





Volume 24, Issue – II Autumn 2022

Centre for Educational Research and Development Paro College of Education



RABSEL

The CERD Educational Journal





1771717X

Volume – 24, Issue II Autumn 2022

Centre for Educational Research & Development
Paro College of Education

Rabsel – the CERD Educational Journal Vol. 24 Issue – II, Autumn 2022

A Publication of the

Centre for Educational Research and Development

Paro College of Education, Paro

Royal University of Bhutan

Telephone: +975 08 272011

Facsimile: +975 08 271917

E-mail Address: cerd.pce@rub.edu.bt

Editor-in Chief

Dr. Kezang Sherab

Research & Industrial Linkages, CERD, PCE

Layout & Design

Kezang Choden, PCE

Reviewers

Ed Sobey, PhD Advocate for Creative Learning USA, Washington

Brenda Wolodko, PhD, University of New England, Armadale, Australia

Judy Miller, PhD, Associate Professor, University of New England, Armadale, Australia

Nina Burridge, PhD, University of Technology Sydney, Australia

Kimberley Pressick-Kilborn, PhD, University of Technology Sydney, Australia

Carsten Rohlfs, PhD, Professor, University of Education, Heidelberg, Germany

Sonam Rinchen, PhD Associate Professor, Samtse College of Education

1

Production Editors

Kezang Sherab DRIL, PCE

Kezang Choden

© Centre for Educational Research and

DevelopmentISSN: 2077 - 4966

The views and opinions expressed in this journal are those of the authors and not necessarily those of the Centre for Educational Research & Development, Paro College of Education, RoyalUniversity of Bhutan.

Table of Contents

Impact of Teaching Environmental Science On the Knowledge and Attitude of Bhutanese Higher	
Secondary Students Towards the Environment	3
જાદ્ર્. તુજા. શ્રુંત. ર્વોલુ. શ્રુંત. ત્રીત્રિય. ગ્રી. ત્યાં ત્રોનુય. ત્યાં ત્રાનુંય. તે. ક્ર્લ. વિલુ. ક્ર્લ. શ્રે. લી. ને. ત્રોલ. ત્યાં ત્રો. લિને. તત્ર.	15
વર્સ્થય લેગ	15
Impacts of Facebook on Reading Habits of Higher Secondary Students: Stakeholders' Perspectives	35
Sampling strategies and Sample process	38
Enabling environment and support as determinant of quality in ECCD centres in Bhutan: An analysis of	
the findings of quality monitoring of ECCD centres in Bhutan	53

Impact of Teaching Environmental Science On the Knowledge and Attitude of Bhutanese Higher Secondary Students Towards the Environment

Author: Kinzang Tshewang

Dashiding School, Punakha

Abstract

Providing individuals with environmental awareness from a young age is important for a livable and sustainable world. The aim of this study was to investigate the effect of teaching Environmental Science (ES) to classes IX-XII students. A mixed method, convergent design, was adopted for the study, guided by the Pragmatism worldview. Quantitative data were gathered from 130 participants and qualitative data were collected from 5 students and 5 teachers from one higher secondary school. A descriptive and inferential statistics were used for quantitative data and the qualitative data were analyzed along the same themes. The results showed that students had a high degree of understanding and a positive attitude in ES and environment. Additionally, it was noted that there is little to no correlation between their knowledge and attitude toward the environment. Thus, it was determined that students, particularly those in high schools, are being encouraged to develop their environmental literacy in order to promote the study of ES. Therefore, the schools in Bhutan need to make more efforts to encourage ES to ensure effective implementation of the curriculum in the nation's sustainable development goals.

Keywords: Environmental Science, Sustainability, Awareness, Effects

Introduction

The advancement and rapid dissemination of science and technology rapidly changed the concept of dominating nature. This change leaves the environmental consciousness in the second place and creates a society that produces and consumes as much as possible (Basuhail, 2019; Marpa, 2020; Cheng, & Monroe; 2010; Purgin, 2018). Therefore, there is a need for individuals who are respectful and sensitive to nature. To meet this need, individuals, who are aware of environmental awareness, protection, and sensitivity, should be trained. According to Robinson (2013), an environmentally sensitive individual can be defined as a human who avoids harming the environment, consciously produces and consciously consumes, is aware of its being a part of this environment and sensitive to environmental problems. Such a human model emerges in cultures that are aware that the environmental problem occurring anywhere in the world affects the whole world equally. Environmental education is important for the formation of this culture. Senvironmental education has an important place in science education. It is also a must for a sustainable environment. In the 1970s, environmental education was first discussed at a higher

education level (Ünal & Dımışkı, 1999). Environmental education aims to make students aware of environmental problems and to act on the problems (Alagoz & Akman, 2016; Jensen & Schnack, 2006; Özden, 2008). Palmer, (1995) said that there are three different approaches to environmental education. These are in the environment, about the environment, and for the environment. About the environment is giving environmental knowledge to students.

As envisioned in the Bhutan Vision 2020 document, environmental science was introduced in the Bhutanese schools as a subject and formed a major part of the curriculum diversification initiative (Royal Educational Curriculum [REC], 2015). Further, the environment science curriculum was formally launched in 2015 as an optional subject for class IX students with emphasis on raising public awareness and subsequently fostering a favorable attitude and conduct toward the environment. This subject provides opportunities to both teachers and learners to incorporate effective educational approaches such as utilizing current issues, connecting with community resources and engaging themselves in research and project-based learning. One of the challenges of the 21st century is going to be the issue of sustainability of natural resources. Thus, this study aimed to explore the effects of teaching environmental science, with a particular focus on students' knowledge and attitudes towards the environment.

Objectives of the Study

- 1. To investigate the impacts of teaching environmental science to class IX-XII students.
- 2. To assess students' level of knowledge on environmental science.
- 3. To find out students' attitude towards learning environmental science.
- 4. To draw the essential perceptions and approaches to support students in learning of environment science.

Research questions

- 1. What are the perspectives of the teachers on the impact of teaching environment science on knowledge and attitude of Bhutanese students towards the environment?
- 2. What is the environmental science students' level of environment knowledge?
- 3. What is the attitude of the students towards the environment?
- 4. What is the relationship between the students' level of knowledge and their attitude towards the environment?

Literature Review 4

Students Perceptions on the Environment

Environment has become so fragile due to the rapid human development. It has brought

numerous changes to landscape and styles of human living. Students as future leaders need to learn how to balance the varied needs of human population (Mongar, 2022). The goal of Environmental Science is to build a cadre of young people equipped with knowledge, skills and values to engage them in the conversation of natural heritage, promoting sustainable and equitable use of natural resources, preventing all forms of environmental degradation in the pursuit of Gross National Happiness (GNH) (REC, 2018, p. ii). Environmental science, on the other hand, is viewed as a process of incorporating environmental information into the educational system in order to raise public understanding of environmental issues at all educational levels. According to REC (2015, p. vii), environmental Science aims to empower students to make right choice for sustainable future with global perspectives, and transform them to become responsible and productive citizens of the 21st century world

Knowledge on the Environment

Students need to possess adequate knowledge about the environment. According to the study by Erhabor and Don (2015) posited that environment education students have adequate knowledge of the environment. Similarly, another study reveals a project-based learning approach for environmental education. Students should be able to use their knowledge in their daily lives especially for environmental education (Kestin et al., 2020). Further, Erhabor and Don (2015) state that environmental education helps learners learn skills on how to destroy the environment with a mean score of 0.91 which indicates that students acquire knowledge and skills which resulted in optimum utilization of nature. In addition, a study by Mrema (2008) revealed that environmental literacy among students of faculty of social science in the University of Putra Malaysia showed that more than 80% of all students had a high level of knowledge towards ES. Thus, students need to know about the environment and its sustainability.

Attitudes on the Environment

Students' behavior and attitudes on the environment is important. According to Keskin et al. (2020), students who were exposed to specific environmental education programs significantly developed an attitude towards the use of water. This literature shows that providing environmental education mostly gives rise to improvement in students' behavior and attitude towards the environment. Their views show that they were motivated. In other words, project-based learning increases students' motivation (Archie, 2003). Project-based learning was usually found effective especially for high school and university students. Yet, in the current study, we reached that it also works with middle school students. Similarly, Jekayinga and Yusuf (2004) stated that students had a positive attitude towards the teaching of environmental education at all levels of education in Nigeria. The positive attitude and high level of knowledge among the students signifies that environmental education has great prospects in actualizing its goals and objectives in the country. However, a study by Aminrad et al (2013) reported the relationship

between knowledge and attitude towards environmental education among students in Malaysia. In this present study, the little or no relationship observed reveals that the knowledge possessed by the students does not influence their attitude towards the environment. Further, knowing science alone is not enough. The citizens should also know how to use that knowledge in their life. Hence, students having a positive attitude towards the environment have huge benefits in the future.

What is the gap/s in the literature that your study tried to fill in?

There isn't any local literature... without that it is often difficult to contextualize the study...

Methodology

A pragmatic paradigm guided this study on the effect of teaching environmental science (ES) to students of classes IX and XII. Further, this study employed a convergent mixed methods. The use of this design provided an in-depth understanding of the subject matter through personal experiences, interviews and surveys (Denzin & Lincoln, 2018). This study also associates with personal experiences and behaviors, and hence this approach guided the collection of data and the process of analysis.

The data were collected through survey questionnaires and semi-structured interview. Based on Cochran (1977) sample size of 384, 130 participants participated in this study. The purposive sampling technique was used since it allowed researcher to describe the major impact findings have on the population. Using a purposive sampling approach, the participants for this study were drawn from students in order to get better information. The sample ensured equal gender representations. Therefore, the study collected questionnaire data from 130 students at Bhutanese Higher Secondary students. Of the total, 80 were male and 50 were female. In one-on-one interview, teachers (n=5) and students (n=5) were included. Each data collection tool complemented the other, which enabled a greater depth of understanding of the issue under study. The survey items were expressed on a six-point Likert scale corresponding to Strongly Agree (6), Agree (5), Somewhat Agree (4), Disagree (3), Somewhat Disagree (2), and Strongly Disagree (1). Further, the scale on the level of the opinion was adapted from Tshering, et al., (2021), guide to interpret the mean score (See Table 1.1). The items were adapted from Erhabor and Don where the study was conducted in Nigeria in 2015 to study the similar topic on environment.

Table 1.1Scale on level of opinion

Scale	Level of Opinion

1-1.50	Strongly disagree
1.51-2.50	Disagree
2.151-3.50	Somewhat disagree
3.51-4.50	Somewhat agree
4.51-5.00	Agree
5.51-6.00	Strongly agree

(Scale adapted from Tshering, Tamang and Rinchen, 2021)

Adhering to research ethics, anonymity and confidentiality of participants was maintained by not revealing names and identities in the data collection and while reporting the study findings. All participants were clearly briefed on the purpose of the research and their involvement. The participants signed an informed consent form before the interview to indicate their permission to be part of the study (Arifin, 2018).

Data Analysis Approach

The analysis of data in a mixed methods design involves the analysis of both quantitative and qualitative data, which was analyzed using appropriate methods of analysis (Creswell, 2013). The study analyzed the survey questionnaires using descriptive statistics using the statistical package IBM SPSS V24. The data were analyzed through features such as frequencies, mean, standard deviation, and correlation, which were represented in the form of tables. To determine the degree of correlation, the idea of Best and Khan (2006) was adapted (see Table 1.2). Interview data were analyzed thematically as seen useful in investigating the various perspectives of research participants and as seen appropriate to the pragmatism paradigm. The interview data were further developed into categories or themes, which became a unit of discussion.

Table 1.2

Correlation and Coefficient Range

Coefficient Interval	Coefficient level	
0.00-0.199	Very low	
0.20-0.399	Low	
0.40-0.599	Middle	7
0.60-0.799	Strong	

0.80-1.000 Very Strong

Adapted from Best and Khan (2006)

Results Perceptions on the Environment First present the text...

Table 1.3

Mean and standard deviation of students' perceptions on the Environment (n=130)

	Participants	Mean	Standard Deviation	Level of opinion
The environment science will equip young people with knowledge, skills and values in environment		4.88	1.05	Agree
Environmental science should focus on the present situations.		4.97	1.002	Agree
Sustainable development is meeting the needs of only the present situation.		5.31	0.042	Agree
Environment science broaden the knowledge and ideas on protection of environment.		4.80	.177	Agree
Environmental science would make the students understand environmental issues at all educational levels.		4.36	1.185	Somewhat Agree
Overall Mean		4.90	0.45	Agree

The analysis of Table 1.3 showed students 'perceptions on the environment. The overall mean score of 4.90 which falls in the agree category reveals that students have good perceptions towards the environment. For instance, the item *Sustainable development is meeting the needs of only present situations* with the mean score of 5.31 indicates that students know about the sustainable use of the environment. Similarly, the standard deviation 0.45 indicates that students have similar opinions. However, environmental *science would make the students to understand environmental issues at all educational levels* 4.36 slightly inclined to somewhat agree. This shows that environment education would substantiate other levels of education about the environment. Similarly, in the interview students expressed that environmental science helps them to develop skills, ideas and knowledge towards the environment. For instance, S1 said, "I gain various knowledge about environment after exposing with the ES subject." Further majority

of teachers shared that environmental science had broadened the knowledge and ideas on the environment. This is exemplified in the quote by T3, "majority of the students show interest in environment science because they are eager to learn more about environment." In addition, S2 stated that this subject teaches us about the real-world situations and its consequences for human development. Overall finding indicates that students hold a high level of perceptions on environmental protections and sustainable usage.

Knowledge on the Environment

Table 1.4

Mean and Standard deviation on knowledge on the environment (???)

