participant and provided them with LSE classes. The focus was on the problems they have committed before. The researcher rewound the situation, encouraged the participants to talk about their problems, the punishment they borne, and reflect on the entire processes. The researcher then used ten core life skills as a tool to choose, change, challenge, and check about the problems they were in. Thus, semi-structured interviews were conducted to check the impact of LSE as potentially a positive disciplining intervention. In addition, 96 students from the same school, selected through simple-random sampling took part as participants for the survey questionnaire on life skills education. Participants' confidentiality was maintained throughout the study.

Research Methodology and Data Analysis

A mixed-method research approach was adopted to collect the data for this study. Questionnaires were administered to examine the impact of LSE while observation records were maintained to track the developmental effect of LSE. In addition, semi-structured interviews were conducted to draw participants' reflection on LSE as positive disciplining intervention. Descriptive analysis was performed to analyse the data collected from the questionnaire while content

analysis was used to analyse the data gathered from semi-structured interviews and observation.

Result

This section presents the findings of this action research. The quantitative data were analysed using descriptive statistics while the qualitative data gathered through semi-structured interviews and observations after providing LSE as intervention were analysed using content analysis technique.

Finding One

For research question 1: What are the impacts of existing disciplinary interventions (Corporal punishment, Verbal abuse, and Suspension) as the interventions to curtail disciplinary issues? In general, the results from the descriptive statistics revealed LSE as having the highest positive impact on the students as a disciplining intervention (Table 1).

TABLE 1

Disciplining Intervention

Disciplining Intervention	M	SD	Level
Corporal punishment	1.79	0.91	Low
Suspension	1.97	0.87	Low
Verbal Abuse	1.96	0.87	Low
Life Skills Education	4.33	0.66	High

N=96

The findings are presented in four parts: Corporal Punishment, Suspension, Verbal Abuse, and Life skills Education.

Students' Perception on Corporal Punishment as a Disciplining Technique

From the descriptive statistics results on corporal punishment (Table 2), students in general viewed that corporal punishment as a disciplining technique has a detrimental effect on their development. Mean scores for students' perception of corporal punishment as a disciplining technique ranged from M= 1.56, SD= 0.55 to M=2.39, SD=1.96, with the lowest being reported as the failure to improve students' behaviour through the infliction of physical pain as corporal punishment.

TABLE 2

Descriptive Statistics on Corporal Punishment as a Disciplining Technique

Corporal Punishment	<i>M</i>	<i>SD</i>
1. Corporal punishment is an effective method to discipline a student	1.71	.70
2. Corporal punishment lead to the development of good character	1.80	.84
3. Beating is a good way of teaching children right from wrong	1.61	.78
4. The law should allow teachers to beat their students to discipline them	1.76	1.01
5. It is necessary to beat students with behavioural problems	2.39	1.96
6. Corporal punishment help build respect for authority figures	1.87	.86
7. Corporal punishment help children become successful adults	1.81	.89
8. Corporal punishment works better than other disciplinary methods that do not involve physical pain	1.56	.55
9. I like the idea of beating the student and I look forward to seeing the teachers doing this often because I think it's necessary	1.70	.61
10. If teachers spare the rod, they spoil the student.	1.67	.93
N=96 Average	1.79	0.91

Students' Perception on Suspension as a Disciplining Technique

The results on students' perception on suspension as a disciplining technique (Table 4) revealed poor impact of suspension as disciplining intervention to correct students with behavioural problems. There were 10 items under suspension as a disciplining technique. The mean scores ranged from $M = 1.75$, $SD = 0.80$ to $M = 2.21$, $SD = 1.04$, with the lowest being reported as the failure to improve students' behaviour through the infliction of physical pain as corporal punishment.

TABLE 3*Descriptive Statistics on Suspension as a Disciplining Technique*

Suspension	M	SD
1. Suspension, the act of temporarily removing the student from the class or school for the period of a week or two helps in teaching the students to behave properly	1.88	.91
2. Students repent for their wrongdoing and the lesson learnt from the suspension helps them to change for betterment	2.09	.96
3. A student who is suspended for his misdemeanor behaves well	2.08	1.06
4. Suspension is one of the positive disciplining techniques	1.75	.80
5. Suspension help build respect for authority figures	2.21	1.04
6. It is necessary to suspend students with behavioural problems	1.84	.67
7. Suspension and detention has similar implications on the students	1.75	.71
8. Students with behavioural problems should be detained and made to take up manual labour	1.96	.74
9. Detaining them for about a week or two and assigning them manual work helps in disciplining the students.	2.07	.90
10. Detention as an intervention for disciplinary problems should be encouraged	2.09	.87
N=96 Average	1.97	0.87

Students' Perception of Verbal Abuse as a Disciplining Technique

Students' perception on verbal abuse as a disciplining technique has ten items (Table 4). Students' perceptions on teachers' use of scolding or verbal abuse as an intervention to bring positive change than inflicting physical pain is highest compared to rest of the items under verbal abuse as a Disciplining Technique ($M = 2.09$, $SD = 1.04$). However, even this highest rated item shows low positive impact of the use of verbal abuse as a corrective measure to bring positive changes in the students. In general, under verbal abuse as a disciplining technique, all the items have the ratings representing low level of positive impacts.

TABLE 4

Descriptive Statistics on Students' Perception on Verbal Abuse as a Disciplining Technique

Verbal Abuse	M	SD
1. Any sort of verbal abuses used by the teachers help in disciplining the students with behavioural problems	1.68	.77
2. Students repent for their wrongdoing after scolding and it helps them to change for betterment	2.05	.82
3. A student who is scolded by the teachers behave well	1.84	.89
4. Scolding has long term positive impacts on the students	2.05	.86
5. Scolding the students help them in building respect for authority figures	2.10	.86
6. It is necessary to scold students with behavioural problems	2.06	.77
7. Students should be scolded often as it has less negative implications	1.93	.80
8. Scolding the students in public has more benefits than scolding them in private	1.87	.82
9. The teacher should scold the students frequently as it warns them to change for a better person	1.90	1.03
10. Scolding the students with disruptive behaviours bring more positive change than inflicting physical pain	2.09	1.04
N=96 Average	1.96	0.87

Students' Perception on Life Skills Education as a Disciplining Technique

For research question 2 “What is the effect of LSE as an intervention to curb disciplinary issues?” students’ perception on Life Skills Education as a disciplining technique with ten items (Table 5) descriptive statistics was computed. All the items under LSE have the highest rated mean scores ranging from M = 4.08, SD =0.81 to M =4.52, SD = 0.61. In general, under LSE as a disciplining technique, all the items have the ratings representing high level of positive impacts of LSE as an intervention to disciplining the students with disruptive behaviours.

TABLE 5*Students' Perception on Life Skills Education as a Disciplining Technique*

Life Skills Education	M	SD
1. Life skill education helps the students to understand the emotional turmoil, make them aware of how emotions influence behaviour and respond appropriately, which otherwise lead to behavioural problems	4.08	.81
2. LSE teach the students Self – awareness that helps them to understand themselves and establish their personal identity.	4.30	.69
3. LSE helps in understanding the importance of mutual respect and socially defined boundaries of every relationship.	4.31	.65
4. LSE prepares the students to resist peer pressure and avoid aggressive self-conduct; irresponsible behaviour and substance abuse that has greater risks with regard to physical and mental health.	4.29	.59
5. LSE instills the value of empathy in the students and helps them to understand and care about other peoples' needs, desires and feelings.	4.34	.61
6. LSE develops interpersonal relationship skills that help students to relate in positive ways with the people they interact with.	4.23	.66
7. Through LSE critical thinking skills are developed in the students to recognize and assess the factors that influence attitudes and behaviour, such as values, peer pressure and the media.	4.37	.69
8. Effective communication is developed through LSE that enables the students to express themselves, both verbally and non-verbally depending on the situations.	4.41	.55
9. LSE helps students to cope with stress, recognize how this affects them, and act in ways that help them control their levels of stress	4.52	.63
10. LSE instills creative thinking skills in the students enabling them to generate new ideas, shift perspective easily, conceive new ideas, and build on other ideas.	4.41	.72
<i>N=96 Average</i>	4.33	0.66

Qualitative Result

The qualitative part of this study examined students' behavioural problems, disciplining approaches used by the teachers and the impact, and the use of LSE as a disciplining approach and its impact. The sample population consisted of ten students selected using purposive sampling techniques. The students involved in this semi-structured interview and observations had been reported to the school Discipline Committee for violating the school's rules and regulations or students' code of conduct as enshrined in the school's Discipline Policy.

Students' perceptions on the following disciplining techniques were explored: 1. Corporal Punishment as a Disciplining Technique, 2. Suspension as a Disciplining Technique, 3. Verbal Abuse as a Disciplining Technique, and 4. LSE as a Disciplining Technique. Thus, the findings are presented in four parts.

Finding One

To answer research question one "What is the impact of existing disciplinary methods (Corporal punishment, Verbal abuse, and Suspension) as the interventions to curtail disciplinary issues?" the content analysis of the interviews produced a thematic structure consisting of four core themes: Corporal Punishment, Verbal Abuse, Suspension, and Life Skills Education. The interviews helped in collecting exhaustive and information by gathering verbal data that reflected participants' views. The following analysis explored each of these themes in detail.

The Impact of teachers' use of Corporal Punishment as a Disciplining Technique

As corporal punishment concerns the teachers' use of force to inflict pain as corrective measures to discipline children, questions were asked to investigate students' perceptions of corporal punishment. Most of the interviewees expressed their negative feelings and experiences of corporal punishment. Students' negative perceptions on corporal punishment can be observed in the following statements:

I have heard about the "Zero Corporal Punishment Policy". I also know that the teachers are not allowed to resort to corporal punishment as a measure to discipline students with unacceptable behaviours. However, I have seen most of my teachers whipping the students when they commit problems. I was caught by the teacher for getting involved in a gang fight. The problem reached to the school discipline committee. I and my friends were canded by the teachers. To be honest, nothing has changed for positive in me after

the punishment. Instead of helping me to refrain from getting involved in fights, the punishment was more of a defamation and insult. This led me to develop grudge for the friends I was into fighting and hatred for the teacher who punished me (Interviewee B).

In the same way, interviewee I responded that:

I think corporal punishment is just a short term remedy because as soon as I am off the pain, I get back to my old habits. In addition, I start hating the teacher who punishes me. I lose faith and respect for that teacher. As a result, I do not enjoy that teacher's teaching and the subject (Interviewee I). In addition, one of the interviewees described his perceptions on teachers' use of corporal punishment:

The use of corporal punishment to correct students with behavioural problems has less or no impact at all. I was slapped on my face for abusing substance. I think I fell prey to peer pressure. My friends insisted me to sniff dendrite and I could not refuse them. We were caught and the problem was reported to the discipline committee. I felt very afraid during interrogation. Now I fear making friends and I have lost my confidence too. I even planned to quit schooling (Interviewee H).

Similarly, all the interviewees described corporal punishment as a negative intervention as it brings more harm in the students. There is a limited sense of confidence and security in the students who are exposed to such punishment and even those children who witness this type of abuse are marauded of their full learning potential.

The Impact of Suspension as a Disciplining Technique

Suspension is one of the most common punishments in schools across the globe (Stinchcomb, Bazemore, & Riestenberg, 2006). Suspension or temporary exclusion is assigned to a student as a form of punishment lasting from one day to a few weeks. It is an act of not allowing the students to attend regular lessons. Questions were asked to investigate students' perceptions on suspension or detention as a means of disciplining technique. All the interviewees described the negative experiences they have experienced after the suspension as a disciplining technique. These negative views on suspension or detention as a technique to combat disciplinary issues can be observed in the following statements:

I was involved in a brawl. I tried my best to keep away from one of my school mates who was hurt by my speech. I apologised him but he was not satisfied with my apology. He kept on following and insulting me with vulgar words. I tolerated it for several times but could not keep it as soon

as he started talking bad about my parents. That is when the fight broke between us. I had my friend by my side. We taught him a lesson. The school punished us by suspending from the school for two weeks. My parents were heart-broken by the news about the problem I have committed. They scolded me for the entire suspension period. At first, I felt low and regretted about my wrong doing. With time, I found suspension to be more of a vacation from the school as I enjoyed visiting market and meeting friends. Suspension did not benefit me in any ways (Interviewee C).

Likewise, another interviewee responded that:

I think as soon as I am off the pain, I get back to my old habits as normal. In addition, I start hating the teacher who punishes me. I lose faith and respect for that teacher. As a result, I do not enjoy that teacher's teaching and the subject too (Interviewee E).

In addition, one of the interviewees described her perceptions on suspension as having more negative impacts than the good it does:

I was suspended from the school for a week for breaching student's code of conduct. During the entire suspension period, I was put into work by my guardians. My parents are far away and I stay with my relatives. The entire suspension period was a tough time for me. On the one hand, I was worried about the classes I was missing and on the other hand, I was haunted by the thoughts of how my parents would be feeling. Today, when I reflect and analyse about the problem I have created and the punishment I have meted, I think the punishment did not change for anything positive. Suspension to me is the punishment for more than one person; the person who commits problem and the loved ones that person has (Interviewee J).

In summary, all the interviewees (n=10) shared their experiences about suspension as having negative impacts on their development and growth.

The Impact of Verbal Abuse as a Disciplining Technique

Abuses can be of many types that include verbal, sexual, emotional, drugs abuse and others. When teachers advise to discipline children hurts them causing psychological or emotional damage, it becomes a verbal abuse. Students' perceptions on scolding or verbal abuse whereby teachers pass derogative comments impacting their behaviour are explored.

One of the interviewees stated that physical pain has a short term negative impact as a punishment than the verbal abuse.

I prefer physical pain than verbal abuse. The former hurts me but for short time while the latter hurts me whenever I remember the problem I have committed. I think verbal abuse has lasting damage on our self-esteem and confidence (Interviewee E).

Another interviewee described the psychological impact of verbal abuse:

One of my friends brought alcohol to the school. I could not deny when they offered me to drink some. We were caught by the teachers and before the committee sanctioned us suspension as punishment, we were scolded for our mistake. At first, it was more of an advise but later it was quite harsh for my ears. I could not take it anymore and I broke into tears. That situation has developed fear, depression, and stress in me. It also triggered anger issues in me as I find myself very useless and ‘animal-like’. At one point of time, I even thought of taking my life (Interviewee B).

Life skills education

Life skills education as a positive discipline approach is about long-term solutions that develop students’ self-discipline and their life-long learning. Life skills education promotes nonviolence, empathy, self-respect, human rights, and respect for others. For research question 2 “What is the effect of LSE as an intervention to curb disciplinary issues?” students’ perception on LSE as positive disciplining technique was explored through semi-structured interviews and the answers are provided as statement.

All the interviewees selected through purposive sampling technique responded that LSE has helped in bringing positive changes in their behaviour.

At one point of time, I was punished (slapped on my face) for getting involved in a brawl. I held my anger back and swallowed my words, although I wanted to react. I felt embarrassed before my friends and I could not concentrate on my studies. The punishment haunted me for quite a long time. However, after getting enrolled in LSE classes, I was made to recollect the incident, review the problem I have committed and reflect on the possible actions I could have taken before breaking into fight. The lessons I have learnt from LSE classes and the values I have gained from the ten core life skills not only helped me to behave positively but also taught me to respect and be gentle with friends (Interviewee A).

I simply wish that the discipline committee engage students with disciplinary issues through LSE classes than suspending us from the school. Suspension to me is a waste of time and resources. Instead of suspending us from the school, if we are kept in the school and taught life skills to correct our problems, we will learn from our mistakes and avoid creating or getting involved in such problems in future. Corporal punishment, verbal abuse, or suspension is a short time measure while LSE will have life-long positive impact in our behaviour (Interviewee C).

Scolding me in public or private for abusing drugs did not change anything. I did not learn the lessons that would help me to refrain from using substance abuse. Rather, it made me to continue with that behaviour. However, after taking the LSE classes, I came to learn about the drugs, its effects, society’s

outlook and the long term harm it creates. I also came to learn about the damage it does on the relationship (Interviewee G).

As one participant put it,

As students we need to be disciplined because without discipline everything will be very tough for us in life. However, I feel that inflicting severe pain, demoralizing students through harsh words, or limiting them the chance to take part in academic activities in the name of disciplining should not be encouraged. There are other civilized ways of punishing students as after all, the main purpose of disciplining them is to change for better person. From my experience, I strongly feel that LSE as a positive disciplining technique works wonders! Therefore, enough time and importance must be given for LSE classes to enable both the teachers and students to practice and learn the ten core skills (Interviewee H).

Discussion

The findings of research question 1 “What is the impact of existing disciplinary methods (Corporal punishment, Verbal abuse, and Suspension) as the interventions to curtail disciplinary issues?” revealed that corporal punishment, suspension, and verbal abuse as disciplining techniques were perceived to have negative impact on the overall development of the students.

Corporal punishment has lasting effects on children’s cognitive development and psychosocial well-being. Research has proven that corporal punishment increases mental health problems in children including increased psychological distress (Schinke & Babel, 1987). It leads to anxiety, depression, alcohol and drug use, and general psychological problems. On the contrary, it encourages children to resort to violence. Current study has found that corporal punishment as disciplining technique has impacted students negatively as it does not lead to the development of good character. Likewise, the study revealed that beating children for their mistakes fails to teach them right from wrong and prepare them to become successful adults. This work is consistent with other research concluding that punished children become more rebellious and are more likely to demonstrate cruel behavior, seeking vengeance against teachers and others in society. The law should therefore be put in place so that teachers refrain from using physical force to correct students with behavioural problems as it makes them lose respect for teachers or authority figures.

Similarly, suspension as a disciplining technique was found to have negative impacts on the development of positive behaviour (Skiba, 2006). The study has found that the students who were suspended for wrongdoing did not repent or learn lesson to help them change for betterment. In addition, instead of developing respect for authority figures, students who were suspended from the

school developed hatred and grudge. Furthermore, students with behavioural problems who were detained and made to take up manual labour did not help in disciplining them positively. The results are consistent with the findings of Skiba (2006). Therefore, teachers' use of suspension and detention as an intervention for disciplinary problems must be discouraged.

Children often engage in mischief. To discourage students' repetition of mischief, teachers often respond with reprimands, scolding, or rebukes. Studies have found that these kinds of interventions have more negative implications in the life of the students as they are emotionally fragile and sensitive (Blumenthal, Neemann & Murphy, 1998; Fetsch, Schultz, & Wahler, 1999). Scolding as a disciplining intervention generates a stormy emotional reaction in them, including hurt, fear, anger, humiliation, and shame. Therefore, other positive disciplining techniques must be adopted by the teachers to change students' behavioural problems.

The findings of research question 2 "What is the impact of existing disciplinary methods (Corporal punishment, Verbal abuse, and Suspension) as the interventions to curtail disciplinary issues?" revealed that corporal punishment, suspension, and verbal abuse as disciplining technique were perceived to have positive impacts on the overall development of the students.

With the change in modern life, preparing the schools that ensure students' feeling of connectedness, being a part of school programmes, and installing in them the values of acceptable behaviours and interdependent work ethics has become extremely important. Therefore, LSE is one of the programmes in the school that provide skills to students to find new ways of thinking and solving problems. It also helps in understanding the consequences of their actions and enables them to take responsibility. Likewise, it helps in building confidence while speaking or working with others. In addition LSE helps students to make wise choices when they have options, make decisions based on the outcome they foresee, and develop a sense of self-awareness and appreciation for others.

Most of the problems in the school arise due to poor understanding of oneself. Teaching of life skills to the students will help in knowing and establishing their identity and develop self-awareness through LSE can help students to recognize when they are stressed (Srikala & Kishore, 2010). Similarly, the lack of time received by the students to practice life skills in the school is consistent with the findings of Boler and Aggleton (2004) that teachers get less time in the schools to conduct life skills training. The researchers conclude that enough time must be provided for LSE for the learners to benefit maximally from life skills training.

Decision making is one of the most important life skills. It helps students to deal constructively with decisions about their lives (Mangrulkar, Whitman, & Posner, 2001). Decision making skills helps students to make effective decisions about their actions based on the available options and its impact. In the same

vein, LSE can prepare students to develop measures to cope up with stress and emotions (Botvin, 1989; Schinke & Babel, 1987). Therefore, LSE as positive disciplining intervention must be encouraged in the schools.

Conclusion and Recommendation

In order to have safe and supportive school environment for all children to succeed, teachers need to be trained and supported in non-violent or positive methods of discipline. Positive discipline aims to foster children's development and learning by building their self-confidence and self-discipline. It equips teachers with classroom management techniques which focus on finding constructive solutions to challenging situations, rather than resorting to violence (Durrant, 2010). Therefore, LSE as an intervention to promote positive disciplines in the students must be encouraged than resorting to corporal punishment, verbal abuse, or suspension.

In view of the findings from this study, the researchers recommend that all educators, regardless of the subject they teach, should be trained in life skills to understand and address learners' needs and problems. Similarly, children and adolescents are more likely to make good decisions if they can experience control over their lives; and gain a sense of self-respect and recognition from teachers. To increase the likelihood of success, programmes need to create opportunities for students to practice life skills outside the classroom by letting them play active role in making decisions that affects them. Finally, enough time must be allocated for LSE classes in the schools to encourage life skills.

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Appendix I (Questionnaire)

Life skill Education as a Positive Disciplining Intervention for Students with Disciplinary Issues in the School

QUESTIONNAIRE

This questionnaire is prepared to investigate *Life skill Education as a Positive Disciplining Intervention for Students with Disciplinary Issues in the School*. There are 40 items, 10 each for corporal punishment, suspension, verbal abuse, and life skills education. The instrument requires a Strongly Agree (SA=5) Agree (A=4) Neutral (N=3) Disagree (D=2) Strongly Disagree (SD=1) (1). Please rate how much you agree or disagree with each of the following statements using the scale provided.

Your responses will be kept confidential and will not have any implication on your personal as well as professional life.

Sl. No.	Items	SA (5)	A (4)	N (3)	D (2)	SD (1)
1	Corporal punishment is an effective method to discipline a student					
2	Corporal punishment lead to the development of good character					
3	Beating is a good way of teaching children right from wrong					
4	The law should allow teachers to beat their students to discipline them					
5	It is necessary to beat students with behavioural problems					
6	Corporal punishment help build respect for authority figures					
7	Corporal punishment help children become successful adults					
8	Corporal punishment works better than other disciplinary methods that do not involve physical pain					
9	I like the idea of beating the student and I look forward to seeing the teachers doing this often because I think it's necessary					
10	If teachers spare the rod, they spoil the student.					
11	Suspension, the act of temporarily removing the student from the class or school for the period of a week or two helps in teaching the students to behave properly					
12	Students repent for their wrongdoing and the lesson learnt from the suspension helps them to change for betterment					

13	A student who is suspended for his misdemeanor behaves well					
14	Suspension is one of the positive disciplining techniques					
15	Suspension help build respect for authority figures					
16	It is necessary to suspend students with behavioural problems					
17	Suspension and detention has similar implications on the students					
18	Students with behavioural problems should be detained and made to take up manual labour					
19	Detaining them for about a week or two and assigning them manual work helps in disciplining the students.					
20	Detention as an intervention for disciplinary problems should be encouraged					
21	Any sort of verbal abuses used by the teachers help in disciplining the students with behavioural problems					
22	Students repent for their wrongdoing after scolding and it helps them to change for betterment					
23	A student who is scolded by the teachers behave well					
24	Scolding has long term positive impacts on the students					
25	Scolding the students help them in building respect for authority figures					
26	It is necessary to scold students with behavioural problems					
27	Students should be scolded often as it has less negative implications					
28	Scolding the students in public has more benefits than scolding them in private					
29	The teacher should scold the students frequently as it warns them to change for a better person.					
30	Scolding the students with disruptive behaviours bring more positive change than inflicting physical pain					

31	Life skill education helps the students to understand the emotional turmoil, make them aware of how emotions influence behaviour and respond appropriately, which otherwise lead to behavioural problems					
32	LSE teach the students Self – awareness that helps them to understand themselves and establish their personal identity.					
33	LSE helps in understanding the importance of mutual respect and socially defined boundaries of every relationship.					
34	LSE prepares the students to resist peer pressure and avoid aggressive self-conduct; irresponsible behaviour and substance abuse that has greater risks with regard to physical and mental health.					
35	LSE instills the value of empathy in the students and helps them to understand and care about other peoples' needs, desires and feelings.					
36	LSE develops interpersonal relationship skills that help students to relate in positive ways with the people they interact with.					
37	Through LSE critical thinking skills are developed in the students to recognize and assess the factors that influence attitudes and behaviour, such as values, peer pressure and the media.					
38	Effective communication is developed through LSE that enables the students to express themselves, both verbally and non-verbally depending on the situations.					
39	LSE helps students to cope with stress, recognize how this affects them, and act in ways that help them control their levels of stress					
40	LSE instills creative thinking skills in the students enabling them to generate new ideas, shift perspective easily, conceive new ideas, and build on other ideas.					