	Participants	Mean	Standard Deviation	Level of Opinion
Environmental education helps learners learn skills or destroy the environment.	n how to	4.65	.186	Agree
The human disturbance of the natural environment leads to environmental degradation.		4.90	1.122	Agree
Conservation of nature helps to protect the environment from loss, waste and harm.		4.60	1.032	Agree
Gradual increase in the earth's temperature is known as global warming.		4.55	1.066	Somewhat Agree
Overall Mean	130	4.67	0.85	Somewhat Agree

As shown in Table 1.4, the overall mean and standard deviation for the items on students' knowledge on the environment (M=4.67; SD=0.85). This indicates that students agree that they have gained knowledge after learning the environment science. Further, analysis of the item *the human disturbance of the natural environment leads environment degradation*. (M=4.90; SD=1.22) (see Table 1.4). This also indicates that students strengthened love and appreciation for nature. However, the item *gradual increase in the earth temperature is known as global warming* fall in "Somewhat Agree" category. This shows that students do not have much knowledge about global warming and its causes.

Interview data show that students shared that they gain a variety of knowledge and ideas from environment subjects which ultimately helps in problem solving, and take action to improve the environment. For example, S4 elucidates that it helps to establish standards for a safe, clean ⁹ and healthy natural ecosystem after knowing the facts about the environment. It is further echoed by T2, "it also develops a deeper understanding or environment issues and have the skills to

make informed and responsible decisions." In the same vein, S3 said, "it helps me to understand important issues like safe and clean drinking water, hygienic living conditions and clean and fresh air, fertility of land, healthy food and development." Thus, the majority of participants expressed environmental issues such as global warming, depletion of the ozone layer, and dwindling forest energy resources. Loss of global biodiversity is understood from environmental science subjects.

Attitudes on the Environment

Table 1.5

Mean and standard deviation on attitudes on the environment (???)

	Participants	Mean	Standard Deviation	Level of Opinion
The course has increased my love and appreciation for nature.		4.73	1.149	Agree
Environmental science helps to produce active and well-informed individuals.		4.45	1.058	Somewhat Agree
Humans have the right to modify the natural environment to suit their needs.		4.60	1.06	Somewhat Agree
Humans are severely abusing the environment.		5	.184	Agree
The earth has plenty of natural resources if we just learn to develop them.		4.66	1.142	Somewhat Agree
Plants and animals have as much right as humans to exist.		4.68	1.024	Agree
The balance of nature is strong enough to cope with the impacts of industrial nations.		4.50	0.991	Somewhat Agree
Overall Mean	130	5.03	1.05	Agree

Students need to love and appreciate nature. Overall mean scores of 5.03 revealed that students have the right attitudes towards the environment. The score for the item, the course has increased my love and appreciation for nature indicates that students have enhanced their love and appreciation for nature when they studied ES. Similarly, students know importance of nature with the industrial nations as evident from the item the balance of nature is strong enough to cope with the impact's industrial nations with the mean score of (M=4.50; SD=0.991) The balance of nature is robust enough to cope with the effects of modern industrial nations also 10 demonstrated a positive attitude because the item was negatively structured. Moreover, the standard deviation (SD=1.05) is low, indicating that students have similar feelings towards the

items. Further, interview data revealed that students demonstrate that they have a positive attitude about the environment. For instance, S5 expressed that plants and animals have rights like human beings because non-human animals deserve the ability to live as they wish, without being subjected to the desire of human beings. However, T4 shared that students cannot show their feelings and love for nature the way the Es teaches. A very low positive correlation was found between the knowledge and attitude towards the environment (r=.131; p=0.001) and knowledge (r=.131; p=0.001) at p=< 0.01 (see Table 1.6). This presents an impression that knowledge of environment science doesn't impact attitude of the students towards the environment. Similarly, S3 said, "global environmental change is having a profound impact on ecosystems around the globe, with complex interactions at the interface of global change processes and ecological systems.

Table 1.6

Correlation between the items (Knowledge and Attitude)

		Knowledge	Attitude	
Knowledge	Pearson	1	.131**	
	Correlation	1		
	Sig. (2-taile	ed)	0.000	
	N	130	130	
Attitude	Pearson Correlation	.131**	1	
	Sig. (2- tailed)	0.000		
	N	130	130	

^{**} Correlation is significant at the 0.01 level (2-tailed).

Discussion

One of the findings of this study is that the students' understanding of the environment with the overall mean score of 4.85 which revealed that students have a good level of understanding on ES. The current findings corroborated with the idea of REC (2015), that the environmental science aims to empower students to make the right choice for a sustainable future with global perspectives, and transform them to become responsible and productive citizens of the 21st century world. Moreover, interview data shows that environment science helps them to develop skills, ideas and knowledge about the environment. According to survey findings environmental science would make students understand environmental issues at all educational levels with a 11 mean score of 4.36. This finding is congruent with the previous literature, that a process of incorporating environmental information into the educational system in order to raise public

understanding of environmental issues at all educational levels (Erhabor & Don, 2015). These findings may help us to understand the students develop skills, ideas and knowledge about the environment after learning the ES.

Students also gain a variety of knowledge about the environment after studying the ES. The findings indicated that students gain a variety of knowledge and ideas from environment subjects, which ultimately helps in problem solving, and take action to improve the environment. The finding aligns with the previous study that revealed that environment education students have adequate knowledge of the environment (Erhabor & Don, 2015). Another study showed that students should be able to use their knowledge in their daily lives especially for environmental education (Kestin et al., 2020). Further the findings are supported by current findings. For instance, T2 said, "it also develops a deeper understanding or environment issues and have the skills to make informed and responsible decisions." The finding implies that students derive positive knowledge towards the environment after learning ES.

Young people's environmental attitudes and behaviors are essential for environmental conservation. The previous literature revealed that students who were exposed to specific environmental education programs significantly developed an attitude towards the use of water (Keskin et al., 2020). The previous finding is supported by the current findings, which showed that students have right attitudes towards the environment with the overall mean score of 4.68. Further the interview data showed that students have a positive attitude about the environment. A possible reason for this could be students grasping a wide range of environmental related knowledge and ideas. Additionally, it provides a statistical breakdown of the correlation between students' environmental knowledge and attitudes towards the environment. According to the calculated correlation coefficient, there is little to no association between the students' knowledge and their attitudes toward ES in the school. As "r" is derived to be -0.070, which can be inferred. As a result, it suggests that only 0.1 percent of students' attitude toward the environment and their level of knowledge about the environmental science study do not have affect how they feel about the environment which is similar to a study by Aminrad et al. (2013), who reported a weak relationship between knowledge and attitude towards environmental education by students. Thus, the students' upbeat attitudes and excellent levels of knowledge indicate that environmental science has a great chance of achieving its aims and objectives in the school enabling the development of a favorable environmental attitude among the students.

Recommendations

12

The findings of this study may be useful in establishing a framework for future ES programs and incorporating nature-based education into the classroom. Similar study can be conducted on

13

primary school pupils in the younger age groups. Correlation studies involving environmental awareness and other subjects such as geography and biology can be conducted as environmental awareness research is linked to environmental protection and is critical for environmental preservation. Moreover, this study was conducted with students of only one higher secondary school in Bhutan using convergent mixed methods. Future research could explore the topic by employing sequential mixed methods. This method may allow the researcher to provide detailed analysis and in-depth information from interview participants (Creswell, 2018). Thus, the impacts of non-formal education on environment attitudes can be investigated. Longitudinal studies can be desired to observe the changes in behavior and attitudes.

Conclusion

Environmental science as a field of study has become a fundamental learning for students, particularly in higher secondary schools. This study found that classes IX-XII, students studying environmental science have a high level of critical understanding of the environment as well as the components, purposes, and goals. Additionally, they have a favorable outlook on the environment. As a result, this optimistic outlook and high level of knowledge demonstrate how much the students are impacted by the teaching of ES and material resources. They also possess a positive attitude towards the natural environment. Thus, this positive attitude and high level of knowledge reveals that the human and material resources in the institution of study have a great impact on the students. Meanwhile there was little or no relationship between their knowledge and their attitude towards the environment. Thus, this study demonstrates that environmental literacy is being fostered in students to support environmental education in the nation, although more needs to be done to motivate students and advertise the field of study in the school.

References

- Ackermann, F., Eden, C., & Cropper, S. (1993). *Cognitive mapping: Getting started with cognitive mapping*. University of Strathclyde.
- Aminrad, Z, Zakaria, S., Hadi., & M. Sakari (2012). Relationship between awareness,

 Knowledge and attitudes towards environmental education among secondary school students in Malaysia. *World Applied Sciences Journal*, 22(9), 1326-1333.
- Archie, M. (2003). *Advancing education through environmental literacy*. Association for Supervision and Curriculum Development.
- Alif, L. (2018). Influence of gadget usage and parent involvement to children's proposal behavior. 2(2). DOI: 10.23887/jipp.v2i2.15366
- Cheng, J. C. H., & Monroe, M. C. (2010). Connection to nature: Children's affective attitude

- toward Nature. Environment and Behavior, 44 (2), 31-49.
- Denzin, N. K., & Lincoln, Y. S. (2018). *The sage handbook of qualitative research*. Sage: Publication.
- Fisman, L. (2005). The effects of local learning on environmental awareness in children: An empirical investigation. *The Journal of Environmental Education*, *36*(3), 39-50.
- Jekayinfa, A.A, & Yusuf, A.R. (2008). Teachers' opinions on the incorporation of environmental education in the Nigerian primary school curriculum. *Educational Research and Review*, 3 (11), 334-338
- Kuo, F. E., & Faber Taylor, A. (2004). A potential natural treatment for attention-deficit/hyperactivity disorder: Evidence from a national study. *American Journal of Public Health*, 94(9), 1580-1586.
- Keskin, C., Akcay, H., & Kapici, H, O. (2020). The effects of environmental science e-projects on middle school students' behaviours and attitudes. *International Journal of Technology in Education and Science*, 4(2), 160-167.
- Micic, S. M (2001). Testing new methods for improving the effectiveness for collaborative and participatory design and planning processes: Conceptual content cognitive map (3CM).

 Master of Landscape Architecture Thesis, University of Washington.
- Mongar, K. (2022). Bhutanese teachers' and students' perceptions about environmental issues in Bhutan. *Interdisciplinary Journal of Environmental and Science Education*, 18(1).
- Mrema, K. (2008). An Assessment of Student's Environmental Attitude and Behaviors and the Effectiveness. Their School Recycling Programs Master Dissertation, Dalhousie University, School of Resource and Environmental Studies.
- Özden, M. (2008). Environmental awareness and attitudes of student teachers: An empirical research. *International research in Geographical and Environmental Education*, 17(I), 40-55.
- Palmer J.A. (1998). *Towards Progress and Promise*, Environmental Education in the 21st Century. 240-244.
- Royal Education Council. (2015). A guide to action research: Enhancing professional practice of teachers in Bhutan. Royal Educational Council.
- Robinson, J.O. (2013). Environmental Education and Sustainable Development in Nigeria: Breaking the Missing Link. *International Journal of Education and Research*, 1(5), 1-6.

तक्ष्याविय। अर्खेन्द्रकार्श्वयामुद्राक्ष्यान्त्रुंन्याः वाध्यक्षामुद्रान्याः वाध्यक्षयाम् विष्याध्यक्षयाम् विष्याध्यक्षयाम्

Author: Samten Tharchen
Paro College of Education

বস্থুশ'ৰ্বৃবৃ Abstract

ৰ্ন্থ্ৰীনা (Introduction)

ष्रिवयः श्चे प्दरुग

स्रिया सुर्याका ४००४) है. हूटायपु.तम् बाबिट्याकार.ता.त क्षेत्रका.हे. ट्रिस्ट्रें क्षेत्रहूटाय-ट्रेगूट.यक्षणा.पक्की.तपु.तम्बेट्याकार.तम् विद्याकार.तम् विद्याकार.तम् विद्याकार.तम् विद्याकार.तम् विद्याकार.तम् विद्याकार.तम् विद्याकार.तम् विद्याकार.तम् विद्याकार.विद्याकार.तम् विद्याकार.विद्याकार.त्युत्याकार.त्युत्याकार.त्युत्याकार.त्युत्याकार.त्युत्याकार.त्युत्याकार.त्युत्याकार.त्युत्याकार.त्युत्याकार.विद्य

यवश्रक्ष-विद्यात् ह्र्यात्र ह्र्यात्र ह्र्यात्र क्ष्मियात्र क्ष्मियात्र प्राप्त क्ष्मियात्र प्राप्त क्ष्मियात्र क्ष्मियात्र प्राप्त क्ष्मियात्र क्ष्म

द्र-च-अभ्री-तिक्षथी

प्रचा-अभ्री-तिक्षथी

प्रचा-अभ्री-तिक्षथी

प्रचा-अभ्री-तिक्षथी

प्रचा-अभ्री-तिक्षयी

प्रच-अभ्री-तिक्षयी

प्रचा-अभ्री-तिक्षयी

प्रचा-अभ्

অশ-প্রা (Objectives):

- श्रॅ्वाश्वार्द्धायः नायुक्षायः नायुक्षायः विश्वायक्षायः विश्वायः विश्वाय
- मिस्राक्षेप्राचीत्रामित्रात्त्राचेत्राते निवास्याम्या मिस्रित्राष्ट्रात्या निवास्याम्या निवास्याम्यास्याम्या निवास्याम्या निवास्यास्यास्य निवास्यास्य निवास्यास्य निवास्य निवास्
- माणुकान्तीः त्याःमानीकात्यः यहेवाहेः र्ष्ट्रवायह्याः प्रह्याः प
- मिल्रुक्षः मिल्रुक्
- श्रॅ्च म्या मि स्ट्रिय प्राप्त क्षेत्र प्रवन्ति कष्ति क्षेत्र प्रवन्ति क्षेत्र प्रवन्ति क्षेत्र प्रवन्ति क्षेत्र प्रवन्ति क्षेत्र प्रवन्ति कष्ति क्षेत्र प्रवन्ति कष्ति क्षेत्र प्रवन्ति क्षेत्र प्रवन्ति क्षेत्र प्रवन्ति क्षेत्र प्रवन्ति क्षेत्र प्रवन्ति कष्ति क्षेत्र प्रवन्ति क्षेत्र प्रवन्ति