Effects of policy developers' beliefs on school education environment

Gembo Tshering ¹

Abstract

A school education system of a nation must respond to its needs, but the capacity of the former to be responsive depends upon the kind of policy environments the latter provides for it. Underpinned by social constructivism, the study employed phenomenology and focus group interviews to explore the elements of the policy environments in which the Bhutanese school education system is situated. With data collected from key stakeholders in the policy environments, the thematic analyses of the data showed that the beliefs and perspectives of educational policy makers were different from the policies that they developed, and the difference resulted in the emergence of educational environments that discouraged a student-driven or market-driven school education system.

Keywords: Achievement; policy; phenomenology; learning; environment.

Introduction

A school education system is a multi-layered system with the overall contextual environment, the school, the classroom, and the student as the layers (Tshering, 2014). Drawing its forms from educational policies, the contextual environment determines the interactive, symbiotic relationship among the layers (Creemers & Kyriakides, 2008; Schreens, 1992; Tshering, 2012). It is probable that the attitudes, perspectives, and practices of educational policy developers influence the types of policies they make, and consequently the nature of the contextual environment. Also, policies are evolutionary, with the nature of their evolution determined by political, cultural, and social needs (Parsons, 1995).

Therefore, it might be helpful to explore the policy developers' lived experience of making educational policies, with the aim of knowing how the policies translate into the emergence of enabling education environments. Knowledge about the lived experiences of the policy makers and the resulting policies, such as national education policies on effective learning environments, external

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achievement stimuli, and mechanisms for evaluating national education policies can help understand the kind of educational environment in which the Bhutanese school education system functions (Tshering, 2012; Creemers & Kyriakides, 2008; Schreens, 1992). As a result, the purpose of this study is to explore the national education policy makers' experience and practice within the framework of phenomenology.

Review of the literature

For a nation's education system to meet national goals, it requires enabling policy environments. It has been rightly claimed that teaching and learning, education policy evaluation culture, and overall learning environment should inform national educational policies, which in turn should result in enabling educational environments (Creemers & Kyriakides, 2008). Each one of these overarching policy themes needs further elaboration. First, an enabling environment for teaching relates to school timetables, long-term and short-term planning, absenteeism and drop-out, and standards for teaching. Likewise, learning relates to school curriculum. Second, a culture of policy evaluation emphasizes the need for evaluating the effectiveness of education policies in improving teaching and learning. Third, the overall education environment relates to the stakeholders' support for (e.g., financial, strategies, advice) and expectations from (e.g., achievement pressure) schools.

Two sets of compelling elements of the enabling education environment were presented by Schreens (1992). The first set comprises the composition of the school population (e.g., disadvantaged pupils, ethnic minorities), the denomination of the school (e.g., private school, public school, boarding school, day school), and the geographical setting of the school (e.g., rural school, inner city school, suburban school). The second set constitutes reward structures (e.g., privatization, deregulation, output financing), assessment-centred government policy, parental involvement, demands made by educational consumers, and cultural values (e.g., societal perspectives on the quality of education and the teaching profession).

No studies, especially about the Bhutanese school education system, reported how policy makers' beliefs and experience inform the policies that they make; therefore, this study will explore this gap.

Method

Sample

A purposive sample (Krueger & Casey, 2009; Morgan, 1988; Morgan & Scannell, 1998) of six men with more than five years of involvement in developing and implementing educational policies participated in this study. The

inclusion criteria were (a) involvement in making educational policies and (b) represent more than 80% of the personnel responsible for educational planning and policy development.

Research design

Given that the meaning of the context of the Bhutanese education system had to be derived from the beliefs and perspectives of its stakeholders, this study used a social constructivist worldview so that the participants in the study could interact with one another and construct the meaning of the phenomena (Guba, 1990; Guba & Lincoln, 1994; Lincoln & Guba, 1985). Because the meaning of the phenomena that the study explored had to be derived from the lived experiences of the participants, the study used phenomenology (Creswell, 2007; Moerer-Urdahl & Creswell, 2004). Furthermore, I was able to set aside my beliefs, feelings, and perceptions from the lived experiences of the participants in line with the bracketing facility of phenomenology. Through this bracketing process, I acquired fresh insight into the central phenomenon of the study.

The study used focus group interview as its data collecting tool because it fitted with the evolutionary nature of policies and the emerging attitudes, perspectives, and cognitions of the policy developers—a dynamism that a focus group interview is typically known to capture from group interactions (Krueger & Casey, 2009; Morgan, 1988; Morgan & Scannell, 1998).

Procedure

With the approval of the Ministry of Education of the Royal Government of Bhutan, the participants who met the inclusion criteria were approached for their informed consent and invited to participate in the study. The participants reported to a pre-arranged venue where the researcher and moderator greeted them. A few pleasantries between the participants and the moderator were exchanged to relax the former before the interview. Then, as the participants were familiar with each other, the moderator introduced the themes of the focus group interview. Next, the participants were familiarised with some ground rules to ensure a collegial environment during the interview. Finally, the participants were asked the focus group interview questions. The interview lasted for over two hours. The focus group interview was recorded with a digital recorder and transcribed verbatim.

Data analysis

The data was analysed based on the methodology proposed by Moustakas (1994). Accordingly, I bracketed my experiences from the lived experiences of the participants, identified significant statements in the data from the partici-

pants, and clustered these statements into meaning units and themes. Then, I synthesized the themes into textual and structural descriptions. Finally, I constructed a composite description of the meanings and the essences of the lived experiences of the participants.

A range of measures were followed to ensure that the study met the methodological rigor. First, I followed the phenomenological method, self-disclosed and bracketed my experience, used field notes, obtained adequate sample size, examined disconfirming cases, and interviewed until saturation of data was achieved (Creswell & Miller, 2000; Anderson & Spencer, 2002). Also, I member-checked the participants, established audit trails, analysed and coded the data, and maintained thick, rich descriptions of the phenomenon of the study (Creswell & Miller, 2000; Anderson & Spencer, 2002; Creswell, 2007).

Results

From verbatim transcripts, 37 significant statements were extracted; resulting in 13 formulated meaning units, and three themes. To attain thick, rich description and audit trails, the significant statements, the meaning units, and the themes were critically analysed side-by-side.

Theme one: The national education policy perspectives on external achievement stimuli

Educational policymakers were aware of the external educational achievement stimuli, and they were in favour of having the stimuli implemented in Bhutanese schools. However, the policymakers identified challenges in capitalising on the stimuli because of various obstacles, albeit perceived, specific to Bhutan as shown in the responses to the following questions.

How important is it for parents to know about the performance of schools in which they plan to enrol their children? Overall, the focus group perceived that the parental involvement in children's education was minimal, and that the parents viewed the children's education as the responsibility of schools. The group's view was evident in the following comment (Member B), "Parents feel that once their children are in schools, it is the responsibility of the schools to take care of their children". Further, the group (prompted by Member B) stated, "Parents should play a role of equal partner to teachers or anyone involved in their children's education". The focus group emphasized the need for policy interventions aimed at increasing parental involvement in children's education.

There should be a model shift in the way parents are involved in our schools. Parents should be involved more in their children's physical, moral, and academic developments than their current way of involving only in procuring

children's stationery and participating in school management board meetings and other non-academic activities. (Member B)

The focus group (Member A) recognized the importance for parents to be aware of the performance of the schools their children were going to attend as evident in one statement, "Very important and there is no doubt about it". However, the group, revealed the challenges in making information about the performance of the schools accessible and comprehensible to the parents. As noted by one group member:

We have not reached that situation where parents can assess how schools are performing. Some schools provide information through school calendars and school magazines, which is neither sufficient nor comprehensive for judging the school performance. (Member A)

What are the likely sources of information available to parents to learn about prospective schools for their children? The focus group pointed out a range of sources as stated in the statement below:

The likely sources of information are school magazines, school brochures, school calendars, school performance reports, and examination topper list. The Ministry is also in the process of finalizing management of information systems that will provide comparative information on school performance. Other sources of information are newspapers. (Focus Group)

Despite a range of potential sources of information available for the parents, the focus group was sceptical about the parents' ability to use them for evaluating the quality of their children's prospective schools. A statement from the focus group (Member A) indicates this, "All parents cannot read the information provided by schools because most of them are illiterate".

How would the publicity of students' achievement results, post-school enrolments in colleges, and receipt of scholarships affect school performance? As expected, the focus group had positive views about the ways of recognizing students' academic achievement. The following comment highlights this view:

"I think for class 12, scholarships make students work hard. In fact, a scholarship is one of the main incentives for students to work hard.... Scholarships foster competition among schools and students. This may make schools and students work hard. At times schools, especially private schools, tend to be judged based on the number of students who qualify for further

education in colleges”. (Member C)

However, the focus group was mindful of the adverse effects of an excessive emphasis placed on student achievement, “... too much focus on students’ performance in examination often results in neglecting other aspects of wholesome education or holistic education”.

The focus group also indicated a change in the future capacity of the Ministry of Education on the matters related to the question. A comment from the group indicates this:

“Individual schools usually keep a record of the number of students who qualified for further studies in colleges. Such a record is not available at the national level. Education Management and Information System (EMIS), once completed, will provide information about students’ post-school education and their previous schools”. (Member B)

What are some of the potential benefits of allowing students and parents to select schools? The group perceived parents’ satisfaction and easing parents’ socio-economic concerns as a couple of benefits from allowing students and parents to select schools:

“The potential benefits will be making the parents satisfied with why they want to send their children to a particular school. Behind the satisfaction, there must be a variety of reasons, such as social and economic ones. Therefore, allowing students and parents to select schools will solve parents’ socio-economic problems”. (Member A)

This view is further supported by another member:

In the past, many students from Thimphu used to seek admission in Zemgang High School, although the school was located in a socially backward part of the country. The reason for such interest in Zemgang High School was that the parents of those students hoped to solve some of the urban-related problems picked up by their children”. (Member C))

Parents’ desire to get their children admitted in schools closer to their residence also featured as a benefit, as implied by the comment (Member B), “Parents tend to opt for schools near to where they live. Therefore, parents often do not think about how schools are performing”.

Notwithstanding the perceived benefits from parents being able to choose schools for their children, the group (Member A) raised some negative or troublesome consequences of allowing parents to choose schools, “Giving choice to parents will result in concentrating students in high performing schools and fewer enrolments in low performing schools”.

In addition, the parents in Bhutan had little control over which school their children might attend as indicated by the group’s comment (Member B), “There is an assumption that parents have a choice of schools, but it is not like that. It is largely related to what District Education Officers plan and decide”. Further, the group commented, “...as it is the government who provides educational goods and services, parents have to comply with educational goods and services provided by the government, including which school their children should enrol”.

How important is it for schools to have freedom in procuring teaching and learning resources? In principle, the focus group recognised the benefits of granting autonomy to schools in procuring teaching and learning materials as evident in the comment (Member B), “It is very important, especially for result-oriented management or outcome-based financing model. If schools were made totally responsible for holistic development of students, it is very important and critical that schools have autonomy in procuring teaching and learning resources”.

However, what was considered potentially helpful for the schools in principle was not applied in the schools. A comment from the group confirms this (Member B), “...due to some constraints, such as inadequate staff for, and right expertise in, dealing with procurement matters, the Ministry of Education has decided not to grant such autonomy to schools”.

How important is it for schools to have freedom in selecting, appointing, and terminating teachers and staff? The focus group recognised the importance of autonomy to schools for selecting, appointing, and terminating teachers and staff in its statement (Member A), “It is one of the highest degrees of autonomy. If it is doable, it is good and very important, but is it very practical now?” Alternatively, “These [freedoms indicating school autonomy] are possible in Bhutanese schools if all schools have minimum facilities already in place so that they have a level-playing field”.

The focus group also raised some additional benefits from granting autonomy to schools. The group pointed out that school autonomy would make teachers feel closer and directly accountable to their schools, and that school autonomy would take care of the teacher deployment responsibility of the Ministry of Education.

“If we look at it positively, one of the major headaches that the Ministry has is the deployment of teachers. Every year we get hundreds of requests for teachers. These teachers, as they work for the Ministry, feel more

accountable to the Ministry than to their schools. If the schools select, deploy, and terminate teachers, they will feel accountable to schools". (Member B)

However, the group was quick to point out that school autonomy would lead to social inequalities by way of creating a rural-urban divide among students:

"...in a situation where we have limited resources to offer teachers and the fact that the teacher salary is uniform across schools, it may be difficult to justify this kind of school autonomy... this kind of autonomy will broaden the rural-urban divide. With government policy interventions, such a rural-urban divide can be avoided and a uniform socio-economic growth can be achieved by allowing parents with equal access to uniform educational facilities across the country". (Member B)

How important is it for schools to be able to use their budgets according to their needs and priorities? The focus group indicated that it was up to schools to use their budgets in accordance with their plans:

"It is very important. Schools should use their budgets where most needed and give the best results. Schools have to find out the factors related to the desired results and the budget should be used in developing these factors. It is up to the schools to take decisions on how they use their budgets". (Member A)

If you had the authority to relate school performance to school funding, what would be your primary recommendation? The possibility for financing Bhutanese schools based on their performance is unlikely for a number of reasons:

"I think we should have the balance of head and heart. The heart may say this is good and go ahead, but is this practicable in the present situation? We need to be rational. I would not really have a lopsided recommendation that relating school performance to school financing is good". (Member A)

A reason for the performance-based financing being lopsided was the lack of comprehensive and reliable assessment practices that take into account students' socio-economic backgrounds, school resources, schools' locale, and students' holistic development:

"Schools differ in terms of infrastructural facilities, teaching and learning resources, and communities from where students come. Most of the parents in urban schools are literate, while most of the parents in rural places are illiterate. Examinations might not actually tell you what the status of

education or the quality of education is in schools, thereby [limiting the whole range of] the school performance”. (Member A)

The group also feared the prospect of malpractices by schools to raise their performance to secure financial rewards (Member B), “We do not want teachers conducting examinations with answers written on the board. If school finance is linked to school performance and teachers conduct examinations, it is obvious that such negative behaviours are bound to happen”.

However, output-based financing, is largely viewed as more efficient than input-based financing; and consequently, the focus group outlined their preference for the former.

“We want to finance schools based on their achievement targets, rather than basing the finance on the resources related to inputs only. Targets would be based on students’ all round development and their post-school achievements. We are planning to develop outcome-based financing in the near future”. (Member B)

Theme two: National education policy on enabling learning environments

The attributes of enabling learning environments are viewed largely as being related to physical infrastructures (e.g., electricity, water supply) of schools. A few intangible attributes (e.g., school leadership) also figured on the list of the attributes of enabling learning environments in schools.

Thinking about some attributes of an effective learning environment for schools, how many such attributes can you promptly list? The focus group raised the following as the attributes of effective learning environments: teaching and learning materials; career counselling; electricity; road access; the Internet; water supply; library books; teacher-pupil ratio; classroom size; school leadership; and health facilities.

How do the attributes (listed in the previous question) contribute to building an education friendly atmosphere in schools? The group stated that the elements would foster a child-friendly school environment and child-centred teaching and learning activities in schools (Member B). “We would want the classroom climate to be conducive, encouraging enquiry, not rote learning. Children should be encouraged to stand up and ask questions when they have doubts, rather than holding back. Education should be child-centred”.

How would you relate the attributes of an education-friendly atmosphere to student performance? The group perceived a positive relationship between the attributes and student performance.

“If you have got a classroom where we have good student and teacher interactions, minimum class size, motivated teachers with good content knowledge and pedagogical skills, good leadership, a school with such classrooms will be a very happy place to be for children. The children in such a school will learn with enjoyment which will have a positive and direct impact on their learning, and hence their school performance.” (Member B)

The group also raised the importance of career counselling services in schools (Member B), “Career counselling or school-life linkages play a very important role. If a child is educated at the right age on what their aptitudes, goals, interests, and efforts are, school can become more meaningful to the child’s future employment”.

Theme three: Mechanisms for evaluating national education policies

The standard practices of policy formulation seemed to have been followed in developing national education policies, but the policies were never evaluated.

Based on your experience, what are the steps you usually follow in formulating policies on educational programmes? Most of the standard steps involved in formulating policies were inherent in the group members’ experience with policy formulations:

“...identification of issues or problems is very important. ...next is getting budgets for solving the problem. ...getting to solve the problem and involving stakeholders from various agencies are other steps. ...we invite people from various departments to identify issues or problems related to their goals and needs and relate their problems to policy guidelines and then frame programmes for them”. (Member A)

How many times were you involved in evaluating national education policies? Few group members had experience with evaluating educational policies (Member B), “I do not remember being involved in evaluating education policies”. On the other hand, the group contested the validity of the evaluation if policy developers were involved in evaluating their own policies (Member B), “...being policy developers, how relevant it is for us to evaluate our own policies is another issue”.

Miscellaneous: Further perspectives

Is there anything further you would like to say on external stimuli for student achievement? Three points were mentioned by the group: a need for enabling conditions for applying the law of supply and demand between the colleges of teacher education and the Ministry of Education; a need for the monitoring

agency to be autonomous from the organizations it monitors; and the relationship between student graduates and labour markets.

First, the group pointed out the need for enabling conditions to apply the law of supply and demand to deliver accountability to the colleges of teacher education:

“The role of the Ministry of Education being responsible for the colleges of education and responsible for recruiting and deploying graduate teachers makes the law of supply and demand difficult to apply. The Ministry of Education has to take in all graduate teachers from the colleges of education”. (Member B)

The focus group indicated a change in the way the Ministry of Education will recruit teacher graduates from the colleges of teacher education:

“Now we are trying to say that we change the role of the Ministry of Education. We are the client and we will demand the type of services we want, the quality of teachers we want, and the quantity of teachers we want from the colleges of education. If we do not get what we want, then we can move to another vendor, in Bhutan or outside Bhutan. So we need to change that role and it is very important”. (Member B)

Second, the group raised the need for the monitoring organization to be autonomous from the organizations it monitors.

“If we look at the Department of School Education, it is the primary department for transaction of educational activities. Its activities are monitored by Education Monitoring and Support Service Division of the Department of Education. In the functioning of good governance, we cannot have doing and monitoring by the same agency.... Now, we are saying that everybody should play the right role, so the monitoring agency should be independent from the organizations it monitors”. (Member B)

Third, the group perceived a mismatch between the labour market and the school curriculum, as underlined by the comment (Member B), “Students coming out of schools and institutions find themselves very little equipped for the labour market”.

Discussion

In line with the literature (Fan & Chen, 2001; Hoover-Dempsey, et al., 2001; Hoover-Dempsey & Sandler, 1995, 1997; Jeynes, 2007; Ritblatt, et al., 2002; Yan & Lin, 2005), the results highlighted the need for schools to connect with parents by sharing information about their children's performance and by involving them in school activities. Such a relationship between parents and schools has the potential for the latter to get greater support from the former in areas related to student learning.

With school magazines, brochures, calendars, student performance reports, and media referred to as popular sources of information for parents about their children's schools, the group perceived that the majority of parents may not be able to absorb this information because of Bhutan's low national literacy rate. The inability of most parents to use available print materials limits communication between parents and schools to oral communication. As reported in Ritblatt, Beatty, Cronan, and Ochoa (2002), the lack of proper communication seems to be a key barrier to parental involvement in the activities of Bhutanese schools. The reliance on oral communication also raises doubts about the parents' ability to assist their children with homework and other academic activities, which is a challenge being faced by parents with a low SES and less formal education (Epstein, 1995; Epstein & Sanders, 2006). However, because the parental involvement in school activities or children's learning spans beyond academic activities in the forms of parenting, volunteering, decision making, and collaboration with communities (Epstein & Sanders, 2006), alternative school outreach programmes should be able to involve parents in school activities.

The group perceived that the publicizing of student achievement results, post-school enrolments in colleges, and receipt of scholarships would make students work harder as they compete for scholarships. The group believed that hard work by students would improve their achievement. However, the group was aware of the negative aspects of school accountability when it is driven by school league tables, as reported in Goldstein and Leckie (2008).

As reported in Waslander, Pater, and Weide (2010), parents' satisfaction and reduced socio-economic concerns were the two benefits that the group felt would ensue from allowing parents to choose schools for their children. While the former is self-explanatory, the latter is related to students' transition and school choice as claimed by Gibbons, Machin, and Silva (2008). However, the group mentioned that allowing parents to choose schools for their children would result in high-performing schools having more students than the low-performing schools, a perspective similar to the findings reported in the literature (Gibbons, et al., 2008; Gibbons & Telhaj, 2007). Notwithstanding the merits and demerits of parents being able to choose schools for their children, the group

stated that since schools were funded by the Royal Government of Bhutan, it is the prerogative of the government to allocate schools for students if it wishes, avoiding the possibility of school choice in Bhutan.

Granting autonomy to schools in procuring teaching and learning materials was perceived to benefit the schools, but the schools were not granted such autonomy because of the perception that schools were not ready. Given that the focus group felt that granting autonomy to schools in procuring teaching and learning materials would be beneficial, which is also in line with the literature (OECD, 2010; West, Allmendinger, Nikolai, & Barham, 2010), studies ought to be initiated to evaluate the feasibility of granting such autonomy to schools.

The focus group conceded that by empowering schools to recruit and terminate teachers and other school staff, the teachers and the staff would be more accountable to schools and free the Ministry of Education from the responsibility of teacher recruitment and deployment. However, these benefits were obscured by the group's fear of fostering inequalities between urban and rural schools because only a few good teachers would prefer to work in rural schools, resulting in differentiated learning opportunities in the two sectors. As suggested by Grauwe (2005), policymakers may grant autonomy to schools in conjunction with supportive strategies to develop the capacities of principals, teachers, and communities with a clear focus on autonomy as a tool for improving school performance and establishing equity in the school education system.

The group underlined the importance of schools being able to use their budget where it is most needed, noting that it was up to the schools to decide how to use their budget. However, an examination of a school budget plan reveals that schools have little discretionary power in using their prescribed budget because of its strict bureaucratic clearance compliance and mandatory audit trailing requirements. Such elements in a budget have been known to obstruct schools in carrying out educational innovations to improve student achievement, especially improving the performance of the at-risk students (Timar & Roza, 2010).

The group did not favour the idea of performance-based funding because the Bhutanese education system did not have the capability to develop a comprehensive list of school performance indicators other than the examination-oriented ones. This statement is difficult to interpret, but it reveals a gap between the school fiscal policies and school performances. In addition, the statement seems to overlook some of the well-established aspects of performance-based funding in the Bhutanese education system such as career ladder, meritorious promotion, master teacher, and in-service training (Foster & Marquart, 1984). The gap, if it existed, would mean that the preceding aspects of performance-based funding are followed as routines (e.g., promoting teachers based on some kind of periodic schedule) in Bhutanese schools rather than as tools for improving student outcomes (Foster & Marquart, 1984). Because there was a desire for

performance-based funding of the schools, the Ministry of Education may care to explore suitable models for instituting performance-based funding.

As expected, physical infrastructural resources are viewed as important for developing enabling learning environments in schools. However, equally important, are some intangible constructs such as school climate and student engagement. The focus group overlooked the intangible constructs in its list of the attributes of enabling learning environments in schools. This finding indicates that the Ministry of Education did not have a comprehensive policy on the attributes of enabling learning environments in schools.

The focus group's perspective of the relation between an enabling learning environment and student achievement suggests that adequate physical infrastructural resources would develop enabling learning environments in schools, and eventually result in child-centred education. This finding suggests that physical infrastructural resources and other intangible attributes of enabling learning environments are compensatory; therefore, focussing on the former compensates for the latter. However, the literature reports that physical infrastructural resources and other intangible attributes of enabling learning environments are not always compensatory, but are rather disjunctive, indicating the need for national educational policies to have equal emphasis on physical infrastructural resources and other intangible attributes of enabling learning environments (Barber & Mourshed, 2007).

The experience and the mentioning of the sequential steps of standard mechanisms of policy formulation (Bridgman & Davis, 2007) is indicative of the mechanisms being followed in developing national education policies in Bhutan. However, the lack of experience of the focus group in evaluating national education policies indicates that the policies, once developed and implemented, are not evaluated. As stated by Bridgman and Davis (2007), not evaluating the policies would result in the lack of knowledge about: (a) how the policies have achieved their objectives; (b) who to hold accountable for the implementation of the policies; and (c) the directions and clues for future policy making. These implications are serious because they suggest the lack of policy analyses and the loss of opportunities for policy learning, which need to be addressed in formulating national education policies and their later development (Parsons, 1995).

The group's emphasis on the need for enablers for the law of supply and demand to regulate the types of teacher graduates produced by the colleges of education in Bhutan and the scope of demand for quality teachers that the Ministry of Education of the Royal Government of Bhutan can make on the colleges is of a concern. This need indicates that the teacher graduates from the colleges were guaranteed employment by the Ministry, and this guarantee was viewed as compromising the quality of teacher graduates. In addition, the

practice was also seen as protecting the colleges from the consequences related to inadequate readiness on the part teacher graduates to take up the teaching profession. As a result, the Ministry of Education seemed to aspire for the use of market mechanisms to exert pressure on the colleges to produce quality teacher graduates. Similarly, the group highlighted the need for the monitoring agency to be autonomous from the organization it monitors, indicating a systemic flaw. This flaw risks biased results from the monitoring activities. Also, the group was concerned about the incongruity between the school curriculum and the knowledge and skills required in the labour market. Although this point was not elaborated, it warrants a tracer study similar to the one conducted by Hanushek and Wobmann (2006).

Policy implication and further study

The group recognised the importance of disseminating adequate and proper information to parents about prospective schools for their children. However, the value of such information was perceived to be contentious because of Bhutan's low literacy rate. A policy implication from this might be to explore alternative ways of disseminating information. This might include the Ministry's Educational Monitoring and Information System and the use of the National Language as the medium, coupled with the range of conventional information sources for parents about the prospective schools for their children.

Focus group data revealed the significance of publishing student achievement results, post-student enrolments in colleges, and receipt of student scholarships. The analyses also revealed that programme officers were aware of possible adverse effects of student achievement-oriented publicity. This finding suggests that relevant policies might well be formulated on student achievement-oriented publicity that encourages student learning and discourages adaptive malpractices in schools.

The group foresaw some benefits from allowing parents to choose schools for their children. Parents' satisfaction and easing parents' socio-economic concerns emerged as two major advantages that may arise from allowing parents to select schools for their children. On the other hand, the availability of options for parents to select schools for their children was contested given its potential to heighten the present rural-urban enrolment imbalance, with the parents preferring to admit their children in urban schools where teachers are better resourced than those in rural schools. However, parents have little freedom to exercise preferences for schools for their children because the Royal Government of Bhutan allocates schools. These findings suggest that the benefits of allowing parents to choose schools for their children be viewed from the accountability aspects and that mechanisms to prevent a rural-urban enrolment

divide be explored through relevant studies.

The group recognised the importance of granting autonomy to schools for procuring teaching and learning materials. Contrary to its perceived importance, the schools still lacked this autonomy. A policy implication from the finding is that studies ought to be initiated to explore a range of workable options for granting autonomy to schools for procuring teaching and learning resources. The group was aware of the benefits of granting autonomy to the schools for recruiting and terminating teachers and other staff. However, schools were not granted such autonomy. This finding suggests that future studies investigate strategies or processes whereby schools might realistically recruit teachers, with the aim of providing greater responsibility to schools in developing and managing school human resources.

Currently, Bhutanese principals have complete autonomy in the disposal of their allocated budget. A policy implication from the finding is that policy guidelines be developed for training school personnel in budgeting and financial management.

The future implementation of output-based financing in Bhutanese schools is unlikely, as the group currently viewed it as a dubious challenge rather than as a means of improving school accountability, suggesting the need for a feasibility study on the prospect of introducing output-based financing in Bhutanese schools. In other words, there is a need to investigate the negative and positive effects of output-based financing and prevailing attitudes towards it.

The group was aware of the complementary relationship between an effective learning environment and student learning. Further, the group endorsed the importance of ensuring that the elements of positive learning environments existed in schools. This finding suggests that proper monitoring and assessment tools be developed to monitor and evaluate the health of the school environment.

Individuals in the group had considerable experience in formulating policies. However, the group had little experience in evaluating them. An implication from this finding is that a mechanism be developed that extends policy formulation to policy evaluation, and include consideration of appropriate structures and processes for this.

The last section showed that the group was not happy with the lack of enabling conditions for supply and demand to regulate colleges of teacher education, and the lack of autonomy of the monitoring agent from the circumstances monitored. Some implications from this finding are that studies be conducted into teacher recruitment and the relationship between monitoring and monitored organisations.

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Educational Practices for Children with Special Educational Needs: A Cross-Sectional Study

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Abstract

With Bhutan fully invested in Education for All, inclusion of children with diverse needs have become the top priority of the Royal Government of Bhutan. With this intent, Ministry of Education have identified schools across the country to strengthen the efforts to address the needs of children with impairments. In the past few years, a growing body of studies have shown the prevalence of sub-standard educational practices across the schools that cater for Special Educational Needs (SEN). Nonetheless, with the commitment and support of relevant development partners, government and non-governmental agencies, the educational milieu around the domain of SEN is much better. Therefore, an explorative cross-sectional case study was carried out to ascertain the educational practices across the Bhutanese schools that cater SEN program. Data were collected via a questionnaire and interview from thirty-eight teachers (n=38) who are involved in the provision of SEN programme. The findings suggest that educational practices for children with special needs is much better than it has been inferred in the past. A few issues that need attention are also discussed.

Key Words: Educational practices, inclusive, special educational needs, pedagogies assessment

Introduction

The cradle of education in Bhutan has dawned with the elite monasticism. The prevalence of monastic education dates back to 8th century (Chhoeda, 2007), yet, literature says that it was formally established in Bhutan in 1622 only during the reign of Zhabdrung Ngawang Namgyel (Dorji, 2008; Phuntsho, 2000; Schuelka, 2012, 2013a, 2013b; Thinley, 2016). However, the advent of modern secular education in Bhutan has happened only by 1960s during the era of His Majesty, the third Druk Gyalpo Jigme Dorji Wangchuk in the face of

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globalization. This makes Bhutanese education system barely fifty years old and relatively new (Scheulka, 2012, 2013a, 2013b, 2014). Nonetheless, the Royal Government of Bhutan under the leadership of dynamic kings has taken great leap by establishing numerous learning centres across the country in a short period of time. In the reports of Ministry of Education –MoE (2015), Bhutan had the total of 570 schools with 209080 school going children. This has enabled almost all the Bhutanese children above 6 years and older to have equitable access to the modern secular education (Dorji, 2003; Dorji & Scheulka, 2016; Tharchen, Chanbachong, & Savegpan, 2010; Thinley, 2016).

In the past decades, educational policies and curricular practices in Bhutanese education system were largely based upon on the Indian paradigm possibly influenced by the presence of greater number of Indian expatriates across the offices and schools (Chhoeda, 2007; Dorji, 2003; Phuntsho, 2000; Namgyal, 2011). However, by early 1980s, Royal Government of Bhutan has taken tangible initiatives to step away from the Indian design by grounding policies and practices in accord to the contextual scenario of Bhutan and the international standards. In their study, Scheulka (2012) and Scheulka and Maxwell (2016) notes that inception of New Approach for Primary Education (NAPE) made Bhutanese education system a giant leap towards realising Bhutanese based curricular approach. Since then, several key policy documents and reforms have been made to ensue the education in Bhutan better and equitably accessible to children from all the walks of life. One such noble initiatives that is gaining popularity in the present milieu is education for children with Special Educational Needs-SEN (Dawa, 2009; Dorji, 2015; Dorji & Scheulka, 2016; Drukpa, 2015).

According to Dorji and Scheulka (2016) and Nannes, Maxwell, Rabten and Karchung, (2007), with Bhutan fully involved in international conventions such as Education for All (EFA) and the Convention on the Rights of Person with Disabilities (RPD), to make school access to all the children has recently become one of the primary focuses of the government. For instance, in the ninth five-year plan, Royal Government of Bhutan (2002) established Special Education Unit under Ministry of Education (MoE) to specifically deal with the aspects of SEN for children with impairments. More recently, the constitution of Kingdom in article 9.15 and 1.95 have explicitly guaranteed the provision of education for all in Bhutan. This policy covers all children, including those with disabilities and other marginalized groups, to enjoy equal “opportunity for an education that helps them to realize their full potential and excel in life” (MoE, 2014b, p. 62). To prove significant impetus for special education, MoE has given reassurance and support to design and development a new National Policy for Special Educational Needs (NPSEN). Once endorsed by the Royal Government of Bhutan, NPSEN is been expected to function as the guiding principle to further strengthen the quality of special education in the country

with better practices and resources (MoE, 2014b).

Despite the lack of a tangible framework and policies, special education in Bhutan at the present scenario seems to be gaining momentum with further identification of schools to cater SEN programs. As of 2015, Bhutan had a total of fourteen institutes that cater SEN programs to 564 students with special needs (MoE, 2015). In early 2016, Ministry of Education then identified Tsangkha Central School in Trongsa and Gonpasingma Lower Secondary School in Pemagatshel as the new SEN schools towards achieving the long-term goal of establishing One SEN School in each dzongkhag. According to Dorji and Scheulka (2016), MoE plans to have twenty two SEN schools across the country with one in each Dzongkhag plus Muenselling and Wangsel Institutes – by 2018, which is the end of the 11th five year plan (Gross National Happiness Commission-GNH, 2013; MoE, 2014a; United Nation for Children Education Fund –UNICEF, 2014). These SEN schools are expected to serve as inclusive education centers to enhance the provision of educational services to children with disabilities in the entire school system (MoE, 2014a). In the current scenario, Bhutan follows a continuum of provision-oriented separate and inclusive systems (Norwich, 2008, 2013) to provide education for children with disabilities. Students with mild to moderate learning disabilities are integrated into mainstream schools, whereas learning for students with severe needs and other categories of disabilities such as those with visual and hearing challenges are offered facilities in segregated special schools (Drukpa, 2014). This trend implies the fact that Bhutanese education system is grounding its policies and practices towards the realization of inclusiveness and heterogeneous learning environment. Yet, in the recent few years, a growing number of studies have documented the extreme lack of professionalism across the schools that cater SEN programs, possibly due to the lack of professionals, professional practices and the logistic resources.

In the study conducted to examine education for youth with disabilities in Bhutan, Scheulka (2013) notes that the educational atmosphere for children with disabilities across the Bhutanese schools are strict, harsh and competitive. From his observation, he further maintains that most of the teachers that deal with SEN programs are under-trained, under-resourced and under-supported when it comes to teaching students with diverse abilities. Similarly, Dorji (2015) and Drukpa (2014) reports that the progress of special education in Bhutan is apparently saddled by the teacher under-preparedness to address heterogeneous classrooms, a rigid curriculum, teacher-centered pedagogy, inappropriate assessment practices, ineffective teacher-parent collaboration, lack of community involvement, and a lack of financial resources also impede the progress of inclusive education. These trends have also been reported in the several other prominent studies carried out by MoE (2014b); Scheulka (2014);

Tharchen et al. (2010), UNICEF (2014), and Van Balkorm and Sherman (2010). According to Dorji and Scheulka (2016) and Scheulka (2013a, 2013b), the sad reality with special education across the schools are virtually linked with the preparation of teachers by two teaching colleges of Bhutan: Paro College of Education and Samtse College of Education that merely provide a single stand-alone module on special education. So, both the colleges do not offer any course on the professionalization of special education nor do they have the capacity to do in terms of funds, staff and expertise. As a result, teachers who have been trained at these colleges resort to the use of archaic pedagogical and curricular techniques that make education for children with special needs extremely difficult. Therefore, many studies have called upon the concerned Ministry and agencies to work out the strategies to enhance the professionalism of teachers who take up the role of dealing with SEN programs across the schools (GNH Commission, 2013; MoE 2014b; Schuelka 2013a, 2013b).

To meet such challenging demand, in the past few years, Ministry of Education and other organizations such as UNICEF and Bhutan Foundation have scaled up their effort to train and specialize the teachers in terms of pedagogical and logistic support by providing access to the workshops within country and sending abroad. According to the latest reports, to build teacher capacity and provide teaching and learning materials and resources to enable children with special need, Ministry of Education intensified the trend to provide workshops to every SEN teacher across the schools that cater to SEN programs on a yearly basis (Dorji, 2015; Dorji & Scheulka, 2016; UNICEF, 2014). The other tangible effort that is happening is the provision offered to the teachers for short term courses and long term course like masters in special education in abroad universities and institutes (Dorji & Scheulka, 2016). With such noble programs and timely measures adopted by the concerned Ministry and respective foundations and stake holders, it is therefore not biased to suppose and presume that standard of special education at current scenario must be better than it was in few years ago with better educational practices. However, given the paucity of the studies, there is no empirical evidence that characterize the current educational practices existing across the Bhutanese schools that cater to SEN programs. Therefore, to establish base line data, this study will be carried out to examine the current educational practices catered to children with special educational needs across the Bhutanese schools that cater to SEN programs with the research question:

What are the educational practices catered to the children with special educational needs across the Bhutanese schools that cater to SEN programs?

Materials and Methods

This study is a qualitative research grounded upon the parameters of interpretive approach and exploratory design. It was carried out towards the onset of second term of the academic year 2017 in the month of August covering all the schools in Bhutan that cater SEN program. Data were collected via written questionnaire and face to face structured interview protocol. Instruments were validated by at least two program officers from SEN division, MoE, Thimphu concerning the face validity and content validity. The data were collected in the domain of four constructs: i) School Culture/Policy, ii) Teacher Deployment, iii) Pedagogies, and iv) Assessment. The questionnaire was administered to thirty eight participants comprised of SENCO(s) and SEN teacher(s) in the respective schools that cater SEN program via mail correspondence. The interviews were carried out with two SENCOs, three SEN teachers and two teachers from general background who deals with SEN at Tendruk Central School, Samtse after the school hours for a period of thirty minutes with each interviewee. The response to interviews were recorded and transcribed into verbatim. The data gathered via questionnaire as well as protocol were analysed based on the approach of Braun and Clarke's (2006) thematic code-based analysis.

Results and Discussion

This study was conducted to examine the educational practices catered to children with special needs across the Bhutanese schools that cater special educational needs program. The study ascertained the educational milieu as outlined in the following sections:

i. School Culture

It appears to be a discernible trend that schools across the country that cater SEN program seems to be playing vital role in making the SEN program in the respective schools fundamentally parallel to the general education. In the study, off the twenty-eight participants, twenty-one respondents emphatically maintained that they receive strong and necessary supports from the school administrators to enhance the inclusive practices in the aspects of academic as well as non-academic domains. Majority explicated that school administrators provides an avenue to the SEN providers to share and collaborate the ideas of best teaching pedagogies and assessment techniques that meet the needs of students with diverse needs besides the commitments rendered in developing and executing policies and work plans of SEN related programs. As a result, it was learnt that schools that cater SEN program are striving hard to integrate the children with special needs along with main-stream children through classroom

settings, games and sports, cultural activities, combined assembly, and scouting activities. This finding resonates the reports of Namgyal (2014) but contradicts with Sheulka (2014) and Tharchen et al. (2010) who notes about the lack of support and collaboration amongst the school stake-holders and the exclusion of children with special needs on various grounds. In the recent findings (Dorji, 2015; Drukpa, 2014; MoE, 2014b; Scheulka, 2014; Tharchen, et al., 2010; UNICEF, 2014, Van Balkorm & Sherman, 2010) reports that teachers across the schools are undeniably over-burdened with ever-increasing teaching workloads. Unlike it, however, as a positive development, one of the interesting developments discerned by the study was the entrust of school managers upon SENCOs to have greater emphasis upon SEN program with less teaching periods across the general classroom settings. Yet, many respondents still noted that there are much that the school administrators need to know about the SEN program. For instance, nearly one-half of the respondents noted that unless the school managers are well aware of the goals of SEN education, policies and guiltiness, needs and the implication that various assistive technology/tools have for the children, it sometimes become uphill tasks to run the program with smooth flow. This has been rightly pointed out by Dawa (2009) that when school and the stakeholders lack the understanding of the policies, educational settings and the psychological needs, it becomes an utter failure to spear head the SEN program and turn out to be frustrating for both the authorities, SEN providers and the children.

It also an encouraging development to notice that many schools have the culture to involve the community. In their response, majority maintained that parents are involved in developing individual educational plan (IEP), sharing the ideas on the learning approaches of the children, planning and designing assessment tools, planning the transition of their children for higher education or vocational education and marking the important days related to special educational needs. This finding refutes the reports of UNICEF (2012) that suggest that parents need to be educated as to what a disability is and the resources they have available. On the whole, the finding implies that there is an integration of society and community in shaping the SEN program across the schools both in terms of policy development and the methods that can lead to the realisation of the needs felt by the diverse learners. To certain extent, some of the respondents even claimed that they observed noticeable differences in children's behaviour and the manner when parents are around the classes, i.e. students appears to be psychologically and emotionally stable with minimal or no social disorders. According to the reports of Namgyal (2014), there is a strong relation between parents' involvement in the SEN program and the childrens' academic performance. In this context, he notes that when parents are involved in the decision making and policy development, they begin to realise

the need of their children and cater better services accordingly in many aspects of physical, medical, educational and emotional spectrums. This supports the theoretical aspects claimed by Tharchen et al. (2010) that schools must integrate both teachers and parents to strategize and make decision concerning the educational needs of their children. Similarly, Scheulka (2014) explicates that parents are the primary source of disability empowerment and, if they are encouraged to advocate for greater educational quality for their children with disabilities, they can make the greatest impact. Moreover, it seems that schools seek advice and learn from the professionals working in the relevant agencies. Respondents claimed that they often call upon health professionals such as physiotherapists, occupational therapists, speech therapists, and other experts to visit schools and interact with both SEN providers and children with special needs. This finding refutes the claim made by Namgyal (2014) regarding the prevalence of medical negligence on most grounds. The collaborative existence of SEN programs and the medical professionals has been widely documented in the reports of Scheulka (2015) regarding the evolving construction of and conceptualization of disability in Bhutan.

However, as apparently and *prima facie* it is, the most new practices carried out by some of the schools is the adoption of one children with special needs by each teacher, professional development programs about SEN frequently and the remedial classes for children who receive SEN program. This would although look daunting and challenging, but if teachers who deals with SEN program are made to focus more on special education with less roles in other school-based activities, such practices would help in yielding better results with better plan, management, one to one interaction and logistic supports and care. However, the success would also be determined by the teachers' qualification and the learning environment that children have around them as it's always not the case across the Bhutanese schools that cater SEN program (Dorji, 2015; Drukpa, 2014; MoE, 2014b; Scheulka, 2014; Tharchen, et al., 2010; UNICEF, 2014, Van Balkorm & Sherman, 2010).

ii. Teacher Deployment

Although, teachers have the autonomy to become SEN provider based on individuals' interest and willingness, experiences and professional supports received in the pre-service and in-service programs. However, the sad realities surfaced from the study is deployment of teachers across classes that have children with diverse needs with main-stream students. Responses from the participants indicated that teaching and learning across the classes are carried out by teachers from background as well. Although, it may look promising to deploy teachers from SEN background, yet the response from the participants indicated their lack of professionalism in special educational needs. In their

response, all thirty-eight respondents claimed that they don't have even diploma in SEN let alone degree and masters although, few noted that they have the experience of taking up one stand-alone module on special education at the colleges. So, it was learnt that even teachers from SEN background do their duties with just the experiences and information received from short study tours abroad, National Based In-service Programs (NBIPs) and School Based In-service Programs (SBIPs) that were are mostly short, tailored, and ad hoc programs. However, anecdotally, many of these in-service workshops are overly theoretical, facilitated by foreign experts with little contextual understanding, and far removed from Bhutanese practical classroom realities. The application of knowledge and learning gained through such activities are hardly supported for implementation in schools, neither are they effectively monitored or evaluated (Dorji & Schuelka, 2016). Other trend noticed was the limited time the SEN providers have as they are tasked to shoulder other responsibilities parallel to teachers who do not deal with SEN program despite being core member of SEN team. Thus, as it's mostly the case (Dorji, 2005; Dorji, 2015; Drukpa, 2014; MoE, 2014b; Scheulka, 2014; Tharchen, et al., 2010; UNICEF, 2014, Van Balkorm & Sherman, 2010), it appears to be the fact that most of the SEN providers do not have the fair share of time to deal with SEN program leaving the responsibilities solely at the hands of SENCOS.

However, the most unfortunate reality observed in the interviews was the involvement of teachers from general background with children with mild or moderate disabilities in the general classroom setting. In the interview, all three interviewees from general background explicated that they have heard about SEN only upon their arrival in the school which has appeared completely alien to them. They maintained straight fact that they don't have capacities to deal with children who receive SEN program as they are not trained for. Their stand was such that with no or limited skills, they face the problem to cater the children with diverse needs as they have to resort with outdated, rigid and archaic pedagogical approaches that make inclusion extremely complicated. This trend has been inferred by several recent studies that Bhutanese teachers are not adequately prepared to face a diversity of classroom situations and scenarios (MoE, 2014b; Van Balkom & Sherman, 2010), which requires critical and evaluative thinking skills as not all classroom issues can be fully anticipated. According to Drukpa (2014), Schuelka (2013), and UNICEF (2014), the problem becomes more challenging and daunting in the case of teaching children with disabilities. Schuelka (2013) postulates that "most Bhutanese teachers are under-trained, under-resourced, and under-supported when it comes to teaching a diverse range of abilities in their students" (p. 70). This as per Dorji and Schuelka (2016) and Schuelka (2013) has to do partly with the professional training teachers receive at the colleges. According to Dorji and Schuelka (2016) and Paro

College of Education (2013), students in teacher training colleges are offered just one stand-alone course on special education with only to complete one 16 hour course on Special Education. As a result, there is no professionalisation of special education in Bhutan, and the few special educators in the education system have either received their training abroad or simply been put into that role with a background in general teaching. However, this observation is not to belittle with the much investment made by the individuals working at various organizations and teachers who have striven hard to navigate the progress of special educational needs from scratch in the beginning. Nonetheless, this would get addressed gradually as Royal University of Bhutan (RUB) and MoE are collaborating to begin award-bearing programs on Special Educational Needs and Inclusive Education (Paro College of Education, 2013). For instance, its plan to introduce a Master's Degree in Special Education by 2018 corresponds to the Ministry of Education's aspiration to have qualified teachers to teach children with special needs (MoE, 2012, 2014a, 2014b).

iii. Teaching Pedagogies

As teachers across the schools lack the professionalism in SEN, it's not biased to presume that there is nothing much they can do to navigate children with special needs with relevant and evidenced based pedagogies. However, unlike what has been observed by several past studies (MoE, 2014b; Van Balkom & Sherman 2010; Schuelka, 2013), there seems to be some evidences in the study to suggest that teachers from SEN background are at least aware and equipped with the strategies that are necessary for children with diverse needs. In their response, many stated that they employ strategies and skills that are best guided by the framework and explanatory schema of differentiated instruction and explicit teaching philosophy. While it is not known how well the teaching is catered, there is still an indication by SEN teachers that to ensure equitable access of education for children with special needs across the general classroom setting, they mostly favour student centered learning styles, peer tutoring, one to one attention, accommodation, cooperative learning structures, multiple sensory learning styles and guided instruction. However, this is just the case with students with mild or moderate disabilities as they are usually accommodated with mainstream students across the general classroom settings (Dorji & Schuelka, 2016). Yet, for children with severe needs, there seems to be other extra protocols maintained. The responses to the questionnaire and interview revealed that students with extreme disabilities are trimmed through push in and pull-out classes, peer-budding, standardized IEP with separate portfolios, exposure to learning based on individual's learning needs with relevant assistive tools and modified curricular materials that are exclusively handled by SEN team members and SENCOs. It was learnt that children with severe physical impairments are

mostly dealt with sound and phonic clues, while those with social, emotional and behavioral disorders are handled via one to one attachment. On the other hand, children with autistic disorders and mental disorders are made to read and re-write the mistaken words or sentences whereas, those with communication needs are made to communicate without the use of sign language similar to what has been found out across the schools in United Kingdom (Dorji, 2008). These were some of the tangible steps employed by the SEN team members to cater special educational needs for the children with severe impairments. These evidences appears to support the premise that Bhutanese SEN providers are not as underprepared, undertrained or under supported as claimed by Dorji and Schuelka (2016) and Schuelka (2013a, 2013b, 2014). Nevertheless, their finding may still prove to be true with teachers from general background. Conversely, as revealed by many participants, it is not the same story with children with mild or moderate disabilities who are usually intervened with curricular materials same to the main-stream students which are rigid and competitive by nature. Though cruel and unlucky, these students are still catered by teachers from all background and that make the matters bad to worst. As evident, three interviewees from general background made their stark truth that with limited experiences and mastery, they resort to the use of rigid, irrelevant, outdated and archaic pedagogies partly fueled by the curricular designs, workloads and the classroom setting. This finding appears to be supported by the report of Dorji and Schuelka (2016) and Schuelka (2013) who outlines that vision of special education and inclusive education in Bhutanese education policy is clearly progressive, but the reality of educational practice is much different. This could be one of the possible reasons that explains why some of the respondents rated SEN program in their respective schools in the level of 'good'. Nerveless, with much support from relevant agencies and stakeholders, there are explicit indications regarding the growth of Bhutanese SEN providers in terms of professional skills and academic knowledge regarding children with special needs.

iv. Assessment and Evaluation

The findings in this section implied assessment and evaluation techniques of children with mild or moderate disorders different from those with severe impairments. It is such that children with severe impairments are exposed to the curriculum that are mostly designed by the SEN team members and SENCOs according to the need and learning style of the individual children within the framework of SEN policies and guidelines. It was learnt that the curricular materials are more or less flexible, while the thinking levels and standards of concepts embodied are usually similar or if not at par with that of main-stream students. As a result, it appears to be evident that children with severe impairment are assed and evaluated through alternative assessment

techniques and tools driven by their individual needs and learning styles. In the study, responses implied that students are mostly graded according to their IEP through observation and informal tests and via individual needs and performance (school-based criteria). These evidences appears to be at odd to the report of Schuelka (2013, 2014) who says that Bhutanese curriculums are generally centered on the idea of centralization and standardisation that make difficult for children to adapt.