ৰীব'ৰের্ক্টিঅ'ই'ব| Research Questions:

द्वीया क्ष्या क्ष्या विश्वास्त्र क्ष्या विश्वास क्ष्या विश्वास क्ष्या क्ष्य

অব্'অশ্'হ্ৰ'বা

- १) मायाया छेत् २० रे.से.पाली दार्रा स्वीता प्रति हिन्सु त्या त्या राष्ट्री स्वात स्वीत स्व
- ४) गम्बर्याचेर्यः र्वेदायह्वाख्वाबयार्राचीः बैराकेवाः वीः हेराञ्चाखः रामायार्थः वीः वीः वीः

- य) ग्रम्था हेर्प, हेर्या तह्रमा लुग्रम्था रामी और किंगा मी हेर् सु त्या रामिया रामी रेसे स्थान स
- અર્મે 'तर्दे गर्थ 'प्रश्र चुन 'प्रते' श्रेन्टिं ग्र कुरि हें न 'सुं 'प्रे न ग्रेन्टिं ग्रं प्राप्त के प्राप्त
- u) ५ इभेग्रथान्ययाः हॅटायदीः त्याः यात्रियः त्युः व्यायः हेन् स्वाः त्यायः त्यायः ने स्वाः त्यायः त्यायः विश्व

विच पर्के वा मी मि प्या :

माद्देशस्यः ह्र्नायः वार्श्ववायाः अर्थः द्रेशः क्षेत्रः वार्यः क्षेत्रः वार्षः क्षेत्रः वार्षः वार्

वु.जी. जात्रा. श्रृंष्यायन्य. श्रृंब्यात्रा. सूच्याच्या हुंच्याय्ये स्त्रा व्याप्ता स्त्रा स्त्रा व्याप्ता स्त्रा स्त्र स्त्रा स्त्र स्

र्डेंअ:वेश:पश्चर:विष| Literatures Review:

ह्र्यस्य न्यास्य स्थान

ૹ૾ૺઽ^{ૻૢ}ૠૢ૽ૺૼૺૺ૾ૡઽઌ૾ૺૺૼ૾૽ૡ૽૽ૡઌ૱૱ૢૺઌ૽ૼૢૹ૾ૺૡ૾ૢૼ૽ૼઽઌૡ૿૽ઌ*૽૾*૱૾૽૾ૣૼઽૺૹૣ૾ૺૡ૾ૺૠ૾૽ઌૻ૱ઌ૽૱ઌ૽૽૱ઌ૱૱૱ઌ૽ઌ૱૱૱૱ઌૺઌ

Rajadurai (2016) गैश्र-प्यः ફ્રॅन्'श्चेतः त्रेग्'झ्यःयेग्'झ्यःयेग्श्यः हेन्'श्चेत्रः श्चेन्'श्चेत्रः श्चेन्'श्चेन्यः श्चेन्'श्चेन्यः श्चेन्'श्चेन्यः श्चेन्'श्चेन्यः श्चेन्'श्चेन्यः श्चेन्'श्चेन्यः श्चेन्'श्चेन्यः श्चेन्'श्चेन्यः श्चेन्'श्चेन्यः श्चेन्यः श्चेन्यः

लवारान्, भार्यट्याञ्चित्यस्य क्ष्र्य क्ष्र्य ह्रिं ह्रिं से पट्टाव मैचार मूना माना कु चन्ना मिना मुन्यस्य स्वार स

<u> र्हेन्ञुन्गराञ्चेन्त्रुयः र्ह्वणयः देवः घययः वेया</u>

ख्रिं प्रस्तुं क्षें क्षें त्र प्रस्तुं न्य क्षेत्र प्रस्ता क्षेत्र प्रस्ता विषय । वि

क्ष्मामा हुर्स साम्बेरिया प्राप्त स्थान स्यान स्थान स्यान स्थान स्यान स्थान स

ৰ্বিন্দর্কীঝ'ঘ্রন্থ'অ্যা Methods:

དམ་ཚད། Sampling:

दश्क्, ब्रेक्ट्रम् पर्विक्षान्य प्रमुक्षित्र प्रमुक्ष प्रमुक्षित्र प्रमुक्ष प

તવરાળી રે.ભર. રેટનર. જાર્સ્ટ, જાર્સ્ટ, જાર્સ્ટ, જાર્સ્ટ, જાર્સ્ટ, જાર્સ્ટ, જ્વિવાવર્ષ્ટ્રળા સ્ત્રીયા ત્રાપ્ટ, જ્વિવાવર્ષ્ટ્રળા ત્રાપ્ટ, જાર્સાવર્ષા ત્રાપ્ટ, જાર્મા ત્રાપ્ટ, જારાપ્ટ, જારાપ

पर्चार-प्रेसिन्न श्री विश्व विश्व विश्व के त्या के त्

শ্বশংশ্বর্ণবৃধ্বন্ধ্বর্ণার্থর Procedures:

ત્રાત્ર મુખાયમાં મુખાયમાં ત્રિયા મુખાયમાં મુખાયમાં મુખ્યા મુખાયમાં મુખ્યા મુખ

नृष्ठे नृष्ठ नृष्ठे निष्ठे निष्ठे

শ্বন্থ শ্বন্ধ শ্বন্ধ মান্ত্ৰ Result

निर्धिग्रशर्द्दरायम् च्याःभ्रिश्चारः ॲरङ्गरः चङ्गर्मारः चत्रश्चारः चत्रश्चार

23

यान्नात् सुयाः विभावान्तात् १ वर्षां यो सुर्यान्य विभावान्त्र स्थान्य विभावान्त्र स्थान्य स्थान्त्र स्थान्त्र स्थान्त्र स्थान्य स्थान्त्र स्थान्त्र स्थान्त्र स्थान्य स्थान्त्र स्थान्य स्थान

विनावसण्यमः १ म। नासुराञ्चरम्यस्थिनसायदेगमञ्जयः स्रीतः स्र

दर्हें या मृदिरे थी मु ' ५ ८ अ ८ अ	र् <u>ह</u> ेन्'श्च'तर्ह्धेथ'न	पहूजानपुनम्भिक्ष
गृह:५:घ:ई:ब:ब	५मया सहया सर्या यस्या महिया महिया च	200%
अक्षा ग्रह्मा ग्रह्मा नुस्मा नुस्मा गुर्धिदा	अया वया वरा यरा सरा ल्या	po%
कुंबा बंदबा लंदबा दला	गुकुँग। गुब्दा गुप्पदा बदवा	ข0%
कें द ्	र्वे र्वे ^द ्	30%
ଅ'ସ		

व) नायुक्तः स्निन् व्हूं स्वर्क्षस्य स्नुन स्वेतः प्रथ्यः होः नाय्यः स्वानः प्रथ्यः स्वानः स्वानः स्वानः स्वानः व्यवस्य व्यवस्य व्यवस्य स्वानः व्यवस्य स्वानः स्वानः स्वानः स्वानः स्वानः व्यवस्य व्यवस्य स्वानः व्यवस्य स्वानः स्वानः स्वानः स्वानः स्वानः व्यवस्य स्वानः स

यन् देश्य स्थान्त्र स्थान्य स

जम्. २०%।

ड्रम्. म्यान्यां स्टर्स्य स्ट्र्य स्टर्स्य स्टर्य स्ट्य स्ट्र्य स्ट्र्य स्ट्र्य स्ट्र्य स्ट्र्य स्ट्र्य स्ट्र्य स्ट्य

हुमालिश्लाट. ४ तो मिलिशःस्रेट,हुं.शक्शशानपुःषःश्चियःशुःसीलूट्राचुःह्ट्रस्रैपुःट्यापःट्ला यम्भिःकःलश. ⁶⁰% लूट्रतपुःश्ट्यामाणःक्चेट्ला प्राचाशाल. हुमालिशःलाट. ४ पटासीःचानुचाशःक्विशा प्राचाशाः यधुःखेवाशःलूट्रतपुःशुट्याचाःह्ट्रस्रा टानुःश्चारा १००% । ला.च्येचाशःलाट. ४ पटासीःचानुचाशःक्विशःसाः हुसायहिचाः द् प्राचाशाः पश्चित्राच्याः स्ट. ह्पा) नुप्तान्त्राः चम्चे.कालशः १००% । ला.च्येचाशःस्ट्रम् मेच्याः प्राचानप्ताः हुसायहिचाः (श्व. स्वाध्याशः क्वाचाः)क्वं. शाःचित्रात्त्राः (श्व. स्वाध्यायः वि. स्वाधः प्राचाः वि. स्वाधः वि. स्वाधः प्राचाः वि. स्वाधः वि. स्वाधः प्राचाः वि. स्वाधः प्राचाः वि. स्वाधः प्राचाः वि. स्वाधः प्राचाः वि. स्वाधः वि. स्वधः वि. स्वाधः वि.

तर्हें ध मृति दे धे मु ५ ८ से ८ केंग	<u> </u>	यहूल.चयु.चमु.क
ग'ह'र्'न'ई'ल्'व	र्गाय। अहरा अर्या यचया अहरा मानया चचया	100%
५५०। ग ठेश ५वरा गवरा ५४२। श्चवा गर्लेवः	टी हेमा सरा बरा थरा ज्या	900%
<u>ત્</u> યા કુવના વત્ના સૂચી નના ચેના સત્યા વના	સ્વા ગઉવના ગવન્યા ક્રેંવા સુચા વસુવા નવના ગવના	٥0%
कें ब्रॅन्कुन	कॅ कॅट कुवा	20%
ਹ . ១	소화/회	100%
ম'হ'হা	বন্সা বহা বন্স	100%
꿰 짧기 젊씨 웗기	에 따지 때에 따다	0%
티 웨 최	5 ' व्या	<i>0</i> %%
झेन झेन्।चन	5म 5 स ^{.ाय} म	3 0%
रु.जा वर्क्रुजा छ। हा बचा बुधा बी क्तनेजा चनका	क्षण प्रकृता क्षी ह्या चमा चुन्ना ची ग्रेगा समा	40%
हैंचा दर्कणा हैंदा बैसा बसा मुबेग श्वेचा	डैचा तकवा र्धूटा बैका मबका मबिमा भैचा	ข0%
चगामा लगा नगाना नन। चना चना चना करा	गांग ५२। खेला करा (हेबरदह्याःगी:ब्रु:भुगांबरपॅं५४:ब्रे)	100%
ही। हो। हेर्या हर्यालया	용대 토니 토대 파대에'(파대	900%

य) गांधुसःस्नृत्वित्सावःस्वतःस्यः व्यतःस्त्रःस्त्रःस्त्रःस्त्रःस्त्रःस्त्रःस्त्रःस्त्रःस्त्रःस्त्रःस्त्रःस्त्र

लूरी तमः विषयःर्श्वेटःर्थः स्मिनबिस्त्वीःस्वालमः वर्षःणुषःर्टः रिक्वेःख्विनःप्यत्रःस्वेःत्वेनःप्यव्यःर्थः प्वालमःभरःस्वार्येन्त्रः म्रीटः चश्चमः विषयःश्वेदःश्वःस्वालमःश्चेः (षटालमः चश्चप्रभरःविष्ट्राम्याःभूविषःश्वःश्चेत्वः स्वः ॥ स्वः ॥ यर्ष्यभः २० विषयःश्चितःश्वेदःश्वः स्वात्वःश्वःवालमःश्चेतःश्वः विषयः स्वः स्वः स्वः स्वः स्वः विषयः। स्वः विषयः। स्वः विषयः

लश. १०% लूट्रनपुःश्रम्थ्योशाःचैट्ली प्राचीशाः हुचाःचिशाःश्वरः व वेटामिःचेश्चयाःक्ष्येशां विश्वाः विश

विनाव्वराष्ट्र १ म गुस्रा सूर्वे विरुष्ठाता सुन से तुर्धे र प्रति हेर् सुति र गाय र या

वर्हेव मुद्रिय मुद्रिय मुद्रिय	<u>र्</u> हेन्' <u>स</u> प्रहेंथ'न	বৰ্ছুল.বন্ধ.বন্ধ.ছ	
শৃহেণ্-মাৰ্হাৰ	5्याया अहता अपया विषया चावता विषया च	1 00%	25
अकुमा मार्वमा मार्वमा नममा नममा मार्थिवः	3 या वस्ता वरा अरा धरा ल् या	po%	
क्षेत्रा बस्या परमा रणा	गुकुँग। गुब्दा गुण्दा स्ट्या	<i>30%</i>	

3 ર્કે 3 કૈવચા 3 ^{ચચ} ા	ना र्वे। नना नैया नयया	&0%
ข.อ	<u> </u>	100%
ग्र.ट.च	여파 여자 여자 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이	100%
শ্ৰ	ぎ て	ข0%
<u>É</u> S		%
गल्दा लग	প্ৰা প্ৰ	%
풰 줘짜 줬다	તા તથા તતા	& 0%
티 멘 체	57 व्य	0%
ावःक्। ऋत्वर। चक्रूरा क्षी क्षेषःक्रूबोका लुबाःक्रा	ाया वाच्या क्षा क्षा क्षा क्षा क्षा क्षा क्षा क्ष	५०%
41	ર્સ]	& 0%
क्ष्रम वम नगमा यमा चनवा नचना	५म बना गमा मना नेवा नेवना (ह्रमायह्रमानी:अन्तिमायार्ण्यन्यः)	0%
ही। है। हैम सम्बन्ध	의 퇴 존대 표여제	200%
<u> </u>	51	60%

वास्त्रास्त्रन्त्र अरक्षेप्रतामःस्त्रन्त्रीतः स्त्राप्तः स्त्रितः स्त्राप्तः स्त्रापतः स्त्रा

शु. चয়ै.ড়. ४०% ।

लूर्टताचबेश.मृ.श.रची.त्तर.श्रेच.शु. चয়ै.ড়. ४०% । र.च्येचेश.चळी.चखु.लश्च. (য়,) जी. (য় र.) बुर.श.रची.त्तर.श्रेच. लूर्टताचबेश.मृ.श.रची.तर.श्रेच.शु. चয়ै.ড়. ५०% । र.च्येचेश.चळी.चखु.लश्च. য়য়.ट.च. चिश्वश.कुं.हूर्-मृं. कूथ.लहंची.लूर्टताचवेश.मृ. शर्चा.त्तर.श्रेच.शु. चয়ै.ড়.लश. ४०% । लाच्येचेश.चळी.लश. য়য়.ट.च. चिश्वश.कुं.हूर्-मृं. कूथ.लहंची.ल्ट्ची.लंटची.ल्ट्ची.लंटची.ल्ट्ची.लंटची.ल्ट्ची.लंटची.ल्ट्ची.लंटची.ल्ट्ची.लंटची.ल्ट्ची.लंटची.लं

तक. 60% लूट्-तदुःश्र्ट्य-व्यक्षणःवैद्द्ती वाव्यक्षणः वृचाविश्वःक्षटः \in षटःमीःविव्यक्ष। विव्यक्षः विव्यक्यः विव्यक्षः विव्यक्षः विव्यक्षः विव्यक्षः विव्यविव्यक्षः विव्यक्

विना खरा लर रा नासुरा सुन स्था स्था सार्थ सार्य सार्थ सार्य सार्य सार्य सार्य सार्थ सार्य सार्य

26

गृह:५'च'ई'ल्'ब्	५ माया सहया स्था यमया सहया मालया मनया	ρο%
न्ह्या नुसरा गर्षेवः गणरा ग्रवरा	<u> इ</u> ला बना बॅबा पदा बहा	30%
पॅबा बॅबा	गर्भेंबा र्र्भेंबा	30 %
ଅ'ସ	성관,4위 성관,4위	po%
ग्र'इ'ब्र	여희 성기 성기	५०%
শ্ৰ	ᇵᅐ	30 %
श्रुण लग नगरा धरा चनवा नचरा	७म लगः गरा यरा निया ५पटा (हेसःतह्मानीः सुःस्वानः स्पर्यः स्वे)	५०%
ही। हा हम सम्भग	의 퇴 존대 표대체	೨ 0%
ব্ৰুগ	5 71	ρο%

मणुष्यःभ्रनः नुष्यः व्यन्यते त्यः भ्रुनः स्रोतः स

तक. 60% लूट्-तदुःश्र्ट्य-व्यक्षणःवैद्द्यी व.व्यक्षण. वृच-विश्वःक्षटः 6 वटःशे.व्यच्चयशः वृ्च्यां व्यक्षः विश्वः व्यक्षः विश्वः व्यक्षः व्यक्षः विश्वः व्यक्षः व्यक्षः विश्वः व्यक्षः विश्वः व्यक्षः विश्वः विश

विनाविकालनः ५ मा गासुकान्नन्त्वा विनायते।तान्नुनाकीत्युः स्निन्न्यते हेन् क्षुते नगातः न्या

तर्हें धामितियामा प्राप्त प्र प्राप्त प्र प्राप्त प्र प्राप्त प्राप्त प्र प्र प्राप्त प्र	र् <u>ह</u> ेन्'ञ्च'त्रहेंव'च	पहूज.चयु.चयी.क्री
गःहः५:पःहं:ल:ब	न्माया सहया सन्या यनया सहया मानया मनया	ข0%
न्ह्या नसमा गर्षेवः गणमा गवमा	<u> इ</u> वा बरा बॅबा परा बरा	३ ०%
र्षेत्। र्वेत्।	ग्रव्यं र्श्वेन	30 %
गु:ਚ	<u> </u>	५०%
শ: 5:ম্	<=== <================================	५०%

최	おろ	५०%
म्नुग लग नगरा धरा चनवा नचरा	>७वा ७वा. पाना नना नेला नेवता (हुन्न.पह्या.ग्री.स्रे.नीयन.लूनेन.स्रे)	40%
রী হা হ্রম রম্মলা	의 토 토리 표대체	ข0%
ন <u>কু</u> বা	<u>51</u>	po%

(a) माधुक्रः स्नूनः क्षेत्रमा स्वास्त्रमा स्वास्त्रमा

त्तरा. ⁶⁰% लूट्-तपु-श्र्ट्य-योशज-बैट्-लू। पा.योशज. वृत्य-विशालट. १ यट-जी-योज्ज्य-क्ष्यंश्वा विश्वास्तर्यः विश्वास्तर्यः विश्वास्तर्यः विश्वास्तरः विश्वास्तरः विश्वास्तरः विश्वास्तरः विश्वासः विश्वास

डिना'व्वराखरः ७ म निस्पराञ्चर के स्वा'स्वा'स्वा'स्वरा'स्वा'स्वा'स्वा'स्वरा'स्वा'स्वा'स्वा'स्वा'स्वा'स्वा'स्वा

तर्हें धामविति धीमा प्राप्त र स्थित किंग	<u> </u>	पहूज.चपु.चमु.क		
ग:ह:५:प:ई:ल:ब	र्गाया अहता अर्या यचया अह्या गालया चचया	200%		
न्ह्या न्यमा गर्षेत्रः गप्पमा ग्रवमा	ड्या समा लेंबा परा बरा	e 0%		
पॅबा बॅबा	गर्भेत्। र्श्वेत्।	90%		
ন্ত.হা	^여 (원	900%		
শ:হ:হা	বহা বহা	200%		
শ্ৰ	ΓB	40%		
श्रुण लग रुगरा धरा चनवा रुवरा	5म बमः गरा धरा भूषा ५ घरा (हेस [,] यह्म मी क्षुं,भुगशः पॅर्पराक्षे)	20 %		
श्री श श्रेण स्रम्था	의 톤 존기 표적제	40%		
স্কুর্	<u>\$</u> 51	ρο%		

29

व) वस्त्रिक्षःभ्रन् गुरुञ्चन्त (र्खन्जुन्र-रःकुनः) श्चनःश्चेत्यः र्धन्यदेःहेन् श्चदेःन्यादःन्या

त्रम्भर नेविष्यः हिरायमाःमश्चिष्यः नेविष्यः हिरायमाःमश्चिष्यः निव्यत्यः निव

शु. चয়ै.ড়. २०% ।

लूर्टताचंचेश.मृ.सार्च्यात्रप्रस्याच्छा. चয়ै.ড়. ४०% । राच्येचेशाचंचेत्राच्चेत्राच्चात्रास्याः विज्ञाः विज्

त्रक्ष. 40% लूट्-तर्यु-अर्ट्य-योशफा-बैट-लू। या-योशफा- हुया-विशाक्षटा के बेट-फी-योड्ड्योश-क्ष्येश चित्र-प्रमुच-अर्था चित्र-

वैना'वक'लरः 🔊 या गासुर्याञ्चर'त्रार'ञ्चर'तः विंद्र'कुर'र-कुर'त्यु चेंद्र'र्यादे हेंद्र श्रुदे द्रानातः राया

तर्हेवःम्बितियामुः ५८ स्त्रेर्ट्सम्	<u> </u>	पहूज.चयु.चमु.क
ग्:ह:५:घ:ई:ल:ब	५माया अहता अ५वा यसता अहंदा मालवा मञ्जवा	ข0%
न्द्रिया नुबसा गार्थेवः गायाना गावसा	<u> इ</u> था बरा बॅबा परा बरा	& 0%
र्थेवा वेवा	ग्राप्ता र्श्चेना	& 0%
মূ:ব্রা	연합·/회 역원·/휠	५०%
শ্ৰ'হ'ৰ	ব্যা বহা ব্যা	५०%
শ্ৰ	ᇸᅐ	ข0%
भूग लग नगरा धरा चनवा नचरा	5म वमः गरा यरा मया ५परा (<u>ह</u> ेशःवहमःमें <u>स</u> ्नुमयःर्थेऽसःसे)	५०%
श्री श्री श्रम सम्मा	의 팀 론의 표여제	v0%
শ্রুণ	<u>51</u>	५०%

वीयः क्रियान्यः **म्रियः म्रियः म्रिय**

म्युन'त्रवस्यः र्ह्, त्वा'लक्षःक्षरः २० लक्षः विषक्षःक्षेतः र्व्हः स्त्राचन्नद्वीः स्त्राचन्त्रवेः स्त्राचन्नद्वीः स्त्राचन्त्रवेः स्त्राचन्नद्वीः स्त्राचन्त्रवेः स्त्राचन्त्रवेः स्त्राचन्त्रवेः स्त्राचन्वीः स्त्राचन्त्रवेः स्त्रवेः स्त्रवेः स्त्रवेः स्त्रवेः स्त्रवेः स्त्रवेः स्त्रवे

দাসা, ३०% । প্রান্তর দেখা, উন্দেশ্র স্থা, (জী উমা উথ-তুমাসা, ছ্নিটা, ১। ১মা, ১৫-তুমাসা) লুমামামাস্থিনাপ্তা, নছী.ছ. ৯০% । মনে ইনাপ্তান বিশ্ব নাম্য ক্রিলা, ক

दर्हेयःग्विदिधःगुः ५८ स्त्रेट्रिय	養气潤''邛薏´ロ' '''''''	पहूज.नयु.नमु.क
गह-५-पह-ल-व	न्गता भहता भन्ता तनता भहता मानता नजता	ข0%
गण्दा गर्षेदा गदशःखुदा	णरा र्णवा वसासुवा	30%
3 3ે 34 3ે4મા 3મમા	वा वें। ववा वैया वयया	30%
ଅ :ଶ୍ୱା	<u> </u>	ข0%
ग्रञ्च	বন্সা বহা বহা	ข0%
ही हेय हे <u>य.क</u> ्र्याया	त्र त्रहेंबा	30%
न्यान् चम्या	गान् ना (हेरायह्वामी:सु:भुगार्यार्पन्यःसु)	e 0%
ही। है। हैय स्वायमा	उ। हा हता कतमा	40%
श.स.व. मु.हो म्रै.खेच सेब.एक्जा व.म्रीटी व.च	त्रैय. त्रैय. वैय। ध्रु.त्रैय। त्रै.यक्षा त्रैन.क्या	10%
গ্ ৰন্থ্য	\$ 51	20 %

तरःश्रीयःतरु,रेयोयःस्याः कुंल्र्नाः श्रीयःयवश्वाः अस्यां अस्याः विस्ताः विस्ताः विश्वाः विश्वः विश्व

विनावराष्ट्र १ मा नासुराञ्चरने स्तुः र्ये रायदे हेर् बुदे रागदर्य पर्दुर पर्दुश

<u> </u>	ন ম:ক্রিমাধা	ক্ট্র্যমহ্মশ	मेट्य	য়ৼৠ৾য়	र्वुक्ष:घटम	ब्रे:स्मा:श्रमा:श्लेरा		養工和	श्ची.चर्जूश्वश्व
<u> ત્રાજાત કુર ફ્રિવ તદીવા જુર તતુ કૂર ક્રેયે.</u>	200%	200%	200%	ro%	ข0%	200%	ข0%	ข0%	ત્રગ. ત્ય%
ব্ৰ্মা (ৰাছস্মৰ্ছ'ৰে'ৰ ')									
<i>ગુજાયા</i> કુરાર્સ્ક તલ્ફ માર્ય્યક સ્ત્રેન સુક્રિક્સ સ્ત્રુ	po%	200%	_{%0} %	30%	3 0%	&0%	& 0%	30%	પપ %
र्व्वतः वृद्धः न्याः (८.छ.व.चः नयटः)									