However, it is partly correct, as it is not the same token with the children with mild or moderate impairments. As Bhutan is still in the pipeline of developing polices and guidelines, there is still no concrete and separate stand-alone curricular designs meant for children who receive SEN program. Consequently, these group of students are unconditionally exposed along with main-stream students to the rigid curricular designs and assessment modes that are overly competitive and full of choking. Although, it was learnt that SEN team members as far as possible try their best to modify the nature of conceptual aspects and assessment items according to needs of learners, yet, their responses also indicated that with limited knowledge or inadequate mastery, they fail to do same in every subject. This implies the need to have SEN team members from every subject. Nevertheless, as it's the case at the present scenario, irrespective of the background, students have to appear same examination with same standard and formalities in the national levels such as Bhutan Secondary Examination for Certificate (BSEC) and Bhutan Higher Secondary Examination for Certificate (BHSEC). Although, this is not the case with the learners at Wangsel and Munselling Special Schools, generally, it looks bit unfortunate to note the unfair means of assessment type catered for children with special needs from other special schools. In the words of Schuelka (2013), without any accommodations, youth with disabilities taking the BCSE and BHSEC will have an inherent disadvantage. However, in the recent few years, it seems to be culture that schools have started sending the children with special needs to next higher grades that cater vocational skills through alternative assessment techniques. This proves to be a better assessment method than making children to appear meritocracy exams for next higher grades that does not support inclusivity. Therefore, it appears to be fact that current scenario around the assessment of children with special needs is much better than it was in past few years, although there seems to be much work that needs to be done to make environment around Bhutanese educational milieu more inclusive.

Conclusions

The study unveiled the phenomenological prevalence of SEN practices across the Bhutanese schools that cater to SEN programs. In light of evidences, the

contemporary SEN practices across the Bhutanese schools appears to be much better than it has been reported in the past few years by several studies. With push from concerned bodies from the ministry and other relevant agencies, there is an impression that schools have the culture to navigate SEN programs with logistic supports and collaboration amongst all the relevant stakeholders. However, what seems to concern more is the educational background of teachers who provide SEN programs. It appears that most if not all the SEN providers are providing the SEN services with the mere incentives availed from short NBIPs and SBIPs. Nonetheless, it looks better that SEN providers who form school SEN teams are to some extent well equipped with relevant aspects of pedagogical content knowledge (PCK). Hence, it looks promising that children with severe needs are purely handled by the teachers who form the school SEN team. It appears a bit unfortunate that teachers from general background are deployed to cater to the learning needs of children with mild or moderate disabilities even though they are underprepared and logistically not ready to handle the classroom situation that comprise the children with special needs. Meanwhile, it is not surprising to note that children with mild or moderate impairments are exposed to the curricular designs identical to the main-stream students. It appears to be a concern that children are assessed through same mode of assessments both at national and school level even though measures are taken to offer alternative approaches. Nevertheless, what impress the fact is the exposure of children with severe educational needs to the alternative curricular approaches in accord to their individual needs and situations. So, in the overall, the SEN practices across the schools that cater SEN program appears to be much better than it has been reported in the past few years.

Limitations

As the study was focused exclusively upon schools, it lacks the credible information from the organizations, agencies and the special education units that cater SEN program. Moreover, the informants are mostly the teachers and by this fact, the study also lacks the information from school administration as well as from children with special educational needs. On the other-hand, the study was not designed to investigate how well the SEN team members are equipped with PCK and learning theories. Their shared ideas in the study were just the key information and with this token, the study do not have the attribute to evaluate and establish the level of capacities that Bhutanese SEN providers possess. At the same time, it appears to be a fact that, contemporary Bhutanese SEN providers compared to the past few years seems to be much better prepared with relevant PCK. However, the study do not have the credible evidences to suggest how well each strategies are applied according to the situational needs

of the diverse learners.

Educational Implications

The study ascertained the prevalence of educational practices around the Bhutanese schools that cater to SEN programs. The evidences suggest the fact that phenomenological prevalence of educational practices across the schools that cater SEN program is much better than it has been reported in past studies. Therefore, it is not biased to presume that educational milieu around the Bhutanese schools that cater to SEN programs seems to be progressing well within the mandates of Ministry of Education with good school culture and better SEN providers equipped with relevant and necessary curricular approaches. Yet, as evident in the study, there are some issues that needs an urgent attention of relevant stakeholders:

- i. SENCOs and the teachers who form the school-based SEN team members do not even have a diploma in SEN let alone a degree and masters. RUB and MoE have plans to introduce masters (Dorji & Schuelka, 2016) and other award-bearing programs on SEN and Inclusive Education (Paro College of Education, 2013). However, the need for this program is immediate and may not happen sooner than required and therefore requires urgent attention of concerned agencies and stakeholders to strategize and implement the plans to enhance the academic background of the SEN providers.

- ii. Students with mild or moderate disabilities are handled by teachers from general background with main-stream students across the general classroom setting. The sad reality with these teachers is such that they are not just a minority in SEN but are completely unaware, unprepared and undertrained to tackle the classroom situation with diverse learners. According to Johnstone and Chapman (2009), when teachers are not supported professionally, and not trained adequately, they often fall back onto old pedagogical methods and fail to see the overall vision of the educational policy and their place in implementing it. Therefore, with onus on their court, stakeholders across the special education units and concerned individuals at the school level can at least look into the matter and spearhead the plans and strategies to ensure the teachers from general background with some package of information and skills regarding SEN. This would at least inform the teachers in advance to prepare and plan with relevant PCK according to the needs of all the learners. Moreover, it appears to be the accountability of MoE and RUB to collaborate and work out on the courses to expose all the student teachers (irrespective of the majors) regarding the aspects of SEN. In the current scenario, both

the college of education (Paro and Samtse) offers one stand-alone module regarding SEN (Dorji & Schuelka, 2016). However, more can be done to explore the possibility of infusing inclusive education ideas and pedagogy across the entire teacher education curriculum and not just a stand-alone course or module.

iii. Currently, children with mild or moderate impairments are exposed to the curricular designs that are identical to the main-stream students with same conceptual aspects (syllabus) and assessment modalities (examinations at school and national level-BSEC and BHSEC). Such kind of curricular approach that demand meritocracy and competition may not favour all the learners from diverse background (Schuelka, 2013). Therefore, special education units under MoE and Royal Education Council (REC) can still explore and design the curricular approaches that would serve the interest and the needs of children with special needs. On the other hand, it looks promising that at the school level, teachers who form school SEN teams take the initiative to design alternative assessment tools by modifying the test items relevant and at par with the children's cognitive level. However, it looks like this does not happen for every subject due to the lack of SEN team member from all the disciplines. Therefore, to mitigate such inconveniences, SENCOs in consultation with relevant stakeholders can spearhead the culture to form the school SEN team members comprised of teachers from different subject background.

iv. Although, it appears that school administrators are aware of the SEN policies and educational needs of children from special needs background, it may still turn out to be better if school administrators could be better informed about the aspects of SEN by the concerned individuals from national and school level.

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Assessment of Students' Attitude on 21st Century Transformative Pedagogy-Kagan Cooperative

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Abstract

Kagan cooperative learning is a transformative pedagogy introduced nationwide in the Bhutanese education system. It is founded on the principles of interdependence, accountability, participation, and interaction. Effectiveness of cooperative learning is affected by the students' experience and attitude towards cooperative learning. It is crucial that we understand their attitude at the very early stage of its implementation. This study assessed students' attitude towards the cooperative learning, and attitude differences between genders, high and low achievers, and older and younger students. A total of 413 students participated in this study. Both quantitative and qualitative data were collected for the study. The statistics such as descriptive and t-test was used for statistical analysis. Data analysis found significant difference, $p < .05$, in attitude between the genders and between older and younger students. Despite the differences, students of both the genders as well as the class levels revealed positive attitude towards cooperative learning. The findings strongly depicted that the Bhutanese students have positive attitude towards Cooperative Learning.

Key Words: Cooperative learning (CL), teaching learning, transformative pedagogy (TP)

Introduction

Transformative Pedagogy (TP) that focuses on Kagan Cooperative Learning (CL) Structures is one of many important changes that has been rigorously implemented throughout the schools in Bhutan. TP is a pedagogy that “Empowers students to examine critically their beliefs, values, and knowledge with the goal of developing a reflective knowledge base, an appreciation for multiple perspectives, and a sense of critical consciousness” (Ukpokodu, 2009, p.43). “CL is a successful teaching strategy in which small teams, each with students of different levels of ability, use a variety of learning activities to improve their understanding of a subject” (Balkcom, 1992, p.2). Kagan's CL structures are

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founded on four basic principles of Positive Interdependence, Individual Accountability, Equal Participation, and Simultaneous Interaction (Kagan, 2003).

In May 2016, every teacher in Bhutan attended TP professional development programme based on Kagan CL. Bhutan allocated Nu.117 million to facilitate the professional development programme. In the context of debate on quality of education, there is also public deliberation on whether the decision to invest such an amount of money on the teachers were justified. Whether the justice is done or not will rely on how well these pedagogy will be received by students in the daily teaching learning process. Bayat (2004), expressed that the effectiveness of CL structure are affected by the user's attitude and experiences towards the CL concepts. The general consensus of researchers on the effectiveness of CL is that they do result in positive outcome and produce positive effects on achievement (Dotson, 2011; Slavin, 1990). Properly structured CL can be beneficial to all students, regardless of their level of ability, gender or cognitive ability (Peklaj, 2003). Since the application of CL is new to the Bhutanese education system, it is an opportunity to study Bhutanese students' attitude towards the CL pedagogy. Johnson and Johnson (1999), listed student's achievement, interpersonal relationship, psychological health and social competence as outcomes of the CL. All these can be condensed in the following lines:

The students were satisfied with the planning and monitoring process used in CL. They felt that it was adaptable for normal classroom teaching. Students believed that group tasks clear their concepts more than individual learning. It also makes learning interesting, it provides fun, done in satisfactory situation and their socialization enhance. Students also expressed that during the assigned work, they felt responsibility of work, committed to success of each member and their group (Akhtar et al. 2012, p. 145).

Therefore this study attempts to assess how the students' view this pedagogy in their daily class. Specifically this study will compare the attitudes of students towards CL in terms of achievement level, age, and sex.

Method

A mixed methods research design was implemented. However, the qualitative data were used only for specific quantitative findings that needed additional clarification such as individuals with extreme scores and unexpected results in this case. Attitude attributes were described by statements that reflected participants' attitude towards the CL. It is accorded with 5-point Likert scale from 1-strongly agree to 5-strongly disagree. Data collections are carried out from Shari Higher Secondary School (HSS)-grades 11 and 12, and Gaupel

Lower Secondary School (LSS)-grades 7 and 8 under Paro Dzongkhag with prior permission from the respective school administrations. These schools are GNH seed schools for the piloting of Kagan CL structures identified by Royal Education Council. So purposive sampling method has been used. A total of 413 students- 156 from Gaupel LSS and 257 from Shari HSS, participated in the self-administered structured questionnaire survey for the purpose of collecting quantitative data. The questionnaire were developed in consultation with the CL master teachers of the pilot school. Qualitative data were collected through interview with students who volunteered to explain the probable causes of unexpected findings from the analysis of quantitative data. Views of CL master teacher was also sought for the same. General attitude and the comparison of attitudes between high achievers and low achievers, between older and younger students, and between males and females were analyzed using one sample and independent sample t-test in SPSS. Frequencies, graphs and mean scores were also used as an analysis tool.

Result and Discussion

Demographic Information: A total of 413 students participated in the survey out of which 17 cases were rejected. This 17 cases include incomplete rating (out of two page questionnaire, they answered only first page), same or neutral rating for all statements (they rated the same score for all the 35 statements that include both positive and negative statements), and patterned rating. Therefore, the quantitative analysis of this study used the data from 396 participants only. Table 1 shows the proportions of each category of students in percentages. As per their aggregate percentage in their previous year-end exam, they were categorized into low (0-49%), moderate (50%-69%) and high (70-100%) achievers.

TABLE 1

Demographic Characteristics (n=396)

Gender (%)		Standards (%)		Achievement groups (%)		
Male	Female	LSS	HSS	Low	Moderate	High
41	59	38	62	21	67	12

Students' age for the Lower Secondary School ranged from 11 to 17 years with mean age of 13.7 years and from 16 to 22 years for Higher Secondary School with a mean age of 17.6 years.

Students' general attitude towards CL structures: The questionnaire consisted of 24 positive statements and 11 negative statements (Appendix A) that supports and despises the use of CL structures respectively. Aggregate mean scores of the positive and negative statements were tested for their differences with the neutral value (3) of 5-point Likert scale rating as shown in Table 2.

TABLE 2

One sample t-test for positive and negative statements

	Mean	Std. Devi- ation	Test Value = 3		
			t	df	Sig. (2-tailed)
Mean score of positive statements	4.13	0.454	49.705	395	.000
Mean score of negative statements	2.48	0.570	-17.992	395	.000

The differences of both positive and negative statements were highly significant with $p < .001$. Students in general have positive attitude towards the new TP. Reda (2015), Bilen and Tavil (2015) concluded that students have strong positive attitude towards the use of CL structures in their daily teaching-learning process. Rasbi (2014) also found CL as an effective teaching learning method preferred by students in their teaching learning process

Out of 35 statements, all the 24 positive statements had clear indication of agreement with only 4.9% of the respondents disagreeing with it. As for the negative statements, around 20% of the respondents agree with the statements. Participants have divided views on three of the negative statements as listed in Table 3.

TABLE 3

Frequency (%) for each degree of agreement with divided views (n=396)

Items/statements	Strongly disagree (%)	Disagree (%)	Neither agree nor disagree (%)	Agree (%)	Strongly agree (%)
I learn more on my own than through interaction with friends	7	17	33	26	16
Equal grading (marks) for all the team/group members are not fair	16	18	32	22	13
I prefer taking notes rather than engaging myself in group discussion	13	26	33	19	10

These divided views were unexpected and as per research design, few students and a CL master teacher has been interviewed. Students expressed that group discussion and interaction often consumes lot of time. According to master teacher K. Lhaden (personal communication, March 4, 2017) CL strategy is at initial stage of implementation and as such, students need to get used to the strategy and build confidence in garnering productive interaction with their friends. Rao and Pujari (2013) stated that these problems come from not being able to implement CL structures carefully and logistically. Besides, McLeish (2009) observed that students' preference for individual work rather than group work is due to their fears of low grades.

As for equal grading not being fair, students who contributed more complain that it is mostly the same person with major contribution in group works. They also stated that some groups have better performing members than other groups and therefore same assignment for all the groups provides advantage for the better performing groups all the time. Slavin (1990) also states that it is demotivating for the weaker groups to put in extra effort. However, Kagan and Kagan (2009) argued that CL is for learning and not for grading. Contrary to this, Johnson and Johnson (1999) advocate use of group assignments for group grading in CL teaching learning process.

Comparing attitude of high and low achievers: The positive statements were categorized under the themes of study skill, social skills, equality, and responsibility (Kagan & Kagan, 2009; Bulut, 2009). Study skill includes students' preference

for different CL structures that improve their attitude towards learning skills and capabilities. Social skill include CL structures that will help them develop skills like interaction, team building, helping each other, taking others perspectives, and work relations. Equality includes opportunity for equal participation, inclusion in the group work, self-esteem, and confidence. Responsibility includes accountability, and being responsible for their own learning, understanding others problems, and developing leadership skills.

As shown by Table 4, social skill has the highest mean score. Students rated social skill as the most prominent advantage of using the CL structures.

TABLE 4

Differences between low and high achievers (advantages)

	Academic achievement	Mean	Std. Deviation	t	df	Sig. (2-tailed)
Study skill	Low achievers	4.06	0.644	-1.187	127	.237
	High achievers	4.19	0.557			
Social skill	Low achievers	4.21	0.532	-0.321	127	.749
	High achievers	4.24	0.488			
Equality	Low achievers	3.99	0.542	-1.972	127	.045
	High achievers	4.18	0.407			
Responsibility	Low achievers	4.09	0.651	-1.887	127	.061
	High achievers	4.20	0.521			

As per Kagan & Kagan (2009), besides achievement crisis, social skills crisis is an important issue that the CL structures addresses. They further stated that CL will counter the trend of disappearing interpersonal skills.

There were no significant differences ($p > .05$) in study skill, social skill, and responsibility between the high and low achievers. For equality dimension, the difference is significant with $t(127) = -1.972$ and $p < .05$. Within equality dimension, data revealed that even though there is no difference in rating on equal opportunity for participation, ratings on their ability to participate differs. Limited academic competency of low achievers restricts them from active participation in the group discussion (Tesfaye & Berhanu, 2015). Kagan and Kagan (2009) on a positive note states that low achievers watch and learn as their more able peers think aloud and model how to solve a problem. Even with differences between low and high achievers, McLeish (2009) attributes enhancement of

participation as a benefit of CL.

Negative statements were categorized under the themes of grading conflict, task conflict, time wastage, and dependency. These themes constitute the disadvantages of CL (Smith et al., 2005; Ragusa, 2013). Grading conflict includes equal grading for group members, their preference for individual work, and fear of low mark. Task conflict consists of non-cooperation of group members in carrying out group assignment. Time wastage include CL structures being time consuming and group work, a waste of time. Dependency accounts for group members depending on other group members to complete the group tasks. Table 5 shows the differences between high and low achievers.

TABLE 5

Differences between low and high achievers (disadvantages)

	Academic achievement	Mean	Std. Deviation	t	df	Sig. (2-tailed)
Grading conflict	Low achievers	2.87	0.684	1.153	127	.251
	High achievers	2.72	0.734			
Task conflict	Low achievers	2.23	0.913	-0.042	127	.966
	High achievers	2.23	0.908			
Time wastage	Low achievers	2.35	0.818	1.158	127	.249
	High achievers	2.17	0.866			
Dependency	Low achievers	2.43	0.962	2.758	127	.007
	High achievers	1.97	0.828			

In general students' are highly inclined towards disagreement with the negative statements. Amongst the disadvantages, with $t(127) = 2.758$ and $p < .007$, there is significant difference in the mean score of dependency between the low achievers and high achievers.. Understandably, high achievers with the mean score of 1.78 disagreed on the statement "I depend on my team members to do the group works" with greater conviction than the low achievers with the mean score of 2.35 (Appendix B). They are significantly different with $t(127) = 2.681$, $p < .05$. According to Akhtar et al. (2012), some educators argue that the high achievers are slowed down because they are stuck working with low achievers. On the contrary Kagan (2003) expressed that high achievers in fact learn more as they explain to the low achievers.

Comparing general attitude between class levels and between genders: In general HSS students demonstrated greater positive attitude towards the use of

CL than the LSS students as shown in table 6. Between genders, mean attitude scores are higher for female students and the differences for both positive and negative statements are statistically significant with $t(394) = -2.087$, $p < .05$ and $t(394) = 3.466$, $p < .001$ respectively as in Table 7. Reda (2015), Adeyemi (2008), and Ella et al. (2007) also found the same result in females revealing greater positive attitude towards the CL structures. However, they did not find any statistical differences between the standard levels.

TABLE 6

Differences of positive and negative statements between older and younger students

	Mean score-LSS	Mean score-HSS	t	df	Sig. (2-tailed)
Positive statements	4.07	4.172	-2.139	394	.033
Negative statements	2.57	2.431	2.397	394	.017

TABLE 7

Differences of positive and negative statements between genders

	Mean score-Male	Mean score-fe-male	t	df	Sig. (2-tailed)
Positive statements	4.08	4.174	-2.087	394	.038
Negative statements	2.60	2.403	3.466	394	.001

Comparison of specific statements between older (LSS) and younger (HSS) students: There are some issues with applicability of some CL activities. This includes class and team building, use of brain breaks and the act of “cheering” between the older and younger students. As shown in table 8, there is no significant difference in team building, and brain breaks between the standard levels.

TABLE 8

Differences associated with applicability between LSS and HSS students

	Standards	Mean	Std. Deviation	t	df	sig. (2-tailed)
I like when teachers come up with different brain breaks during the instructions	LSS	4.53	0.843	-0.667	394	.505
	HSS	4.58	0.710			
I enjoy all the activities of the CL structure, class and team building activities and active learning activities	LSS	3.94	0.924	-1.459	394	.145
	HSS	4.06	0.762			
I like cheers being used in the class	LSS	4.41	0.952	4.159	394	.000
	HSS	3.96	1.080			
Team building activities are appropriate at my class level	LSS	3.99	0.959	1.819	394	.070
	HSS	3.81	0.924			

Use of cheers in the class and team building activities (team names, team cheers, team logos) are the most debated issues when it comes to its applicability in the higher standards. As per Kagan & Kagan (2009), it is one of the most frequently asked questions by the educators. Even though student of both the levels seem to like the concept of cheers, HSS students do not seem to enjoy the cheers as much as the LSS students do. The difference of mean scores between them is highly significant $t(394) = 4.159$ and $p < .001$.

The specific statement on use of brain breaks has the highest mean score (4.56) amongst all the statements (Appendix B). Use of brain breaks is an answer to time and cost effective solution to students' lack of attention in the classroom and it applies to every academic level (Turner, 2015). Appropriateness of team building activities has one of the lowest mean score amongst the positive statements. In the follow-up interview, students' take on this is they feel that the class becomes superficial. Herrmann (2013) also pointed out that students' perceive them as superficial and redundant. On the contrary, he also stated that team buildings serves the purpose of instilling the values of ownership and belongingness.

Comparison of specific statements between genders: Figure 1 shows positive and negative statements that has statistically significant difference between the genders as shown in Table 9.