कृदेः हें नृञ्चः यान्या (कृत्यः व)	30%	30%	& 0%					30%	2 9.4%
ल.चन्ध्रवासःकृष्यःयह्वाःस्रेन्यतःकृष्ट्नःस्र	200%	200%	100%	ρο%	५०%	200%	५०%	ข0%	po%
之山村 (최.최.대. ਖਵਯ.)									
र.चन्न्यशर्स्य,यह्या.ज्ञर.नयुःह्र्र.ज्ञ. अ.	200%	200%	100%	५०%	५०%	200%	40%	ข0%	44.214%
ব্ৰানা (ম.হ.ম.জ. ত্ৰ্যতেহত্তৰ)									
र.च5योश.जश.शेंदुःहूरे.श्चे.बूर्यर.चः श्चरा	30%		ข0%	30%	५०%	५०%	ข0%		૯૧.૫%
ज.चरेबोश.रेट. लयु.हूरे.मैं.सर्थ.क्षेत्र. यहूज.	५०%	0%	& 0%						<i>વહ</i> .વષ%
य समास्रास्य साम्या									
ૹઌ૽ૼ [ૢ] ૱ૢૡ૽ૼૢૹૺઽ <u>ૢૹ૽૾ૺ</u> ૽૾ૣ૽ૼઽૹ૾ૣૢૻૢૢૢૢૢૢૢૢૹઌૢૼ૱ૡ૽ૢૼ૱ૹ૽ૼ૱ઌ	ρο%	po%	ρο%						વ વ%થપ
इ.ध.ध.भ सं.कं.कं.के.के.के.के.ले. ८.के.च.चा									
ષર્મા. ક્ષે.લી. એ . કુ. કુર.ર્ધીત.થી		30%						30%	ฆ. ц%
इस्रायह्या यी स्रु. श्वास स्रे पर्हे बाधा	ρο%	200%	ρο%	५०%	५०%	ข0%	५०%	& 0%	ข<.ข<%
ग्'र्'र्राथ									
ઽ ૹ૾૽ૹ૾૾ૹઌઌ૽૽૱ૢ૾ૼ૱ૹ૾૽ૺઌૢૢૢૼઌૢ૱	५०%	200%	100%	ข0%	ข0%	40%	ข0%	५०%	<i>49%</i> વય
च.स.घी.स. ४/६ ४/४ ४/२									
ર્ક કં.૨ - ક્યું કુર્યું સ્વતુ ર્સુત વર્દે ભાવા			५०%						20%
इ.क्.जी. न्नां न्नाजी. इ.क्।									
श्रीरम्बिः विःश्रसम्बुदायदेःस्रीरक्षिणमीःहेर्न्सुः			& 0%						& 0%
ঀ ॱऄ॒ॱॺॱॸॖॺऻॱय़ॸॱऄॗॖॖॖॖॖॸॱऄऻ									
ङळहालाम ५८: इंक्टांचाया ह्वीरोहेंनाञ्चा		५०%							10%
শ্ব'ৰ্ক্ত্ৰ'ৰ্ব্ব'ৰ্ব্-শ্বা									
ल.चेरेचेश्व.जी. इंश.पहेंची. ट्रेंच.ज.स. लूटे.	ρο%	po%	60%	ρο%	0%	ρο%	५०%	ข0%	4 9.4%
यदे.ह्र्र.में.ब्र्यू.सं. व्याप्त. ह्या									

र्भेष Recommendation

बुद्धः चन्त्रकालक्ष. क्रूंब्द्रम् त्युंना त्युंना विष्णा क्ष्या ने त्या ने त्

र्मुर्य, चक्चिरी चक्चिर्जुं च्यां श्री क्ष्यं क्षयं क्ष

र्क् नीयः नगायःन्यःने र्कुः सेयः वनयः तुः नसेनयः गाननः नस्तुनः र्सेनः सेनः सेनः सेनः वननः नर्गायः यनुगा

व्यक्षः भेक्षः चर्ने व्यक्ता चर्मे द्रे प्रेचः प्रेचः द्रेवः व्यक्षः व्यक्षः भेक्षः व्यक्षः भेक्षः व्यक्षः व्यवक्षः विवक्षः व्यवक्षः विवक्षः व

মন্ত্ৰ্যা Conclusion

क्रुपः हेदः भ्रीः भ्रा References

गुब्राचबर्न्स् है। (२०१३) *हॅरावदिःह्न् ञ्चारमाञ्चुबारमाञ्चुबारमाञ्चिष्यास्त्री* हॅरावर्ग्नरस्थेयाः सुब्रार्क्षम् । गुब्रायम्बर्म्स् हे। (२००५) *हॅरावदेःह्न् ञ्चा* ईस्रायां। स्रायाचबर्ट्स् हेर्न्यन्दे केव्यन्यन्द्रम् (२०१५) बुचार्स्चम्याचिष्यः ह्निस्त्र्यायम्बर्धियः ह्निस्त्र्यायम्बर्

RABSEL the CERD Educational Journal 17(2) 96-107 = 27 নেত্ৰ ক্ষেত্ৰ ক্

Rig-Gter Acadamic Journal of College of Education, 6 80-93

- र्हेटायार्वेटायसेवा सूत्रार्टेवासा (४००४) र्हेटायवे यह यात् दियाया स्थाप
- Ary, D., Jacobs, L. C., Walker, D., & Sorensen Irvine, C. K. (2019). *Introduction to Research in Education*. Cengage Learning.
- Creswell, J. W. (2009). Research design. (3rd edit) SAGE Publications.
- Huang, L. S. (2018). Tasks for teaching pronunciation to advanced learners. *The TESOL Encyclopedia of English Language Teaching*, 1-9.
- Gilbert, J. B. (2012). Clear speech teacher's resource and assessment book: Pronunciation and listening comprehension in North American English. Cambridge University Press.
- Gilbert, J. B. (2008). Teaching pronunciation. Cambridge University Press.
- Murphy, J., & Baker, A. (2015). History of ESL pronunciation teaching. *The handbook of English pronunciation*, 36-65.
- Rajadurai, J. (2016). Pronunciation issues in non-native contexts: A Malaysian case study. *Malaysian Journal of ELT Research*, 2(1), 18.
- Wei, Y., & Zhou, Y. (2002). Insights into English pronunciation problems of Thai students.
- Zhang, F., & Yin, P. (2009). A study of pronunciation problems of English learners in China. *Asian Social Science*, 5(6), 141-146.

Impacts of Facebook on Reading Habits of Higher Secondary Students: Stakeholders'

Perspectives

Author: Tshering Wangchuk

Teacher

Abstract

Facebook is the most popular network site among young Bhutanese people. Students spend a substantial amount of time checking Facebook and chatting with friends, which could be detrimental to their reading habits. The aim of this study was to investigate the impacts of Facebook on the reading habits of a higher secondary school students in Bhutan. A mixed methods, specifically a convergent design, was adopted for the study, and it was guided by the Pragmatism worldview. Quantitative data were gathered from 274 participants and qualitative data were collected from 10 interviewees and one focus group discussion. Participants included teachers, parents, and students from a higher secondary school in Thimphu Thromde. A descriptive and inferential statistical following thematic analysis was used for quantitative data and the qualitative data were analyzed along the same themes. The findings of the study revealed that use of Facebook positively affected students' reading habits. Students developed positive attitudes towards reading, after they were exposed to inspiring and interesting articles. However, the study also highlighted the negative impacts of Facebook on students' reading habits. Further, the study revealed that students have become complacent in reading owing to Facebook activities. The findings of the study may help different stakeholders understand the importance of creating awareness about media literacy to enable students to choose authentic reading materials on Facebook. This study recommends the Ministry of Education to develop policy and provide media literacy education to students to ensure they consume media information judiciously.

keywords: Facebook, Reading habits, Detrimental, Impacts, Media literacy

INTRODUCTION

The notion of reading in 21st century networked society has changed recently. Students are no longer confined only to print reading, but its spread has expanded to Facebook. The widespread usage of Facebook tools has changed traditional reading culture for many readers. Previous research has found that as the amount of digital information available grows, young adults spend more time reading electronics (Ramirez, 2003; Liu, 2005). While the education system in Bhutan mainly focused on its tradition and culture prior to the 1950s, Conversely, the arrival of the contemporary western education system has changed the education system in Bhutan. With the implementation of the First Five Year Plan in 1961, the education system began to move at a faster pace to meet students' educational needs. Since then, writing and reading in the education system have been necessary to refine intellectual and competent students. The Internet was introduced in Bhutan on June 2, 1999 with the aim of providing citizens access to information and allowing them to interact with the world (Thinley, 2015). The Internet brought Facebook, the most popular network in the world (Albloly & Mohammed, 2013). Facebook was launched on February 24, 2004 by Mark Zuckerberg, Dustin Moskovitz, and Chris Hughes. There are over 2.89 billion active Facebook users monthly, and more than one billion people interact on Facebook every day (Statista Research Department [SRD], 2021).

Most of the students use Facebook as an entertainment medium, which reduces their focus on reading time (Anderson, n.d.). Further, another study demonstrated that students spend more time on online games and Facebook, which reduces time for reading (Sharma & Shukla, 2016; Yeboah & Ewur, 2014). However, Dogoriti et al. (2017) suggest that Facebook generally helps to improve students' reading and learning habits. Additionally, Bedassa (2014) and Ekahitanond (2018) reported that students read news, stories, histories, and other interesting articles on Facebook besides printed books. Nevertheless, another study stated that students feel positive, fun, and motivated to use Facebook (Krasnova et al., 2013; Karakose et al., 2016). In the same vein, literature found that Facebook introduces students to new vocabulary and sentence structures and boosts their confidence in reading English language materials (Cong-Lem, 2018; Kasuma & Tan, 2019; Yuksel & Tanriverdi, 2009).

Since the advent of Facebook in Bhutan in 2004, it has gained popularity among the Bhutanese people due to its enabling services such as sharing of communication, creative expression, and social interaction around the world (Hamidi, 2014). According to the Asian Pacific Digital Overview (2020), there are about 442600 Facebook users in Bhutan, which translates to 52.4 percent of internet users with access to Facebook. Bhutanese youth aged 13 to 24 make up the majority of Facebook users in Bhutan. According to MacEntee (2012) the study revealed that students acquire slang words or shortened forms of words from Facebook, which affects their language and reading skills. On the contrary, students acquire writing skills, communicative abilities, and vocabulary learning when students engage with and read the content on social media (Kasuma & Tan, 2019; Obaidullah& Rahman, 2018; Samdrup, 2014; Yuksel & Tanriverdi, 2009). Thus, students learn news words and content from Facebook.

This study also offers important insights into the impacts of Facebook on students' reading habits. Moreover, this study aims to contribute to this growing area of research by exploring various strategies to use Facebook appropriately and enhance students' reading habits. Additionally, the easy availability and accessibility of reading materials on Facebook is considered advantageous for reading culture. However, Facebook services such as online videos and games are considered a threat to print reading (Dealeal & Tasir, 2017). Moreover, students spend less time reading since they are exposed to inaccurate information, which might lead or tempt students into unlawful or disruptive behavior (Oni et al., 2017). Further, students are addicted to Facebook rather than academic reading and study (Rarakose et al., 2016). Therefore, there is a need to assess the impact of Facebook on reading habits.

Statement of the Problem

Facebook is currently the most popular website on the internet. There are over 2.7 billion monthly active users worldwide, with 45.5 percent between the ages of 13 and 24 (Clement, 2020). There were 373.2 thousand internet users in Bhutan as of January 2021 (Kemp, 2021). According to NapoleonCat (2020), the number of Facebook users in Bhutan increased from 418100 to 522900 in 2019 and 2020. There is a gradual increase in the number of Facebook users annually in Bhutan. Bhutanese youth between the age group of 13-24 make up the most significant group using Facebook (Samdrup, 2014).

Currently, Facebook is used by students to connect with their friends and relatives around the globe (Brydolf, 2007; Ellison & Stelnfield, 2007). Further, students read articles and news on Facebook (Bedassa, 2014) In the contrast, it is also observed that most high school students spend time surfing Facebook rather than reading. Similarly, another study showed that most high school students never finish reading a fiction book from cover to cover after leaving school (Brydolf, 2007). Furthermore, Facebook not only influences students' learning and studying in the classroom, it affects their reading behaviors at home (Shen, 2006). Therefore, it is becoming difficult to ignore the fact that there is a direct relationship between Facebook usage and students' reading habits in higher secondary schools. While there are international studies conducted on the impacts of social media on students' reading habits, there is a dearth of literature on this topic in Bhutan. Thus far, there is only one study by Samdrup (2014) which examined the impact of Facebook on academic performance. Therefore, the primary purpose of the study is to explore the impact of Facebook on reading habits of higher secondary school students in Bhutan.

Purpose of the study

The study aims to explore students', parents' and teachers' perceptions on the impact of Facebook on students' reading habits. It also aims to identify the relationship between Facebook usage and reading habits of Bhutanese higher secondary school students.

Significance of the study

The research findings provide insights into the impacts of Facebook on students' reading habits. This knowledge might help different stakeholders to design strategies to use Facebook appropriately, and promote reading. Moreover, the study is intended to contribute to the body of literature and knowledge on the impacts of Facebook on students' reading habits. Moreover, this study would help teachers and parents select valid reading materials and Facebook pages for their children and students. Lastly, this study would provide scope for future researchers to conduct further research in this area.

Research Question

The following main and sub research questions guided the study.

Primary Question

What are the perspectives of stakeholders on the impacts of Facebook on students' reading habits?

Sub-questions

1) What are the perspectives of students on the impacts of Facebook in students' reading

habits?

- 2) What are the perspectives of teachers on the impacts of Facebook on students' reading habits?
- 3) What are the perspectives of parents on the impacts of Facebook on students' reading habits?

METHODOLOGY

Research Paradigm, Design and Approach

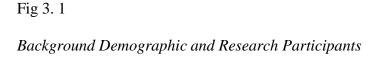
A pragmatic paradigm is guided the study. This paradigm allows exploration of complex phenomena and is the philosophical framework for mixed methods (Teddlie & Tashakkori, 2003). A pragmatic paradigm supports the use of both qualitative and quantitative research methodologies to collect information and make inquiry into complex phenomena of social and natural context (Morgan, 2007). It focuses on the problems and tries to find practical solutions with the use of mixed methods (Ihuah & Eaton, 2013). Since the aim of the study was to explore the perceptions of the impact of students 'reading habits on academic performance in English, a pragmatic framework offered the researcher a means of gaining in - depth and diverse knowledge on the research question. Thus, the practicality of pragmatism allowed the researcher to gather data by using relevant methods when addressing the research problem.

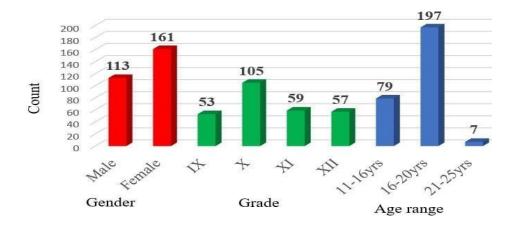
This study adopted a mixed methods research approach. The use of this design provided an in-depth understanding of the subject matter through personal experiences, interviews and surveys (Denzin & Lincoln, 2018). This study also associates with personal experiences and behaviors, and hence this approach guided in the collection of data and the process of analysis. Trustworthiness of qualitative data is ensured by using such as credibility, dependability, conformability and transferability (Lincoln & Guba, 1985).

Of the different types of research designs, this study employed a convergent mixed methods design. It further allowed to understand the lived experiences of individuals on the impacts of reading habits on academic performance in English of Bhutanese secondary students. In addition, this design provided greater understanding of the research problem by obtaining different complementary data (Creswell, 2013).

Sampling strategies and Sample process

Sampling plays a very important role in mixed methods research (Creswell, 2013). After confirming the population, Cochran's (1977) method of sample size determination was used at a 95% confidence level with a 5% margin of error. A total of 274 participants participated in this study. A random sampling technique was used in order to get better information. The sample ensured equal gender representation. Therefore, the study collected questionnaire data from 274 students at a Bhutanese higher secondary school. Out of 274 students, 113 were male and 161 were female. There were 53 students from Class IX, 105 from X, 59 from XI and 57 from XII. There were 70 participants under the age of 11-15, 179 falling under the age of 16-20, and 7 falling under the age of 21-25 (see Figure 3.1).





Semi-structured interviews were conducted with participants from a higher secondary school. This study used purposeful sampling techniques since the researcher was interested in participants who had the best knowledge concerning the research topic. One-on-one interview was conducted as one of the data collection techniques in this study with the aim to acquire indepth understanding of students, teachers and parents on the impacts of Facebook on reading habits of higher secondary students. In this interview, parents and teachers were included (see Table 3.1). Focus Group Discussion (FGD) was included as one of the data collection techniques with the aim to acquire an in-depth understanding of students' perceptions (see Table 3.1). Further, data collected through survey and interviews had helped in the triangulation of the data.

Table 3. 1

Number of Focus Group Discussions and One-on-One interviews

Interviewees	Number of Interviewees	Male	e Female	
Focus Group Discussion	1	2	4	
One-on-one interview with teachers	5	2	3	
One-on-one Interviews with parents	5	3	2	

Data gathering tools

Data collection is the process of gathering and measuring information on variables of interest in an established systematic fashion that enables one to answer mentioned research questions and analyze new insights to great effect (Creswell, 2013). The data had collected through survey, semi-structured interview and document analysis. Each data collection tool complemented the other, which enabled a greater depth of understanding of the issue under study. The discussion of tools is provided in the following sections.

Survey

The aim of the survey is to gather objective data on respondents' perceptions on the impacts of students' reading habits on academic performance of higher secondary school students. Further, this method of collecting data provides insights into participants' opinions on how reading habits impacts academic performance in English. Survey questionnaire consists of 2 sections: broadly positive impacts and negative impacts. The survey items had been expressed on a six-point Likert scale ranging from Strongly Agree (6), Agree (5), Somewhat Agree (4), Disagree (3), Somewhat Disagree (2) and Strongly Disagree (1). Further, the scale on the level of the opinion was adapted from Tshering, Tamang and Rinchen, 2021, guide to interpret the mean score (see Table 3.2). Prior to the administration of the survey questionnaire, pilot test was conducted. Pilot test is important to establish the content validity of scores on an instrument. Pilot testing all study materials provides an opportunity to assess how long the study takes (Creswell & Creswell, 2018). The reliability of students' survey questionnaire was verified through a pilot test study of 24 students from Samtse Higher Secondary School. Thus, the reliability of the items was measured through Cronbach's Alpha of 0.92.

Table 3. 2

Scale of Level of Opinion

Scale	Level of Opinion
1-1.50	Strongly disagree
1.51-2.50	Disagree

2.151-3.50	Somewhat disagree
3.51-4.50	Somewhat agree
4.51-5.00	Agree
5.51-6.00	Strongly agree

(Scale adapted from Tshering, Tamang and Rinchen, 2021)

Semi-structured Interview

For qualitative data collection, the study employed a semi-structured interview tool. This tool provides a framework for respondents to express their own understanding in their own words (Denzin & Lincoln, 2018). This method of collecting data enabled the researcher to understand the impact of students' reading habits on academic performance in English. The study used guiding interview questions for both one-on-one interview and focus group discussion. Interview questions seek to gain deeper insights into the research question. To ensure methodological soundness, the interview questions were pilot tested with 2 teachers, 2 parents and 4 students outside of the study sample. The pilot test was necessary to establish the effectiveness of the instrument in terms of both the content and process of administration.

Focus Group Discussion is an efficient way of gaining large amount of information from the participants (Creswell & Creswell, 2018). Focus Group Discussion was used in order to gather information from similar group of students having same experiences, back group and knowledge on the subject. This study included six participants from Classes IX to XII. Each participant was provided the information sheet, the consent form, and interview guiding questions. Thus, Focus Group Discussion provided in-depth insights into the impacts of Facebook on reading.

Data Analysis Methods

The analysis of data in a mixed methods design involves the analysis of both quantitative and qualitative data, which was analyzed using appropriate methods of analysis (Creswell, 2013). The study analyzed the survey questionnaire using the statistical package for Social Science (SPSS) 22. The data were analyzed through features such as frequencies, mean, standard deviation one-way Anova and correlation, which were represented in the forms of tables. To determine the degree of correlation, the idea of Best and Khan (2006) was adapted (see Table 3.3). Interview data were analyzed thematically following procedures of Braun and Clarke (2018). Audio-recorded interviews were transcribed verbatim and coded using descriptive and In Vivo coding.

The codes were further developed into categories or themes, which became the units of discussion.

In order to safeguard the identity of participants, pseudonyms such as FGA, FGB, FGC, FGD, FGE, and FGF, P1, P2, P3, P4, P5, T1, T2, T3, T4 and T5 were used to represent Focus Group Discussion, Parents, and Teachers.

Table 3. 3

Correlation and Coefficient Range

Coefficient level
Very low
Low
Middle
Strong
Very Strong

Adapted from Best and Khan (2006)

Ethical consideration

All ethical issues that need to be addressed in the whole process of the study was dealt and adhered to strictly as per the ethical or research code of conduct and regulations of the Royal University of Bhutan, 2014 and ethics clearance was also obtained from relevant authorities in the schools. According to Bryman and Bell (2007), protection of the privacy of research participants has to be ensured. Moreover, anonymity and confidentiality of participants was maintained by not revealing names and identities in the data collection and while reporting the study findings. All participants were clearly briefed on the purpose of the research and their involvement. The participants signed an informed consent form before the interview to indicate their permission to be part of the study (Arifin, 2018). Further, the researcher sought consent from the participants to voice record interviews. All the collected data were compiled and protected for 5 years.

RESULTS AND DISCUSSION

Positive Impacts

In the context of this study, positive impacts include students' development and enhancement of reading habits from Facebook reading materials. The analysis of both quantitative and qualitative data showed that Facebook has positive impacts on students' reading habits. These positive impacts translate into enhancement of reading habits, diversity of reading and enhancement of language and perceptions of Challenges is emergent theme. Each of these sub-themes is discussed in the following section.

Enhancement of Reading Habits

Table 4. 1

Mean and Standard Deviation on Enhancement of Reading Habits

Participants		Mean	Standard Deviation	Level of Opinion
Facebook motivates me to read other books and articles.		4.65	1.186	Agree
Facebook makes reading more fun and enjoyable.		4.89	1.122	Agree
Reading on Facebook enhances my reading habits.		4.55	1.082	Agree
Reading on Facebook cultivates my reading habits.		4.45	1.099	Somewhat Agree
Overall Mean	274	4.65	1.099	Agree

As shown in Table 4.1, the overall mean and standard deviation for the items on enhancement of reading habits is (M=4.65; SD=1.099). This indicates that students agree that Facebook enhances their reading habits. The current findings corroborated the idea of Dogoriti., et al (2017) who suggested that Facebook generally helps to improve students' reading and learning habits. Further, statistical analysis of the item *Facebook makes reading more fun and enjoyable* (M=4.89;SD=1.22) (see Table 4.1). Facebook is identified as a catalyst in adding joy to reading. In the similar vein, FGF said, "Whenever the writers provide us with links and suggestions about books... I feel an interest in reading those books and articles."

This finding aligns with previous studies that revealed that students feel positive, fun and motivated to use Facebook (Krasnova et al., 2013; Karakose et al., 2016). The finding implies that students derive happiness and enjoyment when they read on Facebook. A possible reason for this could be that most articles on Facebook are succinct and visuals accompany them. It is also easier to access articles on Facebook using technological gadgets, which reduces the burden of having tocarry a book.

Diversity in Reading

Table 4.2

Mean and Standard Deviation on Diversity in Reading

	Participants	Mean	Standard Deviation	Level of opinion
I read comments on Facebook.		4.88	1.05	Agree
I read news on Facebook.		4.97	1.014	Agree
I read inspirational quotes on Facebook.		5.31	0.042	Agree
I prefer reading short stories on Facebook.		4.76	1.177	Agree
I read history on Facebook.		4.36	1.185	Somewhat Agree
Overall Mean	274	4.85	0.89	Agree

The analysis of Table 4.2 showed that students read various genres on Facebook. Students reading comments (M=4.88), news (M=4.97), inspirational quotes (M=5.31), short stores (M=4.76) and history (M= 4.36) fall in the agree category. They agree that they read different genres to enhance their reading habits. Similarly, the standard deviation 0.893 indicates that students have similar opinions. In the same way, majority of the students shared that they read different materials on Facebook, which enhanced their interest in reading. This echoes the findings of Bedassa (2014) and Ekahitanond (2018) who reported that students read news, stories, histories, and other interesting articles on Facebook besides printed books. However, a few students stated that they love to read printed books as they are well organized and one can keep track of reading. This finding agrees with the previous literature. Literature states that students generally had positive perceptions towards printed books and articles (Makwanya, & Oni, 2013). On the other hand, Survey data regarding the item I read for more than one hour on Facebook in a day" is more slightly inclined to the Agree category with a mean score of (M=4.08; SD=1.340). Similarly, in the interview almost all students agreed that they spend more than an hour on Facebook reading news and other articles. In line with this study, previous studies indicated that with the growing amount of digital information available, young adults spend more time reading electronics (Ramirez, 2003; Liu, 2005). This finding is further supported by Loan (2011) who contended that improved access to relevant articles through social media has increased students' time on reading. The finding also does not confirm students' use of Facebook in the development of their reading habits. It is difficult to explain this result, however, it might be related to the context of usage and availability of technologies. It might also depend on their existing reading habits.

Enhancement of Language

Table 4. 3

Mean and Standard Deviation on Enhancement of Language

Participants		Mean	Standard Deviation	Level of Opinion
Reading on Facebook improves my language.		4.73	1.149	Agree
Reading on Facebook enhances my knowledge on reading comprehension.		4.47	1.063	Somewhat Agree
Reading on Facebook helps me to improve my grammar.		4.42	1.184	Somewhat Agree
Reading on Facebook enhances my reading skills.		4.45	1.154	Somewhat Agree
Reading on Facebook enhances my vocabulary.		4.50	0.991	Agree
Overall Mean	274	4.51	1.09	Agree

Reading different genres on Facebook not only contributes to reading enhancement but also provides knowledge on language and other skills to students. The survey data revealed that reading articles on Facebook helps students to learn new words, improve grammar, enhance vocabulary, enhance reading skills and comprehensions, as shown by the overall mean score (M=4.51; SD=1.09), which is in the Agree category (see Table 4.4). This shows students are passionate about reading on Facebook. For instance, students acquire new words as evident from the item reading on Facebook enhances my vocabulary mean score of (M=4.50; SD=0.99). In the same vein, interview data shows that almost all the students shared reading on Facebook enhances reading habits and acquire their reading ability, reading comprehension and improve language by reading materials on Facebook. Further, this view is echoed by P3 "Whenever my child visits Facebook, she usually learns some words and usage of grammar. Consistent with this finding, studies have found that Facebook introduces students to new vocabulary and sentence structures and boosts their confidence in reading English language materials (Cong-Lem, 2018, Kasuma & Tan, 2019; Yuksel & Tanriverdi, 2009). However, majority of the participants expressed that students are exposed to articles strewn with grammatical errors, spelling and invalid information. For instance, FGF and FGA said that reading on Facebook does not improve language since articles are posted without proper edition. This finding is in line with the study results of study Kasuma and Tan (2019) show that Facebook negatively affects grammar, spelling and academic achievement. In the same way, the quantitatives data also showed that students read for tests and assignments as evident from the overall mean score

of (M=3.79). Interview data findings validated that student's search information related to their assignments and tests on Facebook pages. This is supported by Bana (2020) and Dheleal and Tasir (2017) revealed that Facebook helps in discussion of assignments and clarification, posting information and supporting each other. It is, therefore, assumed that students only read when an assignment has been assigned or during examination.

Negative Impacts

Negative impacts in this context are described as the deterioration of students' reading habits by spending time on diverse activities on Facebook. The mean of (M=3.81) for the item *I spend more than three hours a day on Facebook* falls into the Somewhat Agree category (see Table 4.7). This indicates that excessive use of Facebook by students has a statistically significant effect on their reading habits. This finding corroborates with the previous literature. Literature states that students spend a considerable amount of time actively on Facebook (Dealeal & Tasir, 2017). Similarly, the interview data revealed that majority of the students spend more than 2 to 3 hours on Facebook. This view is represented in the quote by T3, "Students are negatively affected by constant access to Facebook activities."