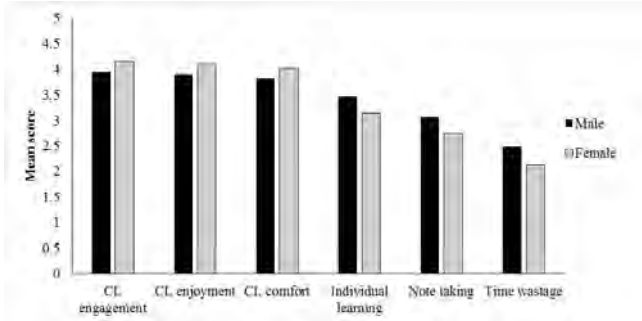


FIGURE 2: Preference rating for group and individual working environment

TABLE 9

Difference between genders for specific statements

	t	df	Sig. (2-tailed)
CL structures keep me engaged throughout the lesson	-2.423	394	0.016
I enjoy all the activities of the CL structure, class and team building activities and active learning activities	-2.341	394	0.02
I feel comfortable using CL structures	-2.459	394	0.014
I learn more on my own than through interaction with friends	2.729	394	0.007
I prefer taking notes rather than engaging in group discussions	2.771	394	0.006
I waste a lot of time teaching/explaining to my group members	3.462	394	0.001

Mean score of each specific statement in Figure 2 distinctively shows that female students scored greater on the statements that encourages group and collective works whereas males valued individual tasks and learning. Ella

et al. (2007) also found that males were more likely to respond negatively to interactions and females tended to explicitly agree and support others.

Conclusion

The frequencies of the ratings and mean scores for each statement explicitly indicated that students have a positive attitude towards the new TP. Comparison between low and high achievers have shown that low achievers were not able to participate in group tasks equally as well as the high achievers do. The mean scores also depicted that low achievers depend on their group members to complete the task more frequently than the high achievers. There was a significant difference in the mean score of statements between standard levels as well as between the genders. Between standard levels, students of higher standards depicted a greater positive attitude towards CL and between the genders, females demonstrated greater positive attitude.

Despite the differences, every category that this study explored revealed a positive attitude towards the new TP-Kagan's CL structures. It is an important and encouraging indication that Bhutanese students are ready for change. Yet students' attitude alone cannot justify a concrete recommendation on the use of the new TP. The effectiveness of this approach concerning students' achievement and personal development needs to be explored further in the Bhutanese education system.

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Appendix A

Questionnaire

Date: February 24-March 4 2017

21st Century Transformative Pedagogy Perception Questionnaire

Demographic Information

Gender: Male Female Class
 Section Roll number Age

Following statements are about your perception (how you feel) towards the newly introduced 21st century transformative pedagogy in your daily classroom teaching and learning. Every statements relates to the use of transformative pedagogy (CL structures) in your teaching and learning process. Please put a tick mark (✓) against each statement that you believe, in anyone of the five choices: Strongly Agree, Agree, Neither Agree nor Disagree, Disagree, and Strongly Disagree.

There are no “right” or “wrong” answers. The only correct responses are those that are true for you. Whenever possible, let the things that have happened to you help you make a choice.

Sl no.	Statements/Item	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
1	I prefer 21 st Century Transformative Pedagogy (TP) (CL structures) over the traditional method of teaching					
2	I enjoy the class when teachers' use different Cooperative Learning (CL) structures (Round Robin, Rally Robin etc.) in the lesson					

3	Team Building Activities (Team names, team cheers, team projects, etc.) allows me to share my ideas to my friends					
4	Class Building Activities (mix-pair-share, quiz-quiz trade, inside-outside circle, stir the class etc.) keeps me engaged and active throughout the lesson					
5	Active Learning Strategies (questioning, clarifying, applying, reflecting, summarizing etc.) make the classroom learning environment interactive and enjoyable.					
6	I can participate more when Transformative Pedagogy strategies (CL structures, class and team building and active learning) are being used					
7	I can interact with my friends and teachers freely when Transformative Pedagogy strategies (CL structures, class and team building and active learning) are being used					
8	I can understand the learning differences between me and my friends					
9	I can help my friends in the classroom to understand the lesson better					
10	CL structures (round robin, round table, number heads etc.) keep me engaged throughout the lesson					
11	Active Learning strategies, team building and class building arouses my curiosity to explore and learn more					
12	I get equal opportunity to participate in the class					
13	I like when teachers come up with different brain breaks during the instructions					
14	I feel that I am responsible for my own learning					
15	I prefer learning in groups					
16	I get more guidance from my teachers and friends					
17	I learn better when I discuss the concept/ lesson with my friends					
18	I can share my opinion to the class without any hesitation					

19	I enjoy all the activities of the CL structure, class and team building activities and Active learning activities					
20	I like cheers being used in the lesson					
21	Team building activities (Team names, Team cheers, Team projects, etc.) are appropriate at my class level					
22	I feel comfortable using CL structures (Round table, rally table etc.)					
23	I prefer working with team mates when completing a team task					
24	I feel comfortable asking questions to my friends than to teachers					
25	I learn more on my own than through interaction with friends					
26	Equal grading (marks) for all the team/group members are not fair					
27	Learning through CL structure is a waste of time					
28	I prefer taking notes rather than engaging myself in group discussion					
29	I depend on my team members to do the group works					
30	I avoid asking questions to the teachers					
31	I waste a lot of time teaching/explaining to my group members					
32	Group members does not work as a team					
33	My group members never listen to me					
34	I may get low marks because of my group friends					
35	I prefer traditional lecture method over new cooperative learning strategies					

Appendix B

Mean score and SD for each statement.

		Mean	Std. Deviation
1	I prefer TP over traditional teaching method	4.11	0.871
2	I enjoy the class when teacher uses CL structures in the lesson	4.37	0.799

3	Team building activities allows me to share my idea to friends	4.39	0.727
4	Class building activities keeps ma engaged throughout the lesson	4.29	0.794
5	Active learning strategies make the classroom learning environment interactive and enjoyable	4.27	0.785
6	I can participate more when TP strategies are being used	3.98	0.814
7	I can interact with friends and teachers when TP strategies are used	4.06	0.837
8	I can understand the learning differences between me and my friends	4.02	0.806
9	I can help my friends in the classroom to understand the lesson better	3.97	0.817
10	CL structures keep me engaged throughout the lesson	4.07	0.833
11	Active learning strategies, team building and class building arousesmy curiosity to explore and learn more	4.08	0.782
12	I get equal opportunity to participate in the class	4.19	0.824
13	I like when teachers come up with different brain breaks during the instructions	4.56	0.762
14	I feel that I am responsible for my own learning	4.39	0.767
15	I prefer learning in groups	4.04	0.824
16	I get more guidance from my teachers and friends	4.19	0.741
17	I learn better when I discuss the concept/lesson with my friends	4.27	0.81
18	I can share my opinion to the class without any hesitation	3.71	0.959
19	I enjoy all the activities of the CL structure, class and team building activities and active learning activities	4.02	0.828

20	I like cheers being used in the class	4.13	1.054
21	team building activities are appropriate at my class level	3.88	0.94
22	I feel comfortable using CL structures	3.95	0.854
23	I prefer working with team mates when completing team work	4.16	0.824
24	I feel comfortable asking question to my friends than teacher	4.13	0.957
25	I learn more on my own than through interaction with friends	3.27	1.141
26	Equal grading for all the team/group members are not fair	2.97	1.238
27	Learning through CL structure is a waste of time	2.14	1.07
28	I prefer taking notes rather than engaging in group discussions	2.88	1.155
29	I depend on my team members to do the group works	2.14	1.101
30	I avoid asking questions to the teachers	2.42	1.041
31	I waste a lot of time teaching /explaining to my group members	2.27	1.05
32	Group members do not work as a team	2.5	1.166
33	My group members never listen to me	2.29	1.112
34	I may get low marks because of my group friends	2.11	1.104
35	I prefer traditional lecture method than new cooperative learning strategies	2.34	1.281

གཞི་རིམ་སློབ་དཔོན་ཚུ་གིས་ གྲོ་གསར་ལས་སློབ་རིམ་གསུམ་པ་ཚུན་རྫོང་ཁ་སློབ་སློབ་
འབད་མི་འདི་ལུ་ ཚོར་སྤང་།།

ཞིན་ཚེན་རྒྱ་མཚོ་ དང བསམ་གཏན་མཐར་ཕྱིན་།

བཅུད་དོན།

རྫོང་ཁའི་ཚེས་ཚན་འདི་ སློབ་གྲྭ་ཁག་ལས་མར་ གྲོ་གསར་སློབ་རིམ་ལས་སློབ་རིམ་གསུམ་པ་
ཚུན་ གྱིར་བཏང་གི་སློབ་དཔོན་ཚུ་གིས་སློབ་སློབ་འབད་དོ་ཡོད་པ་ཨིན། དེ་མཇུག་ རྫོང་ཁ་སློབ་
སློབ་འབད་བའི་སྐབས་ལུ་ གྱི་བཏང་སློབ་དཔོན་ཚུ་ལུ་ ཚོར་སྤང་ག་དེ་མཇུག་ཡོད་པ་ཨིན་ན་ རྒྱ་དང་
སྤུ་རྩེ་གི་རྫོང་ཁག་གཉིས་ཀྱི་སློབ་གྲྭ་ཁག་ཚུ་ནང་ གྲོ་གསར་སློབ་རིམ་ལས་ སློབ་རིམ་གསུམ་པ་
ཚུན་ གྱིར་བཏང་གི་སློབ་དཔོན་ཚུ་གིས་ རྫོང་ཁ་སློབ་སློབ་འབད་མི་ལུ་ ཚོར་སྤང་ ག་དེ་མཇུག་ཡོད་
ག་བལྟ་ཞིན་ཚུ་ལུ་ སྤུ་མའི་ཐབས་ཤེས་ལག་ལེན་འབབ་སྟེ་ ཞིབ་འཚོལ་འདི་འབད་ཡི། དེ་
ཡང་ དྲི་བ་གཙོ་ཅན་གཅིག་དང་ ཡན་ལག་གི་དྲི་བ་བཞི་ལུ་ དམིགས་གཏང་བསྐྱེད་དོ་ཡོད་པ་
ལས་ མཁོ་ཚེས་གཙོ་བོ་ དྲི་ཤོག་དང་ དྲི་བ་དེས་ལན་གཉིས་ལག་ལེན་འབབ་སྟེ་ ཞིབ་འཚོལ་
འབད་ཡོད་པའི་ཡོད་པའི་གྲུབ་འབྲས་དང་ལོ་ཚུ་བཀོད་དོ་ཡོད།

གཙོ་ཚིག།

གཞི་རིམ་སློབ་དཔོན། རྫོང་ཁའི་སློབ་དཔོན། རྫོང་ཁ་སློབ་སློབ་ གཞི་རིམ་རྒྱུད་ལ། སློབ་
སློབ་དཔོན། ཚེས་ཚེན་སློབ་དཔོན། གྱི་སློབ། གཞི་གཙོ་གསུམ་སློབ་སློབ་

ཞིབ་འཚོལ་འབད་དམོ་པའི་དམིགས་ལུ་ལ།

ཞིབ་འཚོལ་འདི་གིས་ ཤེས་རིག་གི་ལམ་ལུགས་ནང་ལུ་ གཞི་རིམ་སློབ་དཔོན་ཚུ་གིས་ སློབ་རིམ་
གསུམ་པ་ཚུན་ རྫོང་ཁ་སློབ་སློབ་འབད་མི་ཚུ་གི་ཚོར་སྤང་ག་དེ་མཇུག་ཡོད་པ་ཨིན་ན་ གནས་ཚུལ་ཁག་ལས་

1. མཁས་དབང་ཞིབ་རོགས་པ། སྤུ་རྩེ་ཤེས་རིག་མཚོ་རིམ་སློབ་གྲྭ།
E-mail: rinchengyemtsho.pce@rub.edu.bt
2. མཁས་དབང་ཞིབ་རོགས་པ། སྤུ་རྩེ་ཤེས་རིག་མཚོ་རིམ་སློབ་གྲྭ།
Email: samtentharchen.pce@rub.edu.bt

འབད་ ཐོབ་ཚུགས་ནི། དེ་མ་ཚད་ གཞི་རིམ་སློབ་དཔོན་ཚུ་ལུ་ རྫོང་ཁ་སློབ་སྟོན་འབད་ནི་ནང་ལུ་ དཀའ་
ངལ་ཡོད་མེད་ཚུ་ རོས་འཛིན་འབད་དེ་ འབྲེལ་བ་ཡོད་པའི་ལས་སྟེ་ཚུ་ལུ་ བྲོས་འཆར་ཕུལ་ནི། དེ་ལས་
རྒྱལ་ཡོངས་ཀྱི་སྐད་ཡིག་གོང་འཕེལ་གཏང་ནི་ལུ་རྒྱབ་སྐྱོར་གྱི་བྲོས་འཆར་ཕུལ་ནི་འདི་དོན་ལུ་ཨིན།

ལྷག་པར་དུ་ ཤེས་རིག་མཐོ་རིམ་སློབ་བླ་ཚུ་ནང་ལུ་ གཞི་རིམ་རྒྱུ་བ་དང་ རྫོང་ཁ་གཞི་རིམ་ཤེས་
ཡོན་གྱི་སློབ་ཚན་ཚུ་ བསྐྱར་ཞིབ་འབད་དགོ་བ་ཡོད་མེད་ ཏ་གོ་འདི་དོན་ལུ་དང་ རྫོང་ཁ་སློབ་སྟོན་འབད་
མི་ལྷོགས་སྐབ་ཅན་ བཟོ་ཐབས་ཀྱི་དོན་ལུ་ཨིན།

དྲི་བ་གཙོ་བོ།

གཞི་རིམ་སློབ་དཔོན་ཚུ་གིས་ གྲོ་གསར་ལས་ སློབ་རིམ་གསུམ་པ་རྒྱན་རྫོང་ཁ་སློབ་སྟོན་འབད་མི་
འདི་ལུ་ ཚོར་སྣང་ ག་དེ་སྟེ་ཡོད་པ་ཨིན་ན་?

ཡན་ལག་གི་དྲི་བ།

- ༡ གཞི་རིམ་སློབ་དཔོན་ཚུ་གི་རྒྱུད་ལུ་ རྫོང་ཁ་སློབ་སྟོན་ཚུགས་པའི་ཤེས་ཚད་ ཡོད་ག་?
- ༢ གཞི་རིམ་སློབ་དཔོན་ཚུ་གིས་ རྫོང་ཁ་སྟོན་ནི་ལུ་ སློབ་དང་ དང་འདོད་འདུག་ག་?
- ༣ རྫོང་ཁ་སློབ་སྟོན་འབད་བའི་སྐབས་ལུ་ དཀའ་ངལ་ག་ཅིར་བྱུང་མ་སྟོ་?
- ༤ རྫོང་ཁ་སློབ་སྟོན་འབད་ནི་འདི་དོན་ལུ་དམིགས་བསལ་གྱི་རྒྱབ་སྐྱོར་ ག་ཅིར་ཐོབ་ཅི་ག་?

ཚུམ་གྲིས་བསྐྱར་ཞིབ།

རྫོང་ཁ་འདི་ ལྷན་རྒྱུངས་འབྲུག་པའི་རྒྱལ་ཁབ་འདི་ནང་གི་འབྲུག་མི་ཡོངས་ཀྱི་ལ་སྐད་འབད་ ཚེད་དུ་
མངགས་ཏེ་མ་བཅུགས་དུང་ སྤྱི་ལོ་ ༡༩༧༤ ལུ་མཐུ་ཚེན་ཚོས་ཀྱི་རྒྱལ་པོ་ཞབས་དུང་འཛིན་པོ་ཚེ་གིས་ ཚོས་
སྲིད་གྱི་གཞུང་འགོ་ཐོག་བཅུགས་པའི་སྐབས་ རྫོང་གཞིས་ཁག་ལུ་རང་བཞིན་གྱིས་འབད་ དར་ཁྱབ་མོང་
ཡོད་པའི་ ལ་སྐད་ཅིག་ཨིན་པས་ཟེར་ (རྫོང་ཁ་གོང་འཕེལ་ལྷན་ཚོགས་༡༩༨༠) ལུ་བཀོད་ཅུག་ དེའི་
འབྲུག་རྒྱལ་གསུམ་པ་ཞིང་གཤེགས་དམ་པ་འཛིགས་མེད་རྩི་རྩི་དབང་ཕྱུག་མཚོག་གིས་ འབྲུག་
རྒྱལ་ཁབ་འདི་ འཛམ་གླིང་སྤྱི་ཚོགས་ཀྱི་འཇུག་མིའི་གྲངས་སུ་འཇུག་ཞིན་མ་ལས་ རྫོང་ཁ་འདི་རྒྱལ་ཡོངས་
ཀྱི་སྐད་ཡིག་འབད་ ཆ་འཛིག་གནང་སྟེ་ ལྷགས་ལྷོ་ལྷོ་ ༨ པའི་ཚེས་ ༥ ལུ་ བཀའ་ཤོག་གནང་སྟེ་སློབ་
བྲལ་ལག་ལུ་ རྫོང་ཁའི་ཚོས་ཚན་འབད་བཅུགས་ཅུག་ (ཤེས་རིག་ལས་ཁུངས་༡༩༨༢)

རྫོང་ཁ་ཡར་རྒྱས་ཡིག་ཚང་ཟེར་ལོགས་སུ་འབད་བཅུགས་ཏེ་ རྫོང་ཁ་ཡར་རྒྱས་ཀྱི་ཕྱག་ལུ་རྒྱ་གནང་མ་

མ་ཚད་ སྤྱི་ལོ་ ༡༩༤༤ ལྷན་ སློབ་གྲྭ་ལག་གི་ རྫོང་ཁའི་སློབ་དཔོན་ཚུ་ཡང་ ཡིག་ཚང་དེ་གིས་འབད་
བསྐོ་བཞག་མཛད་གནང་ཅུག་ དེ་བསྐྱེད་ སློབ་རིམ་སློ་གསར་ལས་ འགོ་བརྩམས་ རྫོང་ཁའི་ཚོས་ཚོན་
ཚམཉམ་ར་ རྫོང་ཁའི་སློབ་དཔོན་རྒྱུ་མ་ཅིག་གིས་ སློབ་སློན་འབད་མ་གཏོགས་ གཞི་རིམ་སློབ་དཔོན་
གྱིས་ རྫོང་ཁའི་སློབ་སློབ་མིན་འདུག (ཤེས་རིག་ལས་ཁུངས། ༡༩༤༩)

གཞི་རིམ་འོག་མའི་ནང་ལུ་ རྫོང་ཁའི་ཚོས་ཚོན་འདི་ སྤྱི་བཏང་སློབ་དཔོན་ཚུ་གིས་ སློབ་སློན་འབད་
དགོ་པའི་སྐོར་ལས་ ཡིག་ཚའི་ནང་ལུ་གསལ་ཏོག་ཏོ་འབད་བཀོད་བཀོད་པ་ཅིག་དེ་སློབ་སློན་གྱི་རིང་ལུ་མ་
མཐོང་། ཤེས་རིག་ནང་ལུ་ཚུགས་ལུ་གནང་མི་ དབང་ཚུགས་རབ་བརྟན་དང་བསྐྱེད་འཛིན་དོ་རྗེ་གཉིས་དང་
རྫོང་ཁའི་རྩ་གཞུང་གི་ལཱ་འགན་ཉིལ་བུ་འབག་སྟེ་ རྩལ་ལྷིང་ལུ་ཡོད་མི་ སློབ་དཔོན་ཚོ་རིང་ཚུ་གིས་ ཞལ་
རྒྱུན་ལུ་ གསུང་དོ་བརྩམས་འབད་བ་ཅིན་ སྤྱི་ལོ་ ༡༩༥༥ ལས་ ཤེས་རིག་ནང་ལུ་ སློབ་སློན་ཐབས་ཤེས་
གསར་པའི་ལམ་ལུ་གསལ་འགོ་བརྩམས་ཞིན་མ་ལས་ སློ་གསར་ལས་ སློབ་རིམ་གསུམ་པ་རྩུན་ སློབ་སྟེའི་
སློབ་དཔོན་གྱི་ལམ་ལུ་གསལ་འདི་འགོ་བརྩམས་ཏེ་ སློབ་རིམ་རེ་རེའི་ནང་གི་ཚོས་ཚོན་ ཚམཉམ་ར་སློབ་དཔོན་
གཅིག་གིས་འབད་ སློབ་སློན་འབད་དགོ་པའི་ལམ་ལུ་གསལ་ཅིག་རྒྱུང་ཡི་ཟེར་ཡིན་པས། ཡིན་རུང་ ལོ་རོ་
བརྩམས་ལྟགས་ཅིག་གི་རིང་ལུ་ སློབ་རིམ་ག་རའི་ནང་ལུ་ རྫོང་ཁའི་ཚོས་ཚོན་འདི་ རྫོང་ཁའི་སློབ་དཔོན་
རྒྱུ་མ་ཅིག་གིས་སློན་ཏེ་སྟོན་ཅུག

ཤེས་རིག་ལས་ཁུངས་ཀྱི་ལ་བུག་ལས་ སྤིང་བུས་ཀྱི་ལམ་སློབ་ཚུ་ནང་ལུ་ སློ་གསར་ལས་སློབ་རིམ་
གསུམ་པ་རྩུན་ རྫོང་ཁའི་ཚོས་ཚོན་འདི་ སྤྱིར་བཏང་ སློབ་དཔོན་ཚུ་གིས་ སློན་དགོ་པའི་སྐོར་ལས་ ཡིག་
ཚམ་ཐོབ་སྟེ་འབད་རུང་ སྤྱི་རོ་དང་བསམ་ཅེ་སློབ་སྟོན་སྟེའི་ལང་ནང་ལུ་ གཞི་རིམ་སློབ་དཔོན་གྱི་སློབ་
སྟོན་ འགོ་བརྩམས་པའི་སྐབས་ཀྱི་གཞི་རིམ་སློབ་དཔོན་སློབ་སྟོན་གི་ལག་ཁྲེལ་ལག་དེབ་(༡༩༩༤) བང་ལུ་
སྤྱིར་བཏང་གི་དམིགས་ལུ་ལ་གཅོ་བོ་ཅིག་ གཞི་རིམ་སློབ་དཔོན་ཚུ་གིས་ སློབ་རིམ་གསུམ་པ་རྩུན་ ཚོས་
ཚོན་ག་ར་སློབ་སློན་འབད་ཚུགས་དགོ་པ་འབད་བཀོད་དེ་འདུག དེ་འབད་མ་ལས་ གཞི་རིམ་སློབ་དཔོན་གྱི་
སློབ་སྟོན་ནང་ལུ་ རྫོང་ཁའི་སློབ་སློབ་མི་ཚོས་ཚོན་ཡང་ ལོགས་སུ་འབད་བརྩམས་ཅུག

སྤྱི་ལོ་ ༡༩༩༩ ཀྱི་ལོ་ལུ་ སྤྱི་རོ་ཤེས་རིག་མཐོ་རིམ་སློབ་གྲྭ་ནང་ལུ་ གཞུང་ལ་སློབ་སྟོན་པ་གསར་པ་
བརྩམས་པའི་སྐབས་ཀྱི་ གཞུང་ལ་སློབ་དཔོན་སློབ་སྟོན་ལག་ཁྲེལ་ལག་དེབ་ (༡༩༩༩) བང་ལུ་ཡང་
དམིགས་ལུ་ལ་གཅོ་བོ་ཅིག་ སློ་གསར་ལས་ སློབ་རིམ་རྩུག་པ་རྩུན་ རྫོང་ཁ་དཀའ་ངལ་མེད་པར་སློབ་
ཚུགས་དགོ་པ་འབད་ཡང་བཀོད་དེ་འདུག དེ་གིས་ཡང་མ་ཚད་ སྤྱི་རོ་ལུ་ གཞུང་ལག་གཞི་རིམ་འོག་
མ་ འགོ་བརྩམས་པའི་སྐབས་ཀྱི་སློབ་སྟོན་གི་ལག་དེབ་ (༡༩༩༩) བང་ལུ་ཡང་ གཞི་རིམ་རྫོང་ཁའི་སློབ་
དཔོན་ཚུ་གིས་ སློབ་རིམ་རྩུག་པ་རྩུན་ ཚོས་ཚོན་ག་ར་སློབ་སློན་འབད་ཚུགས་པའི་དམིགས་ལུ་ལ་བསྟེན་

དེ་ སློབ་སློབ་ཚུ་གི་ཉེ་ཡོད་པ་མ་ཚང་ གཞི་རིམ་རྒྱུ་ལོ་སློབ་དཔོན་གྱི་ཡིག་ཆ་ (༢༠༡༠) བྱང་ལུ་ ལོ་
ངོ་བོ་ཞི་ལོ་སློབ་སློབ་འབད་མི་ གཞི་རིམ་རྒྱུ་ལོ་སློབ་དཔོན་ཚུ་གིས་ སློབ་རིམ་དུག་པ་ཚུན་ ཚོས་ཚན་ག་
ར་སློབ་སློབ་འབད་ཚུགས་དགོ་པ་ཨིན་ཅུང་ རྫོང་ཁྲིམ་ཐང་ལུ་ སློབ་རིམ་ ༤-༦ ཚུན་ རང་སོའི་གདམ་ལ་
འབད་བཞག་ཞིན་ལས་ སློབ་རིམ་གསུམ་པ་ཚུན་ཚོས་ཚན་ག་ར་ དེས་པར་དུ་སློབ་དགོ་པ་འབད་ཨིན་མས།

དེ་བཟུམ་ རྫོང་ཁྲིམ་རིག་གཞུག་ལག་གཞི་རིམ་བར་མའི་ཡིག་ཆ་ (༢༠༡༠) བྱང་ལུ་ཡང་ དམིགས་
ཡུལ་གཙོ་བོ་ཅིག་ རྫོང་ཁྲིམ་སློབ་དཔོན་ཚུ་གིས་ གཞི་རིམ་སློབ་གྲྭ་ སློབ་རིམ་ ༤ པ་ལས་ འབྲིང་
རིམ་སློབ་གྲྭ་ སློབ་རིམ་ ༡༠ པ་ཚུན་ རྫོང་ཁྲིམ་ཚོས་ཚན་དགའ་ངལ་མེད་པར་སློབ་ཚུགས་དགོ་པ་འབད་
བཞོན་དེ་འདུག། དེ་དང་འཁྲིལ་ཉེ་ སློབ་སློབ་འབད་ཡོད་པ་ལས་ སློབ་རིམ་ ༣ པ་ཚུན་ རྫོང་ཁྲིམ་འདི་
གཞི་རིམ་སློབ་དཔོན་ཚུ་གིས་ སློབ་ཞིན་དང་ སློབ་རིམ་ ༤ པ་ལས་ རྫོང་ཁྲིམ་ཚོས་ཚན་འདི་ རྫོང་ཁྲིམ་
དཔོན་ཚུ་གིས་ སློབ་སློབ་འབད་དེ་འདུག།

ད་ལྟོ་ཚུན་ཚོད་ཀྱི་ནང་འཁོད་ལུ་ སློབ་སྦྱོར་ལས་སློབ་རིམ་ ༣ པ་ཚུན་གྱི་ནང་འཁོད་ལུ་ སློབ་བཏང་
སློབ་དཔོན་གྱིས་ རྫོང་ཁྲིམ་སློབ་སློབ་འབད་ཞི་ལུ་ སློབ་ཡོད་མེད་དང་ ལྷབས་བདེ་དོག་ག་ཅིར་འབྱུང་དོ་
ཡོད་ག་ཞིབ་འཚོལ་འབད་འབད་མ་ཅིག་མེད་པ་ལས་ ད་ལྟོ་ཀྱི་ཞིབ་འཚོལ་འདི་ འབད་དགོ་པའི་གནད་
དོན་འདི་ལས་བརྟེན་ཉེ་ཨིན། ཞིབ་འཚོལ་འདི་ནང་ལས་ སློབ་བཏང་སློབ་དཔོན་ཚུ་གིས་ རྫོང་ཁྲིམ་སློབ་
འབད་བའི་སྐབས་ སློབ་དང་དང་འདོད་ཚུ་ ལ་གསལ་འབད་ ཉེ་གོ་ཞི་དོན་ལུ་ཨིན།

ཞིབ་འཚོལ་ཐབས་ལམ།

ཞིབ་འཚོལ་གྱི་ཐབས་ལམ་ལག་གསུམ་ཡོད་པའི་ནང་ལས་ བྱང་ས་དང་རྒྱ་མཚན་ གྲངས་ཁ་མང་ཉུང་
གི་ཐོག་ལས་ གནས་ཚུལ་ལ་གསལ་འབད་ཉེ་གོ་དགོ་པ་ཅིན་ ཐབས་ལམ་གཅིག་གི་ཐོག་ལས་མེན་པར་
ཐབས་ལམ་རྒྱུང་འབྲེལ་འབད་ལག་ལེན་འཐབ་མི་འདི་ མཚོག་ཏུ་གྱུར་པ་ཅིག་ཨིན་པ་ལས་ བྱང་ས་བཅོན་
དང་གྲངས་འབྲེལ་ཐབས་ལམ་གཉིས་རྒྱུང་འབྲེལ་གྱི་ཐབས་ལམ་གདམ་ལ་རྒྱབ་ཅི། དེ་ཡང་ བྱང་ས་འབྲེལ་
གྱི་དོན་ལུ་ སློབ་བཏང་ཅི་བ་སྐྱེ་ལག་ ཅི་ཤོག་བཟོ་སྟེ་གནས་སྡེ་བསྐྱེ་ལེན་འབད་ཡོད་པ་མ་ཚང་ བྱང་ས་
བཅོན་གྱི་དོན་ལུ་ བསྐྱར་བཅོས་འབད་བཏུབ་པའི་ཅི་བ་བཟོ་སྟེ་ཡོད་མི་ཚུ་ མི་རིང་རོས་སུ་རྒྱུད་དེ་ ཅི་བ་
ཅིས་ལན་གྱི་ཐོག་ལས་ བསམ་འཚར་ཚུ་བཞོན་བཏུག་སྟེ་ འབད་ཡི།

གནས་སྡེ་དཔེ་ཚང་།

གནས་སྡེ་དཔེ་ཚང་བསྐྱེ་ལེན་འབད་ཞི་དོན་ལུ་ ཁོ་མ་ཁར་ཡོད་པའི་སློབ་གྲྭ་དང་ ཞེད་འོག་ནང་

ལུ་ཡོད་པའི་སློབ་གྲྭ་ཚུ་ནང་ལས་ འབྲིང་རིམ་བར་མའི་སློབ་གྲྭ་བཞི་ འབྲིང་རིམ་འོག་མའི་སློབ་གྲྭ་བཞི་
སློབ་གྲྭ་རྒྱུ་རྒྱུ་བཞིའི་ནང་ལས་ གྲོ་གསུང་སློབ་རིམ་གསུམ་པ་ཚུན་ རྫོང་ཁ་སློབ་སློབ་འབད་མི་མེ་ཤེ་ ཡོངས་
བསྐྱོམས་ སློབ་གྲྭ་མེ་ལས་ བཞི་མེ་གདམ་ཁ་རྒྱུ་ཅི། དེ་འབད་མ་ད་ ལག་ལེན་དོན་སྲུ་འཐབ་པའི
སྐབས་ལུ་ སློབ་གྲྭ་ག་རའི་ནང་ལུ་ དང་པ་ སློབ་སྡེ་སློབ་དཔོན་གྱི་ལམ་ལུགས་གཅིག་མཚུངས་མེད་པའི
ཁར་ གཉིས་པ་ གྲོ་གསུང་ལས་ སློབ་སློབ་གསུམ་པ་ཚུན་ རྫོང་སློབ་སློབ་འབད་མི་ ལ་ལུ་རྫོང་ཁའི་སློབ་
དཔོན་ཚུ་ཨིན་མ་ལས་ ལཱ་དང་སྤྱོད་འུ་ཚུ་མཉམ་གྱི་ནང་ལུ་ སྤྱི་སློབ་ཀྱིས་རྫོང་སློབ་སློབ་འབད་མི་ག་
ར་ (༡༠༠%) གདམ་ཁ་རྒྱུ་དགོས་བྱུང་ཡི།

གནས་སྤྱད་བསྐྱེ་ལེན།

གནས་སྤྱད་བསྐྱེ་ལེན་འབད་ཐངས་ཡང་ དྲི་ཤོག་བཟོ་ཞིན་མ་ལས་ ཉེ་འདབས་ཀྱི་སློབ་གྲྭ་དག་པ་ཅིག་
གི་ནང་ལུ་ མོ་བཏབ་འབད་དེ་ བསྐྱུར་བཅོས་རྒྱུ་བཞིན་མ་ལས་ སློབ་གྲྭ་ཁག་ཚུ་ནང་ རང་རོ་ལོ་འབད་མོང་
སྡེ་ སློབ་དཔོན་ཚུ་དང་མཉམ་ཞིན་མ་ལས་ དྲི་ཤོག་སློབ་དེ་ གནས་སྤྱད་བསྐྱེ་ལེན་འབད་ཡི། ལྷངས་བཟོན་
གནས་སྤྱད་བསྐྱེ་ལེན་འབད་དེ་ སློབ་དཔོན་ཚུ་དང་རོ་ལོ་འབད་མཉམ་ཞིན་མ་ལས་ བསྐྱུར་བཅོས་འབད་བཏུབ་
པའི་དྲི་བ་བཟོ་ཡོད་མི་ཚུ་ ལག་ལེན་འཐབ་སྡེ་ དྲི་བ་དྲིས་ལན་འབད་དེ་ གནས་སྤྱད་བསྐྱེ་ལེན་འབད་ཡི།

བཅའ་མར་གཏོགས་མི།

༡ སྤྱོད་དང་རྒྱ་རྫོང་ཁག་གཉིས་ནང་ཡོད་པའི་སློབ་གྲྭ་རྒྱུ་རྒྱུ་ འབྲིང་རིམ་འོག་མ་དང་བར་མ་ཚུ་
ནང་གི་གཞི་རིམ་སློབ་དཔོན་ ཡོངས་བསྐྱོམས་ ༡༡ སྤྱི་ཚད་དང་ལྷན་པའི་གནས་སྤྱད་ཐོབ་མི་དོན་ལུ་
ཉམས་སྤོང་ཅན་གྱི་སློབ་དཔོན་ཚུ་ གདམ་ཁ་རྒྱུ་ཐོག་ལས་ མོ་མོ་འདྲ་མཉམ་གྱི་དམིགས་གཏང་བསྐྱེད་དེ་
མོ་ ༤༤ དང་མོ་ ༤༤ རེ་བ་བསྐྱེད་དེ་འབད་རུང་ སློབ་གྲྭ་རོ་མའི་གནས་སྤངས་ནང་ལུ་ དོན་སྲུ་འཐབ་
ལག་ལེན་འཐབ་པའི་བསྐྱུང་ལས་ སློབ་དཔོན་ མོ་ ༡༤ དང་ མོ་ ༤༡ མོ་མོ་མ་བཟོད་མི་ ༡ ཡོངས་
བསྐྱོམས་ ༡༡ རྒྱུ་ཚུ་ཅིག་ཨིན་པའི་ཁར་ མོ་མོ་འདྲ་མཉམ་འབད་ཡང་ ཐོབ་མ་ཚུ་གས།

གནས་སྤྱད་བསྐྱེ་ལེན་མ་འབད་བའི་ཉེ་མར་ ཉེ་འདབས་ཀྱི་སློབ་གྲྭ་དག་པ་ཅིག་གི་ནང་ལུ་ འདྲི་ཤོག་
ཚུ་ མོ་བཏབ་ འབད་དེ་ ལྷན་དག་ རྒྱུ་བཞིན་མ་ལས་ གནས་སྤྱད་བསྐྱེ་ལེན་འབད་ཐངས་
ཚུ་ཡང་ ག་དེ་དག་དྲག་མི་རོ་ལོ་འབད་མཉམ་གྱི་ གནས་སྤྱད་བསྐྱེ་ལེན་འབད་ཡི།

གནས་སྤྱད་དབྱེ་དཔྱད་འབད་ཐངས།

ཁངས་ཚད་ལྡན་པའི་ཐབས་ཤེས་ཀྱི་གནས་སྤྱད་ཚུ་ལུ་ཨང་རྟགས་རེ་བཀོད་ཞིན་མ་ལས་
SPSS, descriptive, statistics, frequencies, crosstabs ཚུ་ལག་ལེན་འཐབ་སྟེ་
དབྱེ་དཔྱད་ མཐེལ་ཕྱིན་འབད་ཡི།

ཁངས་བཅོན་ཐབས་ཤེས་ཀྱི་གནས་སྤྱད་དབྱེ་དཔྱད་འབད་ཐངས་ཡང་ རྫོགས་རིག་ནང་ལུ་ རོ་བཀོད་
འབད་བའི་བསྐང་ལས་ར་ དོན་ཚན་ཆ་འདྲ་མི་ཚུ་ གཅིག་ཁར་བཀོད་ཞིན་མ་ལས་ ཁངས་ཚད་ལྡན་པའི་
ཐབས་ཤེས་ལས་ཐོབ་པའི་གནས་སྤྱད་དང་གཅིག་ཁར་ ག་བསྐྱར་དང་དབྱེ་དཔྱད་འབད་དེ་བྲིས་ཡི།

ཞིབ་འཚོལ་གྲུབ་འབྲས།

ཞིབ་འཚོལ་འདི་ནང་ལུ་བཅའ་མར་གཏོགས་མི་ འོག་ལུ་བཀོད་དེ་ཡོད།

ཐེག་ཁམ་དང་པ། བཅའ་མར་གཏོགས་མི།

		གྲངས་ལ།	བརྒྱ་ཚ།
ཡོད་མི།	ཕོ།	༡༤	༡༤.༡
	མོ།	༤༣	༡༣.༤
	བསྟོམས།	༥༧	༡༦.༥
ཆད་མི།	System	༡	༣.༤
ཡོངས་བསྟོམས།		༥༨	༡༠༠.༠

གཞི་རིམ་ནང་ལུ་ ཚོང་ལ་སློབ་སྟོན་འབད་མི་ རྫོགས་དཔོན་ ཕོ་ ༡༤ བརྒྱ་ཚལས་འབད་བ་ཅིན་
༡༤ ལྷག་པ་ཅིག་དང་ རྫོགས་དཔོན་མོ་ ༤༣ བརྒྱ་ཚལས་འབད་བ་ཅིན་ ༡༣ ལྷག་པ་ཅིག་ཨིན་མ་
ལས་ གཞི་རིམ་ནང་ལུ་ ཚོང་ལ་སློབ་སྟོན་འབད་མི་མང་ཤོས་ར་ རྫོགས་དཔོན་མོ་ཚུ་ ཨིན་པས།

ལ་སྐད།

སྤྱི་དང་རྩ་གི་ཚོང་ལག་གཅིས་ཀྱི་ནང་གི་སློབ་གྲྭ་ཚུ་ནང་ རྫོགས་རེ་ལས་སློབ་རིམ་ ༣ པ་
ཚུན་ ཚོང་ལ་སློབ་སྟོན་འབད་མི་ ༥༨ ཡོད་ས་ལས་ རྫོགས་སྟོན་པ་ ༣༡ བརྒྱ་ཚལས་འབད་བ་
ཅིན་ ༥༥ ལྷག་པ་ཅིག་ལ་སྐད་ཚོང་ལ་སློབ་མི་ རྫོགས་སྟོན་པ་ ༤ བརྒྱ་ཚལས་འབད་བ་ཅིན་ ༡༥
ལྷག་པ་ཅིག་ལ་སྐད་ བུམ་ཐངས་སྐབ་མི། རྫོགས་སྟོན་པ་ ༡༣ བརྒྱ་ཚལས་འབད་བ་ཅིན་ ༡༣
ལྷག་པ་ཅིག་ལ་སྐད་ ཤར་ཕྱོགས་པ་སྐབ་མི། རྫོགས་སྟོན་པ་ ༡ བརྒྱ་ཚལས་འབད་བ་ཅིན་ ༣

ལྷག་པ་ཅིག་ལ་སྐད་ ལྷོ་མཚམས་པ་སྐབ་མི་དང་ སློབ་སྟོན་པ་ ༩ བརྒྱ་ཆ་ལས་འབད་བ་ཅིན་
༩ ལྷག་པ་ཅིག་ལ་སྐད་གཞན་མི་སྐབ་མི་ཨིན་མ་ལས་ རྫོང་ལ་སློབ་སྟོན་འབད་མི་ མང་ཤོས་ར་
རང་གི་གཡུས་སྐད་ རྫོང་ལ་སྐབ་མི་ལཱ་སློབ་དཔོན་ཚུ་ཨིན་པས།

སློབ་སྟོན་གྱི་ཉམས་སྲུང་།

རྫོང་ལ་ག་དེ་གཉིས་ནང་གི་ སློབ་རིམ་སློ་གསར་ལས་སློབ་རིམ་ ༩ པ་ཚུན་ རྫོང་ལ་སློབ་
སྟོན་འབད་མི་སློབ་དཔོན་ཚུ་ སློབ་སྟོན་འབད་དེ་ ཡོངོ་ ༡-༥ ཚུན་ འབད་མི་སློབ་དཔོན་ ༧
བརྒྱ་ཆ་ལས་འབད་བ་ཅིན་ ༡༩.༡ | ཡོངོ་ ༤-༡༠ ཚུན་ འབད་མི་སློབ་དཔོན་ ༡༡ བརྒྱ་
ཆ་ལས་འབད་བ་ཅིན་ ༡༩ | ཡོངོ་ ༡༡ ལས་ལྷག་མི་ལཱ་སློབ་དཔོན་ ༩༩ བརྒྱ་ཆ་ལས་འབད་
བ་ཅིན་ ༤༧ ལྷག་པ་ཅིག་ཨིན་མ་ལས་ རྫོང་ལ་སློབ་སྟོན་འབད་མི་མང་ཤོས་ར་ སློབ་སྟོན་གྱི་
ཉམས་སྲུང་ མང་སྲུ་ཡོད་མི་ཚུ་ཨིན་པས།

སློབ་དཔོན་ཚུ་གི་ཤེས་ཚད།

གཞི་རིམ་ནང་ལུ་ རྫོང་ལ་སློབ་སྟོན་འབད་མི་ ༥༥ ཡོད་ས་ལས་ སློབ་དཔོན་ ༩༧ བརྒྱ་
ཆ་ལས་འབད་བ་ཅིན་ ༤༩ ལྷག་པ་ཅིག་ གཞི་འཇུགས་སློབ་སྲོང་གི་ཤེས་ཚད་ཡོད་མི་དང་ སློབ་
དཔོན་ ༡༤ བརྒྱ་ཆ་ལས་འབད་བ་ཅིན་ ༩༧ ལྷག་པ་ཅིག་ གཞི་འཇུག་ལག་གཞི་རིམ་གྱི་ཤེས་ཚད་
ཡོད་མི། གཞི་འཇུག་ལག་མཐོ་རིམ་གྱི་ཤེས་ཚད་ཡོད་མི་ སློབ་དཔོན་ ༩ བརྒྱ་ཆ་ལས་འབད་བ་ཅིན་
༥ ལྷག་པ་ཅིག་ཨིན་མ་ལས་ ལྷོ་གསར་ལས་སློབ་རིམ་གསུམ་པ་ཚུན་ རྫོང་ལ་སློབ་སྟོན་འབད་
མི་མང་ཤོས་ར་ གཞི་འཇུགས་སློབ་སྲོང་གི་ཤེས་ཚད་ཡོད་མི་ཚུ་འདུག།

སློབ་སྟོན་འབད་སའི་སློབ་རིམ།

གཞི་རིམ་ནང་ལུ་ རྫོང་ལ་སློབ་སྟོན་འབད་མི་ཡོངས་བསྟོམས་ ༥༥ ཡོད་ས་ལས་ ལྷོ་གསར་
ནང་ལུ་སྟོན་མི་ ༡༤ བརྒྱ་ཆ་ལས་འབད་བ་ཅིན་ ༩༤ ལྷག་པ་ཅིག་ སློབ་རིམ་དང་བ་ནང་ལུ་
སློབ་སྟོན་འབད་མི་ སློབ་དཔོན་ ༩༩ བརྒྱ་ཆ་ལས་འབད་བ་ཅིན་ ༩༩ | དེ་ལས་ སློབ་རིམ་
གཉིས་པ་ནང་སྟོན་མི་ སློབ་དཔོན་ ༡༥ བརྒྱ་ཆ་ལས་འབད་བ་ཅིན་ ༩༤ གི་ཅེས་དང་ སློབ་
རིམ་གསུམ་པ་ནང་ལུ་ སློབ་དཔོན་ ༥ བརྒྱ་ཆ་ལས་འབད་བ་ཅིན་ ༩ ལྷག་པ་ཅིག་གིས་ སློབ་
སྟོན་འབད་དེ་ཡོད་ས་ལས་ སློབ་རིམ་ ༩ པ་ནང་ལུ་གཞི་རིམ་སློབ་དཔོན་ཚུ་གིས་ རྫོང་ལ་སློབ་
སྟོན་འབད་མི་ ཉུང་སྲུ་ཅིག་ར་ཨིན་པས།

གཡོག་ཐོག་སློབ་སྲོང་།

སློབ་དཔོན་ཚུ་གི་རྫོང་ལ་ག་ནང་ལུ་ གཞི་རིམ་སློབ་གྲྭ་ནང་ རྫོང་ལ་སློབ་སྟོན་འབད་མི་ ༩
བརྒྱ་ཆ་ལས་འབད་བ་ཅིན་ ༩ ལྷག་པ་ ཅིག་གིས་ རྫོང་ལ་སློབ་སྟོན་འབད་ནི་འདོན་ལུ་ ལྷག་

ཡོངས་ཀྱི་གཞི་གཞི་ཐོག་སློབ་བརྟམ་ཐོབ་ལུག་ ཚུངས་སློབ་སྟོན་འབད་མི་ ༤ བརྒྱ་ཚུ་ལས་འབད་
 བ་ཅིན་ ༡༠ ལྷོ་གསར་ལས་གིས་ ཚུངས་སློབ་སྟོན་འབད་མི་འདི་དོན་ལུ་ ཚུངས་ག་ནང་འཁོད་ཀྱི་
 གཞི་གཞི་ཐོག་སློབ་བརྟམ་ཐོབ་ལུག་ ཚུངས་སློབ་སྟོན་འབད་མི་ ༡༩ བརྒྱ་ཚུ་ལས་འབད་བ་ཅིན་
 ༣༣ ལྷོ་གསར་ལས་གིས་ ཚུངས་སློབ་སྟོན་འབད་མི་འདི་དོན་ལུ་ སློབ་བྱ་ནང་འཁོད་ཀྱི་གཞི་གཞི་ཐོག་
 སློབ་བརྟམ་ཐོབ་ལུག་ འོང་གཞི་རིམ་སློབ་བྱ་ནང་ལུ་ ཚུངས་སློབ་སྟོན་འབད་མི་ཚུ་ལུ་ རྒྱལ་
 ཡོངས་ཀྱི་གཞི་གཞི་ཐོག་སློབ་སློབ་དང་ ཚུངས་ག་གི་གཞི་གཞི་ཐོག་སློབ་སློབ་ ཐོབ་མི་ བརྒྱ་ཚུ་ ཉུང་
 ལུ་ཅིག་ར་ཨིན་པས།

སློབ་སྟོན་དང་འབྲེལ་བའི་གནས་ཚུལ།

ཐོག་ཁྲམ་ གཉེས་པ། སློབ་སློབ་དང་འབྲེལ་བའི་གནས་ཚུལ།

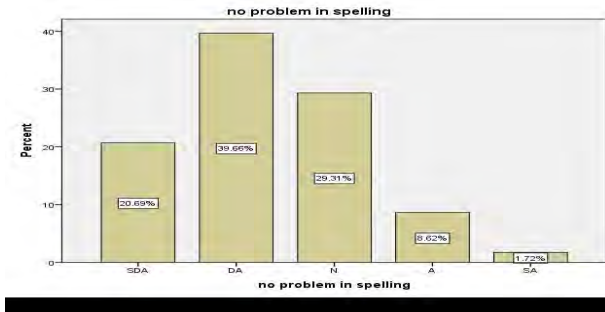
ལང་	དོན་ཚན།	ཚུ་ལས་ ར་མེད།	མེད།	ཀྱིག་གི་ཅི་ □	ཡོད།	གནམ་མེད་ ས་མེད་ཡོད།
༡	ད་ལུ་ ཚུངས་སློབ་སྟོན་ འབད་མི་ལུ་ སློབ་	༡.༧%	༡.༧%	༣༡%	༥༡.༧%	༡༩.༤%
༢	དགོས་འབད་བ་ཅིན་ གཞི་རིམ་སློབ་དཔོན་ ཚུ་གིས་སློབ་གསར་ལས་ སློབ་རིམ་ གསུམ་པ་ ཚུ་ནི་ ཚུངས་སྟོན་དགོ་ མི་འདི་ལུ་ འོས་འབབ་ དང་ རྒྱབ་སྐྱོར་	༣.༤%	༢༤.༡%	༢༤.༡%	༣༩.༧%	༤.༦%
༣	ད་ལུ་ ལྷོ་གསར་ལས་ སློབ་རིམ་གསུམ་པ་ཚུ་ནི་ ཚུངས་སློབ་སྟོན་འབད་ མི་འདི་དོན་ལུ་ ལྷོ་གསར་གྱི་	༠༠	༤.༣	༤༤.༣	༤༡.༤	༤.༣
༤	ད་ལུ་ ཚུངས་སློབ་ དཔོན་ཚུ་ལས་ རྒྱབ་སྐྱོར་	༠༠	༠༠	༡༩	༤༢.༡	༡༩