Deterioration of Reading Habits

Table 4.4

Mean and Standard Deviation on Deterioration of Reading Habits

	Participants	Mean	Standard	Level
			Deviation	of Opinion
I love updating profiles on Facebook instead of		3.46	1.432	Somewhat
reading.				Disagree
I prefer chatting with friends instead of reading.		3.98	1.287	Somewhat
				Agree
I prefer playing games on Facebook instead of		3.35	1.418	Somewhat
reading.				Disagree
I watch videos on Facebook rather than reading.		4.06	1.34	Somewhat
				Agree
I do other activities on Facebook rather than reading.		4.13	1.22	Somewhat
				Agree
Overall Mean	274	3.80	1.34	Somewhat
				Agree

One of the findings confirms that students spend their time chatting, watching videos, and engaging in other activities, with an overall mean of (M=3.80; SD=1.34). In accordance with the present results, previous studies have demonstrated that students use Facebook to connect with friends and relatives, watch videos, and comment. This practice, however, affects good reading habits among students (Bayucan, 2017; Rafig, 2020). Further, another study pointed out that most students use Facebook as an entertainment media, which reduces their focus on reading time (Anderson, n.d.). Similarly, parent participants said, "Facebook activities such as games, videos, chats, updating profiles and other entertaining items do not affect students' reading habits as long as they know how to choose good sites and materials from Facebook." The results of this study indicate that students are inquisitive about utilizing Facebook and are enthusiastic about exploringthe different features of Facebook, especially games and chat facilities. However, they lose their focus on academic activities and reading.

For instance, P1 said, "My children are addicted to Korean advertisements and other unwanted pictures and videos. Which not only affects their reading passion but also their emotions." This finding confirms with the findings of other studies which elucidated that the majority of students spend less time reading since they are exposed to inaccurate information, information that might lead or tempt students into unlawful or disrupted behavior (Oni et al., 2017). This might be due to lack of media literacy and parents' monitoring. The results of this research support the idea that students need to receive media literacy education before they explore reading materials on Facebook.

Moreover, a low positive correlation was found between the items *I spent more than 3 hours on Facebook in a day* (r=231; p=0.000) and *Facebook reduces my reading passion* (r=231; p=0.000) at p=< 0.01. This presents an impression that the use of Facebook affects reading negatively. Further, interview data shows that students spend their time watching videos, chatting, commenting, and viewing profiles on Facebook, which affects their reading passion. In accordance with the present findings, previous studies have demonstrated that students spend more time on online games and Facebook which reduces time for reading (Sharma & Shukla, 2016; Yeboah & Ewur, 2014). Further, students are addicted to Facebook rather than academic reading and study (Karakose, et al.,2016). This finding implies that our students are affected by the ills of Facebook, however, with the right kind of education and guidance, this can be remediated. This finding may help us to understand the value of time and social life.

Challenges

The study showed that students do not read when they are assigned with assignments, homework, and other academic-related activities. This view is exemplified by FGD: "Right after school I do homework, project work, and other academic activities. I do not get time to read on Facebook." The findings of the current study do not support previous research. Literature stated that students normally read Facebook's articles when they are assigned with assignments or during examinations as most of them do not read other books such as novels, newspapers and magazines (Babalola, 2020). In the same way, T1, P2 & T3 expressed that students read notes or articles related to topics when they share through messenger and post on the school Facebook page. This finding may be explained by the fact that students focus more on academic materials than other articles. Therefore, this finding suggests that teachers should post more articles related to their assignments and subjects. The interview findings revealed that students do not have soundly knowledge to evaluate the validity of articles on Facebook, and thus they end up choosing

articles that are strewn with grammatical errors and false information. The current finding is congruent with the previous study. The study revealed that students acquire slang words or shortened forms of words from Facebook which affects their language and reading skills (MacEntee,2012). In the same way, T1, T3 & T5 shared that students use colloquial, abbreviations and jargon in their formal writing and speaking. It seems possible that these results are due to lack of guidance and support from parents and teachers. An important issue emerging from these findings is a needfor media literacy education.

One of the findings revealed that there was a lack of monitoring from parents and teachers. For instance, P1 said, "My children read whatever post is seen on Facebook." Literature emphasized that encouragement from parents and teachers plays a vital role in infusing reading habits into students (Taha, 2021). This finding has important implications for parents and teachers to establish reading time once in a day.

CONCLUSION

Reading on Facebook enhances students' reading habits. Students are exposed to diverse reading materials on Facebook, such as news, comments, stories, book reviews, quotations, and histories. In addition, students also explore academic-related materials on Facebook, which encourages them to read more articles on Facebook. Furthermore, it also helps improve their grammar and vocabulary. On the other hand, students are exposed to slang, colloquial and abbreviations, which deteriorate their language. This finding is noteworthy because Facebook is not only used for social purposes but is also a source for nurturing students' reading habits. This finding implies that Facebook has the potential to boost students' reading habits. Therefore, it is necessary to capitalize on Facebook and use it for academic purposes such as reading. In the 21st century world, apps are becoming a dispensable tool for learning.

The findings also demonstrated that excessive use of Facebook by students has a statistically significant impact on their reading habits. Students do not use Facebook for reading purposes; rather, they use it for social networking and engaging in other entertainment activities. Additionally, inappropriate videos are easily accessible to children, which can affect their attitude toward reading habits. The significance of this finding is that Facebook is not only a source of positive influence but also a breeding ground of negative influence. Relevant stakeholders, such as parents and teachers, must guide the students to select useful materials and use Facebook to their advantage to grow and advance both professionally and personally. If students do not receive timely guidance and support, they may be easily swayed by the multitude of options on Facebook. This could have a detrimental effect on their studies and health.

This study also highlights one of the challenges as a lack of media literacy among students. This finding suggests that stakeholders need to provide education on media literacy to students. Parents and teachers could guide students in learning how to think deliberately about their use of Facebook, and ask them to consider the outcomes of proper use of social media sites. This goal can be appropriately reached when parents and teachers receive appropriate training on the use of social media.

Overall, Facebook enhances students' reading habits and language skills by exploring and reading various articles on it. However, students spend their quality time surfing for entertaining activities, which hinders their reading habits. Further, students' lack of social media education and proper guidance from parents and teachers hinder the development of reading habits.

Acknowledgement

I would like to thank my family for their sacrifices and encouragement. Moreover, I am indebted to the esteemed lecturers, Dr. Yangdon, and Dr. Tashi Gyeltshen, for their endless encouragement, erudite suggestions, generous and friendly nature, critical evaluation, and counsel during the whole course of this project. Thus, I would like to thank all my friends for boosting my energy and confidence and walking the journey with me!

REFERENCES

- Aforo, A. A. (2014). Impact of social media on academic reading: A study at Kwame Nkrumah University of science and technology, Kumasi, Ghana. *Asian Journal of Humanities and Social Studies*, 2(1),243-303.
- Albloly & Mohammed, A. (2013). *Role of Facebook in enhancing reading comprehension among university students*. http://repository.sustech.edu/handle/123456789/4728
- Ameyaw, S. K. (2018). Read or perish reading habits among students and its effect on academic performance. A case study of east bank senior high school. *Philosophy and Practice e-Journal*, 2(3), 44-68. https://digitalcommons.unl.edu/libphilprac/174
- Al-Dheleai, Y.M., & Tasir, Z. (2017). Using facebook for the purpose of students' interaction and Its correlation with students' academic performance. *Journal of Educational Technology*, *16*(4),170-178.https://files.eric.ed.gov/fulltext/EJ1160608.pdf
- Anyira, I. E., & Udem, O. K. (2020). Effect of social media addition on reading culture: A study Nigerian student. *Philosophy and Practice Journal*, 2(1), 34-44. https://digitalcommons.unl.edu/libpilpr
- Ansari, M.N. (2018). *Impact of online reading on skills of professional*. https://digitalcommons/ed Arifin, S. R. M. (2018). Ethical consideration in qualitative study. *International Journal of Care Scholars*, 1(2), 30-33.
- Babalola, J.O. (2020). Evaluation reading habit among junior secondary students in Ekiti state in Nigeria. *International Journal of Language Education*, *4* (1), 74-80. https://org.doi/10.26858/ijole.v4i2.10206
- Bayucan, R.M. (2017). The influence of facebook in the English language proficiency. *International Journal of Technical Research and Applications*, *5*(1), 13-24. ISSN: 2320-8163
- Bana, A. (2020). Students' perception of using the internet to develop reading habits: A case study at the English education department of universities Kristen Indonesia. *Journal of English Teaching*, 6(1), 60-70. https://org.doi/10.33541/jet.v6i1.46
- Bazarova, N., Choi, Y. H., Sosik, V. S., & Cosley, D. (2016). Social sharing of emotions on facebook.https://doi.org/0.1145/2675133.2675297
- Bedassa, F. (2014). Impact of facebook usage on students' academic performance. 1-63.
 - https://www.grin.com/docuemnt/277559
- Bhutan Council for School Educational and Assessment. (2019). Findings from Bhutan experience

- Brydolf, C. (2007). Minding Myspace: Balancing the benefits and risks of students online Social networks. *Education Digest*, 73(2), 4-8.
- Braun, V.,& Clarke, V. (2018). Thematic analysis in Psychology. *Qualitative Research in Psychology*, 3(2), 77-101. ISSN 1478-0887
- Bell, E., & Bryman, A. (2007). The ethics of management research: An exploratory content Analysis. *British Journal of Management*, 18(1),63-77. https://10.1111/j.14678551.2006.0087
- Clement, J. (2020). Number of social media users worldwide.
- https://www.statista.comstatistics/274814
- Cope, D. G. (2014). Methods and meanings: Credibility and trustworthiness of qualitative research. *Educational Journal*, 41(1).89-91.
- Cong-Lem, Ngo. (2018). Does exposure to L2 facebook pages impact language learning? An examination of the relation between facebook reading experience and foreign language development. 14(1), 203-227.
- Creswell, J. W., & Creswell, L. D. (2018). *Qualitative, Quantitative, and mixed method approaches* (5th ed.). Sage Publications.
- Creswell, J.W. (2009). *Research design: Qualitative, quantitative and mixed methods approach* (3rd ed.). Sage Publications.
- Creswell, J. W. (2013). Research design: Qualitative, quantitative and mixed methods approaches (4th ed.). Sage Publications.
- Denzin, N. K., & Lincoln, Y. S. (2018). *The sage handbook of qualitative research*. Sage Publications.
- Dogoriti, E., Pange, J., & Anderson, G. S. (2014). The use of social networking and learning management systems in English language teaching in higher education. *Campus-Wide information systems*. https://doi.org/10.1108/CWIS-11-2013-0062
- Dealeal, Y. M., & Tasir, Z. (2017). Using facebook for the purpose of students' interaction and its Correlation with student's academic performance. *The Turkish Online Journal of Educational Technology*, *16* (4). 170-178.
- Guess, A. M., Lerner, M., Lyons, B., Montgomery, J. M., Nyhan, B., Reifler, J., & Sircar, N. (2020). A digital media literacy intervention increases discernment between mainstream and false news in the United States and India. *Proceedings of the National Academy of Sciences of the United States of America*, 117(27), 15536–15545. https://doi.org/10.1073/pnas.1920498117
- Godwin-Jones, R. (2008). Mobile computing technologies: Lighter, faster, smarter. *Language Learning & Technology*, 12(3), 3–9.
- Hamidi, F. (2014). *Facebook in Bhutan: A comparative study*. https://www.researchgate.net/publication/265466172
- Karakose, T. (2016). Relationship between high school Students' facebook addiction and loneliness status *12* (9), 2419-2429. Doi: 10.12973/eurasia.2016.1557a
- Kasuma, S.A., & Tan, D. (2019). ESL reading activities on Facebook among Malaysian University Students. *Journal of Social Science and Humanities*, 27(1), 101-122.
- Kemp, S. (2021). *Digital 2021: Bhutan*. https://datareportal.com/reports/digital-2021-bhutan Kumara & Kumar, T.B. (2019). Impact of reading habits on the survey academic achievement.