ཐོག་ཁྲམ་ གཉེས་པ། སློབ་སློབ་དང་འབྲེལ་བའི་གནས་ཚུལ།

གོང་གི་རྒྱབ་འབྲམ་ནང་ལུ་བལྟམ་ད་ ཚུངས་སློབ་སྟོན་འབད་མི་ལུ་ སློབ་ཡོད་པའི་ཁར་
 སློབ་སྟོན་འབད་མི་ལྷོ་གསར་གྱི་ཡོད་ཅུང་ གཞི་རིམ་སློབ་དཔོན་ཚུ་གིས་ ཚུངས་སློབ་སྟོན་

འབད་མི་འདི་ལྷ་འོས་འབབ་ཡོད་མི་བརྒྱ་ཚ་ 40 ལས་ཉུང་སྤྱི་མིན་པས།
 རྫོང་ཁ་སློབ་སློན་འབད་བའི་སྐབས་ལུ་ དཀའ་ངལ།

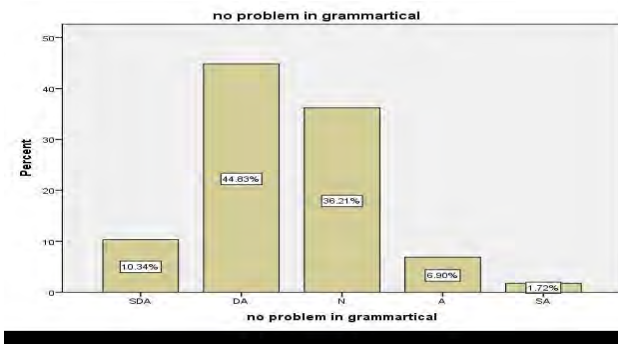
ཡིག་སྐབ་ལུ་ དཀའ་ངལ།



ཐིག་ཁྲམ་གསུམ་པ། ཡིག་སྐབ་ཀྱི་དཀའ་ངལ།

གོང་གི་རྒྱབ་འབྲས་ལུ་ལྷན་ད་ དཀའ་ངལ་ཡོད་པ་འབད་སྐབ་མི་ བརྒྱ་ཚ་ 43 དང་ སྐབ་
 མ་ཤེས་མི་ བརྒྱ་ཚ་ 30 ཡོད་པ་ལས་ སློ་གསར་ལས་ གསུམ་པ་ཚུན་ རྫོང་ཁ་སློན་མི་སྤྱིར་
 བཏང་སློབ་དཔོན་ཚུ་ལུ་ ཡིག་སྐབ་ཀྱི་དཀའ་ངལ་སློམ་འདུག།

ཡི་གུ་འི་སློབ་བ་ལུ་ དཀའ་ངལ།



ཐིག་ཁྲམ་བཞི་པ། ཡིག་སློབ་ཀྱི་དཀའ་ངལ།

གོང་གི་སྐབ་འབྲས་ལུ་ལྷན་ད་ དཀའ་ངལ་ཡོད་པ་འབད་སྐབ་མི་ བརྒྱ་ཚ་ ༥༥ ཏང་ སྐབ་
མ་ཤེས་མི་ བརྒྱ་ཚ་ ༣༤ ཡོད་པ་ལས་ གློ་གསར་ལས་ གསུམ་པ་རྩུན་ རྫོང་ཁ་སློབ་སྟོན་གྱི་
བཏང་སློབ་དཔོན་ཚུ་ལུ་ ཡིག་སློབ་ལུ་དཀའ་ངལ་འདུག དཀའ་ངལ་འདི་ཡང་ མང་ཤོས་རྐྱེན་
དཔོན་མི་ཚུ་ལུ་འདུག།

ཡིག་བཟོའི་དཀའ་ངལ།

ཡིག་བཟོའི་ནང་ལུ་ དཀའ་ངལ་མེད་པ་འབད་སྐབ་མི་ བརྒྱ་ཚ་ ༤༤ ཏང་ སྐབ་མ་ཤེས་མི་
བརྒྱ་ཚ་ ༣༣ ཡོད་པ་ལས་ གློ་གསར་ལས་ གསུམ་པ་རྩུན་ རྫོང་ཁ་སློབ་སྟོན་གྱི་
དཔོན་ཚུ་ལུ་ ཡིག་བཟོ་ལུ་དཀའ་ངལ་སློམ་མིན་འདུག། ལྷག་པར་དུ་ སློབ་དཔོན་མི་ཚུ་གིས་
ཡིག་བཟོའི་དཀའ་ངལ་མེད་པ་འབད་བཤད་པ་ཨིན་པས།

ཡི་གུ་བཀལ་ཐངས་ལུ་དཀའ་ངལ།

ཡི་གུ་བཀལ་ཐངས་ནང་ལུ་ དཀའ་ངལ་མེད་པ་འབད་སྐབ་མི་ བརྒྱ་ཚ་ ༤༧ ཏང་ སྐབ་
མ་ཤེས་མི་ བརྒྱ་ཚ་ ༣༧ ཡོད་པ་ལས་ གློ་གསར་ལས་ གསུམ་པ་རྩུན་ རྫོང་ཁ་སློབ་སྟོན་གྱི་
བཏང་སློབ་དཔོན་ཚུ་ལུ་ ཡིག་བཟོ་སྐྱེལ་ཐངས་ལུ་ དཀའ་ངལ་སློམ་མིན་འདུག།

རྫོང་སློབ་འཁྲུག་དཀའ་ངལ།

རྫོང་སློབ་འཁྲུག་ནང་དཀའ་ངལ་མེད་པ་འབད་སྐབ་མི་ བརྒྱ་ཚ་ ༥༩ ཏང་ སྐབ་མ་ཤེས་མི་ བརྒྱ་
ཚ་ ༣༡ ཡོད་པ་ལས་ གློ་གསར་ལས་ གསུམ་པ་རྩུན་ རྫོང་ཁ་སློབ་སྟོན་གྱི་བཏང་སློབ་དཔོན་ཚུ་
རྫོང་སློབ་ལུ་དཀའ་ངལ་སློམ་མིན་འདུག།

མིང་ཚིག་གི་དཀའ་ངལ།

མིང་ཚིག་ལག་ལེན་འཐབ་ནིའི་ནང་ལུ་ དཀའ་ངལ་མེད་པ་འབད་སྐབ་མི་ བརྒྱ་ཚ་ ༣༩ ཏང་
སྐབ་མ་ཤེས་མི་ བརྒྱ་ཚ་ ༤༧ དཀའ་ངལ་ཡོད་མི་ བརྒྱ་ཚ་ ༣༡ ཡོད་པ་ལས་ གློ་གསར་ལས་
གསུམ་པ་རྩུན་ རྫོང་ཁ་སློབ་སྟོན་གྱི་བཏང་སློབ་དཔོན་ཚུ་ མིང་ཚིག་ལག་ལེན་ལུ་དཀའ་ངལ་ཡོད་
མེད་འདི་ སྐབ་མི་ཤེས་པས། རྫོང་ཁ་སློབ་སྟོན་འབད་དགོ་པ་ཅིན་ སློབ་སྟོན་པ་འདི་ལུ་ རྫོང་ཁ་
མིང་ཚིག་ཤེས་དགོ་པ་འདི་གལ་ཆེན་ལས་ གོང་གི་སྐབ་འབྲས་ནང་ལུ་ སྐབ་མ་ཤེས་པ་འབད་ཡོད་
མི་ལུ་བལྟ་བ་ཅིན་ དཀའ་ངལ་ཡོད་པའི་རྟགས་མཚན་ཅིག་ཨིན་པས།

སློབ་སྟོན་འབད་ཐངས་ཀྱི་དཀའ་ངལ།

རྫོང་ཁག་གཉིས་ཀྱི་ནང་ལུ་ གློ་གསར་ལས་སློབ་རིམ་ ༣ པ་རྩུན་རྫོང་ཁ་སློབ་སྟོན་འབད་མི་
ཚུ་གི་གནས་སྤོང་བསྐྱེལ་ལེན་འབད་ཡོད་མི་དང་འབྲེལ་མ་ད་ དཀའ་ངལ་མེད་པ་འབད་སྐབ་མི་ བརྒྱ་

ཚེ ༤༩ དང་ སྐབས་ཤེས་མི་ བརྒྱ་ཚེ ༩༧ དཀའ་ངལ་ཡོད་མི་ བརྒྱ་ཚེ ༧ ཀྱང་མ་ཅིག་
ཡིན་མ་ལས་ སློབ་གསུང་ལས་ གསུམ་པ་ཚུན་ རྫོང་ཁ་སྟོན་མི་སྲིད་བཏང་སློབ་དཔོན་ཚུ་ལུ་སློབ་
སྟོན་འབད་ཐངས་ཀྱི་ནང་ལུ་ དཀའ་ངལ་ཡིན་འདུག།

ཁྲུངས་བཅོན་ཐབས་ལམ་ལག་ལེན་འབབ་ཐོག་ལས་ཐོབ་ཡོད་པའི་གནས་སྟེན་བཅུད་བསྐྱུལ།
བཅའ་མར་གཏོགས་མི་ མི་གངས་ ༥༥ ཡོད་ས་ལས་ ༩༥ ལས་ ཁྲུངས་བཅོན་ཐབས་
ལམ་ཀྱི་ཐོག་ལས་ བསྐྱུར་བཅོས་འབད་བཏུ་བ་པའི་དྲི་བ་ཚུ་ ལག་ལེན་འབབ་སྟེ་ གནས་སྟེན་
བསྐྱུ་ལེན་འབད་ཡོད་པའི་བསམ་འཆར་ཚུ་ བཅུད་བསྐྱུ་སྟེ་ ཞོང་ལུ་གངས་འབྲེལ་ཐབས་ཤེས་ནང་
ལས་ ཐོན་མིའི་ཐུབ་འབྲས་དང་ ག་བསྐྱུར་འབད་དེ་ བསྐྱུ་ལེན་འབད་ རྫོང་ཁ་སྟོན་ཚོས་ཚན་འདི་རྫོང་ཁ་
སློབ་དཔོན་གྱིས་ར་ སློབ་སྟོན་འབད་ཚུ་གསུམ་པ་ཚུན་དཀའ་ནི་ཡིན་པས་ཟེར་བཤད་པ་ཡིན་པས། དེ་
ཡང་ བཅའ་མར་གཏོགས་མིའི་གསང་ཡང་ ༡-༥, ༥-༡༠, ༡༩, ༢༠-༢༥, ༢༧ ཚུ་གིས་འབད་
བ་ཅིན་ “སྲིད་བཏང་སློབ་དཔོན་ཚུ་གིས་ གཞི་རིམ་ནང་ལུ་ རྫོང་ཁ་སྟོན་པའི་སྐབས་ རྫོང་
ཁ་སྟོན་གྱི་རྟེན་ལུ་ཐོ་ཐོག་པ་མས།” དུ་རུང་གཞན་ཡང་ ཡང་ ༧-༧, ༧-༡༩, ༡༦, ༡༧, ༢༠,
༢༡, ༢༤ ཚུ་གིས་ “རྫོང་ཁ་སྟོན་ལེགས་ཤོམ་མེད་པ་ལས་ རྩེ་འགྲུང་འབད་སྟོན་ཏེ་ ཨ་
ལོ་མེད་པ་གཏང་ནིའི་ ཉེན་ཁ་འདུག།” ཟེར་བཀོད་ཡོད་པ་མ་ཚད་ ཡང་ ༡-༥, ༡༡-༡༤, ༡༥,
༢༠-༢༥, ༢༥ ཚུ་གིས་ “རྫོང་ཁ་སློབ་དཔོན་མངས་འབད་ བཅུ་གསུམ་ཏེ་ རྫོང་ཁ་སློབ་དཔོན་
གྱིས་ར་ སྟོན་པ་ཚུན་དཀའ་ནི་མས།” ཟེར་བའི་བསམ་འཆར་བཀོད་པ་ཡིན་པས།

དེ་འབད་མ་ལས་ སྲིད་བཏང་སློབ་དཔོན་གྱིས་ རྫོང་ཁ་སློབ་སྟོན་འབད་དགོ་པ་ཅིན་ སློབ་
དང་སྐྱུར་བ་ལུ་ ལྷག་ཐངས་ (སྲིད་སློབ་ཀྱི་བཟང་ས་) ཚུ་གི་ སློབ་སྦྱང་དེས་པར་དུ་དགོ་པ་འབད་
བཤད་པ་མ་ཚད་ ལག་དེ་བ་སྦྱང་དེ་བ་ལྷག་དེ་བ་ལ་སོགས་པའི་མཐོ་ཚས་ཚུ་ཡང་ ལམ་སྟོན་ཁ་
གསལ་དགོ་པའི་ཁར་ ལང་མ་འབད་ར་ དགོ་པ་འབད་ཡོད་པའི་བསམ་འཆར་བཀོད་པ་ཡིན་པས།

གོ་ས་འཆར།

ཞོང་ལུ་ ལྷ་དང་སྐྱེ་འདི་རྫོང་ཁ་གཞིས་ཀྱི་སློབ་གྲྭ་ཚུ་ནང་ རྫོང་ཁ་སློབ་སྟོན་འབད་དེ་ཡོད་
པའི་སྲིད་བཏང་སློབ་དཔོན་ཚུ་ལས་ གནས་སྟེན་བསྐྱུ་ལེན་འབད་དེ་ དབྱེ་དཔྱད་དེ་ ཞོང་ལུ་ཐོག་
ལམ་ནང་བཀོད་ཡོད་པའི་ཐུབ་འབྲས་དང་འབྲེལ་བ་ཅིན་།

- སློབ་གསུང་ལས་སློབ་རིམ་གསུམ་པ་ཚུན་ རྫོང་ཁ་སྟོན་མི་སྲིད་བཏང་སློབ་དཔོན་ཚུ་ མང་ཤོས་
ཅིག་ རྫོང་ཁ་སྟོན་མི་སྲིད་བཏང་སློབ་དཔོན་ཚུ་
- སྲིད་བཏང་སློབ་དཔོན་ རྫོང་ཁ་སྟོན་མི་སྲིད་བཏང་སློབ་དཔོན་ཚུ་ལུ་ སྲིད་སློབ་ཀྱི་བཟང་ས་དང་ ཡི་གུ་སྐྱེལ་ཐངས་
ལག་སློབ་དང་སྐྱུར་བ་ཚུ་ འོས་འབབ་ལཱ་ཏེ་གཏོ་འབད་ སློབ་སྟོན་འབད་ཚུ་གསུམ་པ་ཚུན་དོན་
ལུ་ གཞི་ག་ཐོག་སློབ་སྦྱང་ ལོགས་སུ་འབད་གནང་དགོ་པ་འདུག།
- སློབ་གསུང་ལས་སློབ་རིམ་གསུམ་པ་ཚུན་གྱི་ ཚུ་གཞན་ཤོམས་འདིས་ཀྱི་སློབ་བཟང་ཡང་ གནང་

དགོས་འདུག

- གློ་གསར་ལས་སློབ་རིམ་གསུམ་པ་རྩུན་གྱི་ཚུ་གཞུང་དང་འབྲེལ་བའི་མཁོ་ཆས་ཚུ་ ལངམ་འབད་གནང་དགོས་འདུག
- གློ་གསར་ལས་སློབ་རིམ་གསུམ་པ་རྩུན་གྱི་རྫོང་ཁ་ཚོས་ཚན་གྱི་ལག་དེབ་ཁ་གསལ་འབད་བཟོ་དགོས་འདུག
- གློ་གསར་ལས་སློབ་རིམ་གསུམ་པ་རྩུན་ རྫོང་ཁའི་ཚོས་ཚན་འདི་ རྫོང་ཁའི་སློབ་དཔོན་ཚུ་གིས་རྩེ་ན་པ་ཅིན་འོས་འབབ་ འོང་ནི་མས།
- མཐོ་རིམ་སློབ་གྲུབ་ལུ་ གློ་གསར་ལས་སློབ་རིམ་གསུམ་པ་རྩུན་གྱི་ཚུ་གཞུང་ལུ་གོམས་འདིས་ལེགས་ཤོམ་བྱིན་དགོས་འདུག

ད་བཅས་གྱི་ཞིབ་འཚོལ་ནང་ལུ་ མ་རྩུང་དེ་འབད་རུང་ ཞིབ་འཚོལ་འབད་བའི་སྐབས་ལུ་ བྱུང་ཡོད་པའི་གནད་དོན་ཚུ་ མ་འོངས་པའི་ཞིབ་འཚོལ་པ་རྩུ་ལུ་ གོ་ས་འཆར།

- སློབ་གྲྭ་ལག་གི་དབུ་འཛིན་ཚུ་ལས་ སྤྱིར་བཏང་སློབ་དཔོན་ཚུ་གིས་ རྫོང་ཁ་སློབ་སྟོན་འབད་ནི་ལུ་ སློབ་གྲྭ་དེ་སློབ་སྦྱོང་དོ་ག་ བསམ་འཆར་ལེན་ནི།
- རྫོང་སློབ་དང་སྤྱི་སློབ་གཉེས་ཀྱིས་ རྫོང་ཁ་སློབ་མི་ལུ་ བྱུང་པར་བརྟུག་ཞིབ་འབད་ནི།
- སློབ་གྲྭ་ག་རའི་ནང་ལུ་ གློ་གསར་ལས་ སློབ་རིམ་ ༩ པ་རྩུན་ རྫོང་ཁའི་ཚོས་ཚན་འདི་ སྤྱི་སློབ་ཚུ་གིས་སློབ་སྟོན་འབད་དོ་ཡོད་མེད་བཟུ་ནི།
- ཞིབ་འཚོལ་དེ་བརྩམ་ རྫོང་ཁག་ གཞུང་ཁར་ཡང་ བཟུ་དགོས།
- གཞི་རིམ་རྩུང་བའི་ནང་ལུ་ རྫོང་ཁ་སློབ་མི་འཛུ་སློབ་ མང་ཤོས་ར་ཨམ་སྤུ་ཨིན་པའི་ཁྱེད་ས་ ག་ཅི་ཨིན་ན་བཟུ་ནི།

རྒྱལ་ཁྲེན་གྱི་ཐོ་

ཚོས་ཚན་ཅུག་ཀྱི་འཕེལ་རྒྱུ་ལྟོ་ཚན་། (༡༩༩༤) གཞི་རིམ་སློབ་དཔོན་སློབ་སྦྱོང་གི་ལག་ཁྱེར་ལག་དེབ། ཐིམ་ཕུ།
ཤེས་རིག་སླེ་ཚན། གསོ་བ་དང་ཤེས་རིག་རྒྱན་ལག།

སློབ་སྦྱོང་དཔོན་སློབ་སྦྱོང་ཁང་། (༡༩༩༩) གཞི་རིམ་སློབ་དཔོན་སློབ་སྦྱོང་ལག་ཁྱེར་ལག་དེབ། ཐིམ་ཕུ། ཤེས་རིག་སླེ་ཚན།
གསོ་བ་དང་ཤེས་རིག་རྒྱན་ལག།

སློབ་ཤེས་རིག་མཐོ་རིམ་སློབ་གྲྭ། (༡༩༩༠) རྫོང་ལ་ཤེས་རིག་གཙུག་ལག་གཞི་རིམ་བར་མའི་ཡིག་ཆ། སློབ་ཤེས་རིག་
མཐོ་རིམ་སློབ་གྲྭ།

སློབ་ཤེས་རིག་མཐོ་རིམ་སློབ་གྲྭ། (༡༩༩༠) ཤེས་རིག་གཙུག་ལག་གཞི་རིམ་གཞི་འདུག་གི་ལས་རིམ་ཡིག་ཆ། སློབ་
ཤེས་རིག་མཐོ་རིམ་སློབ་གྲྭ།

རྫོང་ལ་གོང་འཕེལ་རྒྱན་ཚོགས། (༡༩༩༠) རྫོང་ལ་འཕེལ་རྒྱུ་དགོས་པ་ བདེ་སྲོལ་སྤྲོད་བའི་སློབ་ཆ། ཐིམ་ཕུ།
རྫོང་ལ་གོང་འཕེལ་རྒྱན་ཚོགས།

ཤེས་རིག་ལས་ཁུངས། (༡༩༦༤) ལྷན་སྐྱོང་གི་ ཐིམ་ཕུ། འབྲུག་གཞུང་ཤེས་རིག་ལས་ཁུངས།

ཤེས་རིག་ལས་ཁུངས། (༡༩༦༩) འབྲུག་འཕེལ་རྒྱུ་དེབ། ཐིམ་ཕུ། འབྲུག་གཞུང་ཤེས་རིག་ལས་ཁུངས།

Perceptions and Experiences of Unplanned Pregnancies among University Students: A Case study at Paro College of Education

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Abstract

The unintended or unplanned pregnancy is statistically increasing among young women around the world, and in most cases they undergo significant physical and psychological effects. The record at Paro College of Education indicates certain evidences of unplanned pregnancy and yet no formal studies is carried out to understand the perceptions and experiences of unplanned pregnancies among the female student teachers. This study carried out document analysis, particularly the record of pregnancies among female student teachers in the college and condensed the sampling to five cases of the unplanned pregnancies. All five cases identified were based on the preliminary finding of unplanned pregnancy – while three cases had given live birth and two cases are currently pregnant. These five cases show significant difference of how they perceive pregnancies between pre-marital pregnancies and married student teachers. There is also significant difference of stress experiences between them. The moral support from the family and society implicates a strong correlation with the pregnant student teachers' mental and physical wellbeing.

Keywords: Stress, unplanned pregnancy, physical effect, psychological effect

Introduction

Several studies found that unwanted/unplanned pregnancy has a considerable effect on the health of mothers and infants (Akbarzadeh, Yazdanpanahi, Zarshenas and Sharif, 2016; Bahk, Yun, Kim, and Khang, 2015; Isumi and Fujiwara, 2017; Lanre, 2010). The cognitive impairments, psychological risks, poor physical health due to abortion and social-stigmatization are some of the problems young women in general and university students in particular face as a

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result of unplanned pregnancies. Out of 210 million pregnancies worldwide each year, approximately 22% or 46 million end in abortion (Irvin, 2004). It is difficult to find the exact worldwide figure on the cases of abortion that is related to unplanned pregnancies because many countries consider it as illegal by law. However, countries like India found that one third of all pregnancies resulted to abortions, and nearly half of pregnancies were unintended (Singh, Shekhar, Acharya, et al 2015). Other studies show that women who have births resulting from unintended pregnancies may be at higher risk of postpartum depression (Steinberg and Rubin, 2014).

Nonetheless, unwanted or unintended pregnancy among young women in the developing countries is increasing statistically every year (UNICEF, 2013). For instance, of the 182 million pregnancies each year, 76 million are unintended (Lule, Singh and Chowdhury, 2007). Bhutan is no exception with-in the prevalence of unintended or unplanned pregnancies. The unplanned pregnancy and perspective study at Nganglam town, southeastern Bhutan, found that one in five women experienced unplanned pregnancy (Choden; Pem and Pathak, 2015). Studies have also found that socio-economic background and sexual behaviours are some of the contributing factors to unplanned pregnancy (UNICEF, 2008).

Even within the young university students, there are growing incidences of unplanned pregnancies, and the sexual behaviour is thought to be one of the contributing factors. The study on the responsible sexual behaviours among Royal University of Bhutan (RUB) students found that around 20.4% of the female respondents either 'agreed' or 'strongly agreed' that they experienced their first sexual intercourse after joining the College (Gurung, Tshomo, Wanghcuk and Nidup, 2017). However, the issue of college students' experiences of unplanned pregnancies is not discussed sufficiently. For this study, five cases of unplanned pregnancies from Paro College of Education, RUB, were selected to study its causes and effects. Through this case study, it was thought that certain modalities could be identified to lower the incidences of unplanned pregnancies among the university students in Bhutan.

Background of the study

Instances of unplanned pregnancies in Paro College of Education (PCE) are nothing new. In 2005, academic results for six girls from B. Ed (Pry) Programme were withheld for two years for breaching the college rules, i.e. getting pregnant while still in the College (NIE-P/ADM(19)2005-2006/739 dated December 13, 2005). Even today, the situation of some female student-teachers getting pregnant in PCE has not changed much. The records

maintained with the Dean of Academic Affairs, PCE indicate that three students took 1-year academic leave in 2017 alone, one of whom was asked to take academic leave on compulsory basis. There had been similar cases in the past too where student got pregnant while still studying in the College. These students were specifically briefed of the consequences of pregnancies during the Orientation Week in the beginning of the first semester of the first year. The students' handbook which is available on the VLE clearly state that "if any student teacher is found to be pregnant during the academic session, she would be asked to take a year off (one-year academic leave) immediately" (2017, p.12). The issues of pregnancies are also discussed in the Life Skills lessons. But the unplanned pregnancies seem to continue in the College although it mostly goes unreported.

What is more worrying is that during pregnancy, young mothers tend to hide their pregnancy by wearing tight clothes, often binding the womb which might restrict the growth of fetus. Further, after delivery, they take only a day's leave for delivery after which they are back in the class. While it is understandable that they do not want to miss classes or fall short of attendance, it is quite inhuman on the part of mothers to leave their newborn babies home, unattended. Such a practice not only denies the new born babies of their mothers' breast milk, it also poses great risks on the long-term health of mothers. Besides, the young mothers can neither give adequate care to their newly born babies nor can they concentrate on their studies. Hence these mothers suffer from anxiety, depression and fatigue, all of which need to be properly studied. In this regard, studies by Gipson, Koenig and Hindin (2008) clearly show the need to assess both depression and anxiety in new and expectant parents.

It was imperative to carry out an in-depth study on why such a phenomenon at the College persists. Accordingly, five cases were identified. All the five student-teachers who had given births, and those who were pregnant admitted that their cases were unplanned or unintended. This case study intended to provide insights on the occurrence of unplanned pregnancies and find out in what ways they were affected within their social and personal lives. More importantly, this study is expected to provide insights on their perception and decisions on unplanned pregnancies within the parameters of student-life situations.

Case Description

Five cases of unplanned pregnancy were selected for this study. Case 1, 2 and 3 were the cases of student-teachers who had given live birth recently, and cases 4 and 5 were the cases of student-teachers who were pregnant when this study was conducted.

Case 1 – It was a pre-marital pregnancy case, and unplanned. The student conceived during her 1st Year of study in the B. Ed Primary Programme. She currently lives with her mother. Her husband is a student of another college under Royal University of Bhutan. The husband often turns abusive towards her and makes her go through a stressful life. She has even developed suicidal tendencies owing to these unfortunate circumstances.

Case 2 – This student knew that she was 22 weeks pregnant when she missed her monthly periods. Like in *Case 1*, her pregnancy was unintended and unplanned. Her husband lives in eastern Bhutan and visits her as and when he gets time. She gave a live birth but did not avail the academic leave although she knew such a facility was available.

Case 3 – She is married to a student from the same College, but it was a pre-marital pregnancy. They now live together in a small rented apartment near the College. She availed academic leave for a year soon after she learned about her pregnancy.

Case 4 - She is currently pregnant, and the parents know about their relationship. However, they have not informed their parents about their unplanned pregnancy, and they are waiting for the right time to break the news. Her husband is a graduate from the same college and their relationship is stable.

Case 5 - She is married to the man who works in Thimphu. She has relatively good family support and lives with them. But it was an unplanned pregnancy, and she is currently on a 1-year academic leave.

Literature Review

As of autumn 2017, Paro College of Education had a total of 1011 full-time pre-service student-teachers enrolled on five different programmes. Records maintained with the Student Record Section, PCE (2017) revealed that 530 were females and 481, males. This indicated that more than half of the student-teachers in PCE were young women of child-bearing age. However, the Women's Hostel in the College has only 212 beds, ladies' self-catering hostel included. What it means is that about 328 of the girls had no alternative but to stay in the rented rooms outside the PCE campus.

Studies done by the National Commission for Women and Children (NCWC) and World Bank (2013, p.16) suggested that “the adolescent fertility rate of Bhutan was 47 per 1,000 in 2010, more than twice the East Asia average”. The same study also pointed out that “early pregnancy was a major contributing factor to the gender gap in tertiary education in Bhutan” (NCWC & World Bank, 2013, p.15).

Contextualized to PCE, once the student-teachers lived on their own, i.e. without any direct supervision from the Hostel Matron, they shared same rooms

with their male counterparts. They openly said they ‘live-in together’. As a result, a few of the girls usually got pregnant when they were still studying on the programme. The consequence- they had to take one-year academic leave of absence from the College to nurse their newborn children as well as regain their health. Although they could pursue their teacher training a year later, it meant that they had to relinquish their aim of completing their education in the stipulated time frame. Also the possibility to continue and complete their training depended on the support from their parents and relative to take care of their babies which further make the young mothers more dependent.

In the study conducted by Cheizom and Choden (2014, p.9), it was found that “women think more collectively than men and certain social and women-related issues were better understood by women”. However, looking from the persistent pregnancy cases in PCE, it appears that more advocacy programmes are necessary for young women. For one, unplanned pregnancy was still rampant in the College. Two, pregnant women never reported their pregnancy to the College authorities with the apprehension that they would be asked to take a 1-year academic leave from the College. But this did not mean that the young mothers did not undergo problems. As per the studies conducted by Shahry, Kalhori, Esfandiyari and Alavijeh (2016), unwanted pregnancy induced adverse attitudes regarding pregnancy and facing increasing mental and socio-economic difficulties. The same study also found that if a pregnant woman did not receive support well, not only would she experience low maternal parental self-efficacy, but the well-being of both the mother and her child would be affected. Some of the other low sides of unwanted pregnancy also included stress, low self-esteem, depression and suicidal tendencies.

Researches such as the one conducted by Barton, Redshaw, Quigley and Carson (2017) found that unplanned pregnancy was common worldwide and indicated that an estimated 30 million births occurred globally in 2012. The findings of the study also pointed out that such pregnancies could result in adverse health outcomes for both mother and child- the claim which Mauldon and Delbanco (1997) perceived as ‘true and serious’. The same concern was echoed by Gipson, Koenig and Michelle (2008, p.30) that “unintended pregnancy also may affect negatively the breastfeeding and nutritional status of children who resulted from unwanted pregnancies”.

This is particularly true in PCE since pregnant mothers seldom reported pregnancy case to the College authorities. Inexperienced and young women gave births at homes or in hospitals and as soon as deliveries were over, mothers attended regular classes in the College. Perhaps they lacked adequate education on unplanned pregnancies and its consequences. Research showed that even in the developed countries, education to that effect was vital. For instance, Delbanco, Lundy, Hoff, Parker and Smith (1997) found that there was a need in the

US, Canada and Denmark for “better education about reproductive physiology and the risk of pregnancy” (p.74). Findings of the studies conducted by Gipson, Koenig and Hindin (2008) also concluded the need to assess depression and anxiety in new and expectant parents, be it postpartum anxiety or prenatal care.

Studies by Callegari, Zhao, Schwarz, Rosenfeld, Mor and Borrero (2017) indicated that because some young women lacked partner involvement in contraceptive decision making, it resulted to low contraceptive self-efficacy which again resulted to inconsistent contraceptive use and the use of less effective methods. The ultimate consequence was that young women become pregnant although neither ‘they’ nor ‘their partner’ had planned for it.

Given the fact that unwanted pregnancies did occur in young women student-teachers of PCE (who underwent mental trauma, social problems, and financial difficulties), it was imperative that self-efficacy beliefs among students on unplanned pregnancies and its psychological effect on the unprepared parents be examined first. After all, the construct of self-efficacy could be employed as an intervention to prevent sexually active women student-teachers of PCE from unplanned pregnancy (Chan, 2009). The findings from this study would also be instrumental in understanding preferences, beliefs, and practices of young girls in PCE pertaining to the contraceptive use and unplanned pregnancies. On this note, the entire study was guided by the following research questions:

Research Questions

1. What are the contributing factors to unplanned pregnancies among students at Paro College of Education?
2. How do female student-teachers perceive unplanned pregnancies?
3. What are their experiences of unintended pregnancies as student-teachers?
4. In what ways do unplanned pregnancies impact personal and academic lives of the female student-teachers?
5. What psychological impact do unplanned pregnancies have on young mothers?
6. What can the College Management do to prevent unplanned pregnancies in the College?

Methodology for Case studies

This study adopted qualitative approach to researching and used an interpretative paradigm since this study was concerned with understanding the world of student-teachers from emic point of view. The Case Study was particularly suitable in this research since the study was qualitative in nature and dealt with individual cases of young adolescent student-teachers’ pregnancies. Besides,

in a Case Study, different methods could be combined with the purpose of illuminating a case from different angles.

Since this study was underpinned by an interpretivist paradigm, this study focused on the individuals' interpretation of beliefs and experiences among students on unplanned pregnancies and its psychological effect on the unprepared parents. Interpretivist holds that there is no single view of the world; rather, people interpret the world in widely different fashions (Sheppard, 2006). They produced and reproduced the meaning of the world as a part of their everyday activities (Blaikie, 2004). To understand this subjective meaning, researchers considered participants' perspectives with due care. Further, the case study had the ability to reveal multiple perspectives and present a unique case (Simons, 2009) pertaining to their beliefs on unplanned pregnancies.

The study chose to do document analysis of the records maintained by the College and examined five cases of unplanned pregnancies. These cases were chosen from students currently studying in the College. They were chosen as samples since their pregnancies were all unplanned and happened during their stay in PCE. Data collection tools included face-to-face semi-structured interviews, field notes, anecdotal records, and document analysis. Data collection was done in the month of November, 2017.

Findings and Discussions

The five cases of unplanned pregnancies at Paro College of Education are divided categorically for this study. Case 1, 2 and 3 are the cases of student-teachers who gave live birth recently and cases 4 and 5 are the cases of student-teachers who were pregnant when this study was carried out. The five cases of unplanned pregnancies analysis yielded three major themes: i) how they perceive unplanned pregnancy and their decisions ii) impact on mother-child health, and iii) how they respond to the policies/rules of the College. The central overarching theme of this study is the "impact supposition" of unplanned pregnancies while studying at the College". Table 1 shows the summary of the findings and themes.

TABLE 1.
Summary of the findings

Point at Issues	Themes	Main Theme
non-use/improper use of contraceptives	Perception on unplanned pregnancies	Impact supposition
alcohol-use		
certainty/uncertainty over marital life		
living environment		
financial burden		
academic studies		
abortion panic	Psychological and physical effects	
antenatal care		
early-signs of depression		

1. Perception of unplanned pregnancies among student-teachers and their decisions

Fears to cope with academic studies, financial burden and uncertainty/certainty prospect over the marital life are some of the perceptions of unplanned pregnancies among student-teachers at Paro College of Education. This study also found that the participants had undergone different level of emotional stress and threats depending on the status of their relationships with their partners, families, and colleagues at the College. Their perceptions on unplanned preg-

nancy are explained under three themes: cause of unplanned pregnancy, support from friends and family and professional life.

1.1 Causes of unintended or unplanned pregnancies

Five cases of unplanned pregnancies among student-teachers were observed and interviewed. The student-teachers expressed a range of beliefs on unplanned pregnancies. It was evident that alcohol-use, improper/non-use or inconsistent use of contraceptives among student-teachers were some of the main causes of unintended pregnancies.

case#1: one-time sex was a consensual though both of us were drunk and we had forgotten all about contraceptives. But I heard after you (I) have had period within one week, I was told it is safe...

case#2: my husband doesn't like condom, he would know when to ejaculate the sperm so he used only that time.

case#3: we did not use any contraceptives.

case#4: I did not know, we took every precaution, after some ... few months I have started missing my periods...

case#5: usually we use condom, but that month we did not use.

Furthermore, independent living environment such as living in the rented apartment away from guardians and parents is often viewed as a contributing factor to sexual behaviour among student-teachers. The College has hostel accommodations limited only to a fewer number of students. The result is that majority of student-teachers have to study as day-scholars in privately rented houses. For instance, student-teachers expressed that “*if they (students) are in relationships and staying as day-schooler, there is no restriction, as in hostel there is matron and timing*”. Timing, in this case, connotes rules and regulations of the hostel such as reporting and outing time.

1.2 Acceptance and support from family and society

All the five cases viewed their pregnancies as ‘accidental’. They expressed negative reaction to unexpectedly becoming pregnant and indicated significant stress level. For instance, their marital status had detrimental effects on them. Three cases confessed premarital pregnancies and indicated anxiety and pregnancy worries. They were mainly worried about the unintended pregnancies because

of uncertainty over the prospect of marital life. One particular case reported that her boyfriend was not only unsupportive, he often physically assaulted her. She said, “*to be honest he (boyfriend) hit me more than ten times.*” It also indicated the lack of moral support and acceptance from her boyfriend. At one instance, he refused to acknowledge the child as his own! She also reported that her boyfriend threatened to commit suicide if abortion is not sought as a solution to the unplanned pregnancy. Moreover, given the social stigma attached to unmarried women’s pregnancies, coping with their pregnancies was very difficult. They especially feared the public ridicule. For instance, case 1 & 2 reported that:

case# 1: *After I got the result of gonadotropin, which was positive.... I cried in the hospital and cried the whole night.*

case # 2: *If you are married they (college friends) think it is okay but if we are not married then they say like without husband you are pregnant.. they tell so many bad things about ‘that woman’.*

Even in the case of those students who had stable relationship (married) and support from immediate family members, they expressed that getting pregnant while studying is not the right time. However, there are subtle signs of disapproval in the beginning. For instance, cases 1, 2, 4 and 5 expressed shock and bewilderment in the initial stage although their families and the society accepted it. Even in case 3, she has to wait for the suitable time to break the news to her family despite the fact that she is confident of her family’s acceptance. The fear to reveal the pregnancy to their parents indicates significant stress level indeed. She said, “*I don’t know how to reveal it to my parents and I don’t know how they will react so I am so stressed out*”.

Another downside of an unintended pregnancy that plagued student-teachers’ daily lives was their inability to fulfil parental commitments and responsibilities. They required support from their immediate family members, usually parents, to help them look after their children. They expressed that support from husbands, family members and friends are crucial for safety of the newborn child. For instance, two cases reported that:

case#2: *When I first gave to live birth that time I was very worried about how to handle the baby – like wiping toilet. I was worried if I drop the baby so I was always seeking help. My mother helped me to handle my baby, most of the time.*

The study revealed that there is a positive correlation between support provided by the family/society/partner and the pregnant student-teachers’ mental

well-being

1.3 Professional life

The professional life relates to the student-teachers' perception of continuing their education in the College even after learning that they are pregnant. The data analysis showed that PCE students were aware of the College rules and policies regarding pregnancies since all of them admitted their knowledge of the "1-year mandatory academic leave they have to take" should they become pregnant during the study period. However, none of those pregnant student-teachers had come forward to declare their pregnancies to the College Management. It is clear that they did not avail academic leave voluntarily, and given the choice, they would rather prefer to continue their studies at the College and not take any leave. Moreover, they perceived that continuing the study will enable them to acquire job on time and become financially independent. One particular case reported that *"I will be left behind, my friends will be ahead of me, and I will be wasting a year repeating..."*.

The data revealed that two out of five pregnancies cases did not avail academic leave for a year. However, the three unplanned pregnancy cases who had taken academic leave were either counseled by their family and faculty members or were asked by the College Management to take one year of academic leave. For instance, Case 3 reported that one of the faculty members knew about her unplanned pregnancy and urged her to take an academic leave. She said *"maam X knew about my pregnancy and told me that I must avail academic leave..."* Despite being advised by the faculty member, she continued to attend the classes. The College Management had to finally issue the formal leave letter asking her to take academic leave. Case 4 who is currently pregnant asserted that *"I might have to beg (to the College Management) because there is only one and half month left before graduation... but I might have to take leave after the delivery"*. Another case reported that *"I am ready to take leave if they (College Management) find out that I am pregnant but then if they don't find out I am going to continue my studies at the college"*.

They were more worried of the completion of their studies on time than their pregnancies. They felt it was necessary to complete their studies on time. For instance, they were worried that they need to bear tuition fees and living expenses on their own if they were to repeat the course after a year of academic leave. However, students' misconception on the regulation of tuition fees is indicative as students need not have to pay the tuition fees for the approved academic leave. Nonetheless if a pregnant student-teacher takes an academic leave starting from the month of May (mid-semester) this year, she shall not be entitled for monthly stipend till the May month of the following year. This pertains to those student-teachers who study under the government scholarships.

The self-financed students, as customary, need to bear daily expenses on their own upon resuming their studies. One such case reported, *“If I take a year off, we are left behind, again we have to pay on our own which is a huge amount”*.

The five unplanned pregnancies cases in the College reveals significant inclination towards continuing their study courses despite going through physical and mental trauma. They perceive that hiding their pregnancies from class/college mates and faculty are crucial for them to continue their study at the college.

Effects on Mother-Child Health

The child care and protection rules and regulation of Bhutan 2015, domestic violence prevention rules and regulation 2015, and breast feeding policy are some of the mother and child policies in Bhutan. This specific parameter pertains to student-teachers' knowledge and awareness on the components of the above rules and regulations. Findings from this case study involving four female student-teachers indicate that they have very little knowledge regarding Bhutan's mother-child policies. For instance, some of the participants even tried to abort the child when they discovered that they were pregnant. They had no idea that abortion was illegal in Bhutan unless “the pregnancy was due to rape or incest, or abortion was done to preserve the woman's mental health or to save her life” (Bhutan Penal Code, 2004). Two cases reported that abortion was first sought as a solution to their unintended or unplanned pregnancies. One student-teacher had even attempted it.

The female student-teachers selected for this study were able to find out their pregnancies only after 4 - 22 weeks of pregnancy. The analysis of three cases also shows significant negligence of the antenatal care (ANC) during their pregnancies. The ANC is a preventive public health intervention to ensure healthy pregnancy outcomes and improve survival and health of the newborn. Case 1 did not visit the ANC due to unsupportive partner, case 2 visited the ANC after 22 weeks of pregnancy and case 3 only after 28 weeks. But none of them received the ANC on a regular basis. Although case 4 and 5 reported that they have registered for the antenatal care in the nearby mother-child unit, they were mostly likely unaware of its importance. However, it is beyond the scope of this study to find out the outcome and effects of non-use of ANC, particularly the low-weight birth and neonatal death among student teachers with unplanned pregnancies in the colleges. Another empirical study could be carried out to find out its impact.

On the other hand, effect of the mother-child health is implied due to negligence of post-natal care and continuation of their studies at the College soon after the delivery of child. Three cases reported that soon after the birth of a child they attended the regular classes without the knowledge of the College Management. This could have serious complications on the mothers' health as

they would require abundant rest after birth. Further, their new born children were either looked after by their friends or family members whereby timely breast-feeding was often missed. This is because on many working days, the mother had to attend the classes in the College. The 0-7 year of age is critical phase of a child's life- the time when bones are formed, and habits, principles, patterns, experiences, relationship with others and relationship with self are shaped in relation to what a child sees in the immediate environment (Razo, 2013).

The study concludes that the unplanned pregnancies among student-teachers have implications on mother's health. Less or non-use of ANC, improper post-natal care and no rest for the new mothers are indications that it would have long-term effect on their health.

Physical and psychological impact supposition

Physical and psychological impact looks at two aspects: the physical strain, and the stress level, which transmutes to mental trauma during the pregnancies and after the delivery. Given the scope of this study, it does not delve into finding the behavioural patterns during and after their pregnancies.

The unplanned pregnancies among five student-teachers consistently reported they had gone through a range of stress level. Suicidal thoughts and attempts to abort the child which manifested from the stress are prevalent amongst the female student-teachers with pre-marital pregnancies. For instance, case 1 and 3 developed suicidal thoughts. Case 1 had once attempted it. Case 1, 2 and 3 indicated suffering from insomnia for several months after they knew about their pregnancies. Moreover, their apprehensiveness about the acceptance of pregnancy by the family and society aggravated their stress level. For instance, their classmates making fun of them had contributed to the development of low-esteem and embarrassment. Even the married student-teachers with good family support indicated going through stress in terms of completing their studies on time. However, this phenomenon was common in all the cases.

One of the significant findings of this study is that all the five cases of unplanned pregnancies had negative reaction to becoming pregnant while studying. Hence they were shocked when their pregnancies were confirmed by the test. Nonetheless, marital prospects had significant differences in stress level between married and unmarried at the time of conception. Case 1 reported that she had gone through psychological trauma to the extent of attempting suicide as her case was a pre-marital pregnancy. She said, "*I cried from the hospital then went to college and then I cried whole night. I nearly tried to commit suicide. I tried to cut my nerves.*" Other findings show that they stressed out on how to reveal their pregnancy to their parents. This was mainly found to be true among the married student-teachers since they feared of negative reactions from their parents.

Owing to their commitment to complete their studies on time, all of them

had attempted to attend the classes during the pregnancy period with 3 cases attending classes even after the 'delivery of child'. The data reveal that they often skipped classes due to discomfort and pregnancy-related lethargy. However, in most cases they had to force themselves to attend the classes as the attendance of 90% is mandatory as per the examination regulations. This meant they had to endure significant physical strain by having to sit upright the whole day. Concealing pregnancy from classmates and lecturers was yet another stress they had to undergo. However, it is interesting to note that despite their physical and psychological situations there was no adverse effect on their academic performance. Case 1, 2 and 5 reported that they did not feel academic pressure, and were able to cope with any tasks given to them. The examination records revealed that their academic performance had not suffered owing to pregnancy issues. However, in the case of 3 and 4, they realised that their academic performance was affected. Nonetheless, 'significant stress' and 'coping with academic pressure and the college policy' are some of the findings of this study.

Support from the College Management

The College Management's support for the unplanned pregnancy is reflected in its policies such as granting a year of academic leave. This is aimed at providing abundant rest for the mother and the proper care of the newborn child. However, the support in its real sense is, more of a preventive measure as occurrence of an unplanned pregnancy is assumed to be the result of irresponsible sexual behaviours among students. The College has structured programme and polices and counseling unit services. The non-credited module, Life Skills is offered to sensitize the positive/negative side of sexual behaviours among the student-teachers and how to cope with real-life problems. Although the College Counseling Unit which has the capacity to counsel the pregnant student-teachers going through stress, not many cases come forward to seek its services. Another initiative taken by the College in recent times is installation of condoms boxes in and around the college premises. This measure is aimed at preventing unplanned pregnancies.

Conclusion and Recommendations

Although there was a need to understand perceptions and experiences of unplanned pregnancies among the student-teachers of Paro College of Education, no formal study was carried out in the past. Hence this study looked at the cases of the unplanned pregnancies that are recorded in the College. The study particularly looked at the five cases in which the participants shared their perceptions and experiences of unplanned pregnancies. It is unfortunate that although there are many cases of pregnancies each year, only a few are recorded

in the College by way of granting a year of academic leave.

This case study found that the unplanned pregnancies among the five female student-teachers perceived their pregnancies as 'accidental' and indicated negative reactions. They expressed that they had gone through a range of stress levels. The findings from the study reveal that there is a significant difference in stress level between pre-marital pregnancies and married student-teachers. The student-teachers who had conceived before the marriage seemed to have gone through higher level of stress compared to those who were married at the time of conception. But there are good evidences of both the parties going through the experiences of physical and psychological trauma while they were studying in the College. Based on the findings, this study proposes the following recommendations:

- Provide hostel facilities to the female student-teachers. Alternatively, the College Management need to monitor the student-teachers residing in private apartments.
- Initiate mechanism to detect pregnant student-teachers by creating linkages with the hospitals in and around the country.
- Awareness on mother-child health must be initiated consistently by inviting guest speakers, health personnel, etc.
- Continue to offer CSE. The counseling unit has to play a proactive role by counselling the pregnant student-teachers.

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RABSEL – the CERD Educational Journal Guidelines for Manuscript

RABSEL – the CERD educational journal

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11. All tables and figures must be numbered in the order by Arabic numerals in which they appear in the manuscript (e.g. Table 1, Table 2). In multi-part tables, each part should be labeled (e.g. Table 1 (a), Table 1 (b)).
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