- Library Philosophy and Practice, 1(3), 1-15.https://digitalcommons.unI.edu/libphil
- Krasnova, H., Wenninger, H., Widjaja, T., & Buxmann. (2013). Envy on facebook: A hidden threat to users' life satisfaction?
 - https://www.researchgate.net/publication/256712913_Envy_on_Facebook
- Liamputtong, P. (2013). Qualitative research methods. Oxford University Press.
- Shen, L. (2006). Computer technology and college students' reading habits. *Chia-Nan Annual Bulletin*, 1(32), 559-572.http://doi=10.1.1.526.1818
- Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Sage Publications.
- Loan, F. A. (2009). Impact of new technology on reading habits. *A Glimpse on the World Literature*, 10 (2), 33-66.https://hdl.handle.net/10760/20084
- MacEntee, S. (2012). *Negative effects of social networking sites for students*. https://performing.com/negative-effects-of social-networking
- Makwanya, C., & Oni, O. (2013). E-Books preference compared to print books based on student perceptions: A case of University of Fort Hare students. DOI: 10.39991/ijim.v13i12
- Middleton, F. (2020). The four types of validity.https://www.scribbr.com/author
- Mingle, J., & Adam, M. (2015). Social media network participation and academic performance in senior high schools in Ghana. *Library Philosophy and Practice*, 1-51. https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=3446
- Morgan, D. L. (2007). Paradigms lost and pragmatism regained methodological implications combining qualitative and quantitative methods. *Journal of Mixed Methods Research*, *3* (1), 48-76.
- NapoleonCat. (2020). Facebook users in Bhutan.https://napoleoncat.com/stats/facebook-
- Nga, B. T. (2021). Students' attitudes to online reading in the era technology. *Asian Call Online Journal*, *12*(3), 1-8. ISSN 1936-9859
- Obaidullah, M., & Rahman, M.Z. (2018). The impact of internet and social media on the habit of reading books: A case study in the southern region of Bangladesh. *Studies in English Language and Education*, 5(1), 25-39. https://doi.org/10.24815/siele.v5i1.8966
- Olszak, I. (2015). The effect of online tools on reading among teenage students. *English for Specific Purpose World*, 16 (45), 1-12.ISSN: 1682-3257
- Piction, I. (2014). The impact of e-books on the reading motivation and reading skills of children and young people. www.literacytrust.org.uk
- Rafig, M., Khan, Dr-M, Asim, A., & Arif. (202). The effect of social media on reading habits. *Pakistan JournalManagement*, 21(1), 45-65.DOI:10.47657/2019211248
- Ramirez, E. (2003). The impact of the Internet on the reading practices of a university community: The case of UNAM. http://www.ifla.org/IV/ifla69/papers/019e-Ramirez.pdf
- Royal Educational Council. (2019). PP-XII English framework. Royal Educational Council (REC).
- Sampene, A.B. (2014). Impact of social media on academic reading. *Asian Journal of Humanities and Social Studies*, 2(1), 92-99.
- Samdrup, T. (2014). *Impact of facebook on academic performance of higher secondary school.* https://doi.org/10.13140/RG.2.2.28351.30888
- Shehu, N., & Shehu, A. (2014). Challenges of social networking on students' reading habit in

- Sharma, A., & Shukla, A. K. (2016). Impact of social messengers especially WhatsApp on youth a sociological study. *IJARIIE*, 2(5), 365-395. ISSN:
- 2395-4396 Statista Research Department (2021). Global number of Facebook users 2015-
 - 2020.https://www.statista.com/statistics/490424/number
- Taha, A.M. (2021). Reading habits among students and their effect on their academic Performance: A Study of students of a public school in Al Ain City in the UAE. *Global Scientific Journal*, 9(6), 402-421. SSN: 2320-9186
- Tanjung F. Z., Ridwan, &Gultom, U. A. (2017). Reading habits in digital era: A research on the students in Borneo University. *Language and Language Teaching Journal*, 20(2), 147-157. https://doi.org/10.24071/llt.2017.200209
- Teddlie, C., &Tashakkori. (2011). *Mixed methods research*. Sage Publications. The Bhutanese. (2014). *His Majesty graces the launch of the National Reading*
 - Year.https://thebhutanese.bt/his-majesty-graces-launch-of-
- national-reading Thinley, J. (2015). *History of internet in Bhutan*. https://conference.apnic.net/data/39/history-of-internet-on-bhutan-apricot-2015_1425186413.pdf
- Verma, J., &Malviya, V. (2010). The impact of internet and digital media on reading habit. *United Institute of Medical Science*, 50(3), 1-8. https://www.researchgate.net/publication/234264060
- Wise, L.Z., Skues, J. & Williams, B. (2011). Facebook in higher education promotes social but not academic engagement. *Proceedings ascilite Hobart*, 1332-1342.
 - https://www.ascilite.org/conferences/hobart 11/downloads/papers/Wisefull.pdf
- Yeboah, J., & Ewur, G. D. (2014). The impact of WhatsApp messenger usage on student's performance in Tertiary Institutions in Ghana. *Journal of Education and practice*, 5(6), 157-164. https://www.iiste.org/Journals/index.php/JEP/article/view/11241
- Yuksel, D., & Tanriverdi, B.O. (2009). Effects of watching captioned movie clip on ocabulary development of EFL learners. *Turkish Online Journal of EducationalTechnology*, 8(2), 48-5

Enabling environment and support as determinant of quality in ECCD centres in Bhutan: An analysis of the findings of quality monitoring of ECCD centres in Bhutan

Author: Sherab Phuntsho and Karma Geley Ministry of Education

Abstract

Quality in Early Childhood Care and Development (ECCD) centres is central to the effectiveness of programmes they provide but it is not limited to what early educators do with children on a daily basis (Britto, Yoshikawa, & Boller. 2011). Taguma, M. et al (2012) emphasize that quality in early childhood education encompasses such facets as how engaging and safe the centre is, if there is a range of strategies and activities employed to make learning experiences meaningful, whether families and communities engage in the educational process and if there is a systemic support from the larger community for the effective functioning of the centre. Recognizing the centrality of a holistic definition of early childhood education, the design of centres in Bhutan is founded on internationally accepted concepts and approaches that integrate critical aspects of quality learning environment. The Bhutan Quality Framework, with four specific domains and 29 indicators, define quality in terms of not just focusing on learning activities and strategies, but also encompassing child safety and well being, quality of interaction and communication, and family and community involvement.

This paper is essentially a report on the state of ECCD centres across the country, generated on the basis of assessment carried out using the quality monitoring tool for ECCD centres. The paper highlights the status of ECCD centres in terms of quality of learning in general and analyzes the levels of attainment in each of the four domains of quality. The paper further specifies the state of quality in ECCD centres by districts and types of centres to illustrate their strengths and weaknesses of ECCD centres in varying situations and environments. The paper analyses the key findings of the survey and summarizes a number of recommendations that could contribute to heightening quality of ECCD programmes by addressing shortfalls in the different aspects of quality in ECCD centres.

1. Introduction

ECCD centres provide early education and stimulation in organized settings with professionally trained educators during the most critical period of development. Disruption and lapses in the continuum of

children's development often set in during this phase of life between the transition from home and school as children are most vulnerable to exposure to negative stimulation and neglect (Yoshikawa et al., 2013). McCoy et al.(2017) assert that ECCD centres play an important role in laying strong foundations for lifelong learning in all aspects of education including literacy, numeracy, creativity, science, arts, movement, moral, spiritual, social, cultural, and livelihood skills development through formally organized settings and developmentally appropriate approaches to education. Shonkoff (2010) also posits that there is increasing evidence that children starting strong in their learning and well being have better outcomes when they grow older.

According to the Organization for Economic Cooperation and Development (OECD), quality in ECCD centres constitute two key aspects; structural quality and process quality. Structural quality includes learning materials, curriculum, facilitator education, and facilitator-child ratio, while process quality emphasize the more dynamic aspects of early childhood education, including human interactions occurring in the centres such as facilitator-child and child-to-child interactions. The definition of quality in ECCD centres is founded on the goal of holistic development and encompasses four specific domains including, child safety and well being; addressing developmental needs of children; encouragement and support for active engagement of children; and engagement of parents and communities in the programme.

The holistic assessment of ECCD centres in line with the quality framework is critical to obtaining explicit evidence on the state of ECCD centres and to provide practical feedback to Dzongkhags and ECCD centres as well as to incorporate critical interventions in the design of programmes at various levels. The assessment was therefore designed and carried out to address the following research questions:

- i. To what extent are ECCD centres in Bhutan meeting the requirements for quality centres?
- ii. How are ECCD centres faring in fostering quality learning environment?
- iii. What are the key determinants of quality in ECCD centres?

2. Objectives

Based on the research question, the objectives have been framed:

- to assess the quality of ECCD centres using the lenses of the holistic quality framework
- to assess the extent to which ECCD centres in Bhutan are achieving quality in their programmes
- to generate evidences on the strengths and weaknesses of ECCD centre programmes

3. Methodology

The study has employed a mixed research method involving both qualitative and quantitative design and data collection. The quantitative aspect was conducted making use of the existing quantitative instrument called the quality monitoring tool for ECCD centres (QMTEC), which has a detailed questionnaire with data generated using an excel sheet.

The questionnaire is divided into four areas of the ECCD centre quality framework which is further specified into 29 indicators. The scoring for each of the indicators is done within a scale of one to four and descriptions provided for each score for clarity of rating. For example, the score of 1 Indicates not at all achieved, which means that there is no evidence that any effort has been made to achieve the monitoring indicator. The score of 2 Indicates almost achieved, which means some efforts to achieve the monitoring indicator are observed, although not yet enough to achieve the indicator and some additional work is required to ensure the indicator is achieved. The score of 3 indicates that the minimum requirement for quality is achieved which indicates that there is consistent evidence indicator has been successfully reached in the learning environment. The score of 4 indicates that the centre has exceeded the minimum requirement, which means that there is evidence that the centre has consistently worked to achieve excellence.

Apart from the quantitative aspect, the qualitative approach is utilized to gather data through interviews with parents and children, as well as focus group discussions with parents and members of the centre management committee. The qualitative approach provides insights into the processes, mechanisms and challenges related to the practical implementation of the programmes.

4. Analysis and Findings of the Assessment

4.1. ECCD Demography and Enrolment

A total of 408 ECCD centres in 20 Dzongkhags were assessed using the quality monitoring tool, out of which 379 were community ECCD centres, 1 NGO centre, 10 private centres and 15 work place-based centres. The data generated through the analysis contributes to identifying strengths, weaknesses or gaps in learning environment across the different types of ECCD centres by four quality guiding principles and their corresponding indicators in enhancing holistic approach to quality education. Across 408 ECCD centres the enrollment figure of children between the ages of 3-5 years stands at 8329 in absolute numbers. Of the total number, 4248 were girls and 4081 were boys.

4.2. Learning Environment and Support System

In examining the context of the learning environments across the ECCD centres, data was not only collected on the four quality areas but also on the types of interventions that exists and is currently accessible to the ECCD centres. These include some of the core components of child protection, health and nutrition, access to trained facilitators, the level of community support and engagement.

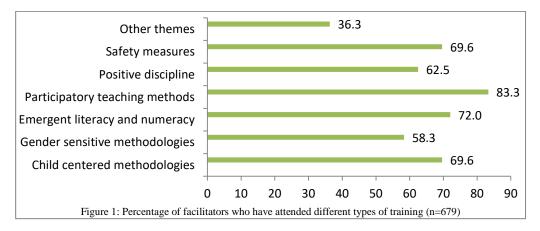
4.2.1. Learning Materials:

Learning materials are critical to quality in ECCD centres and the performance of children in ECCD centres (Monda, 2012). According to the operational guidelines for ECCD centres, materials should include commercially acquired toys, books and materials, as well as locally produced resources produced using low cost and no cost environmentally friendly materials. It was found in this assessment that 96% of the centres have adequate learning materials while only 15 ECCD centres did not have sufficient learning materials. The lack of materials in old centres according to the facilitators interviewed was because of the fact that a material package was supplied at the inception of the centre and no replenishments were made thereafter or no initiatives taken to produce materials locally, with parents' involvement.

4.2.2. Professional capacity of ECCD facilitators

Professional capacity of ECCD facilitators is an important aspect of quality and lack of trained facilitators could impede the quality of learning experiences for children and the management of the centres. The data on basic ECCD training as shown in figure 3 highlights the capacity and training of ECCD facilitators in the different components of their professional areas and competencies.

While most of the facilitators are trained in the two-week intensive basic training and some amount of refreshers training in specific subject areas, some facilitators would not have had such opportunities, which is why there are gaps in their capacity as indicated in the chart. Besides, many facilitators have undergone the ECCD Diploma programme in Paro College of Education. Figure 1 presents the overview and diversity of knowledge and skills the ECCD centre facilitators in these centres bring in delivering quality ECCD programme for children. More than 80% of the facilitators have been trained in delivering participatory teaching methods while only 58% have been trained in gender sensitive teaching methodologies.



4.2.3. Parent and Community Involvement in ECCD Centres

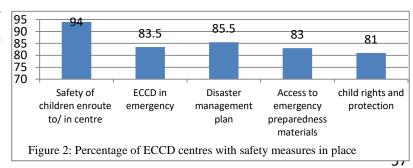
Even though ECCD centres are professionally supervised by parent schools under the administrative control of local governments, the centres are managed collectively by centre management committees that comprises of members such as the Gup, Tshogpa, Parent School Principal, Health Worker, ECCD Facilitator and Parents. Furthermore, ECCD centres are also mandated to carry out regular parenting education sessions and material development workshops involving the community. Therefore, community and parent involvement in ECCD centres is mandatory.

In the analysis on parents and community engagement in different activities and the role ECCD centres play in making programmes more participatory and responsive in support of children's learning, currently more than 90% of the ECCD centres have centre management committees and implement parenting education programmes. Community participation takes place through active engagement of community leaders and parents in various activities and events in the ECCD centre.

4.2.4. Child Safety and Wellbeing

Safety and protection of children enrolled in the centres is central to their well-being. If children do not feel safe and protected, their ability to engage in learning and interaction is compromised (Gillham & Thompson, 2005). Therefore, ECCD centres have the responsibility of ensuring that children are safe both in the centres and en route to the centres. Considering the threat of imminent disasters such as earthquakes and fire, measures should be in place to ensure adequate preparation and risk reduction. Another important aspect of safety is ensuring that children are protected from abuse and exploitation.

Figure 2 presents the percentage of ECCD centres with the level of safety measures in place enabling not only a safe physical environment but also ensuring a



learning environment that meets children's emotional and psychosocial needs. While more than 94% of the centres ensure protection of children to and from the ECCD centre, only about 80% of the centres are equipped with safety measures that protect children from natural disasters and other forms of exploitation.

4.2.5. Health and Nutrition

Health and nutrition are central to children's well-being and healthy development (Underdown, 2006). Quality ECCD centre must have adequate health and sanitation facilities as well as linkage with local health facilities for support services such as vaccination, health monitoring, micro-nutrient intervention and health education. The data from the monitoring of ECCD centres show that more than 85% of the ECCD centres have established linkages with a local health facility, indicating the existence of consistent health services. It is evident that 85.5% of the centres have WASH (Water, sanitation and hygiene) programmes, which is also indication that there are proper WASH facilities in these centres and WASH education and utilization are in place.

4.3. Four Areas of ECCD Quality Framework

As articulated in the quality framework, the principal is to support a holistic approach to deliver quality education by promoting high quality learning environment. The assessment of existing learning environments across the ECCD centres corresponding the four guiding principles or the quality criteria is presented in the subsequent figures below.

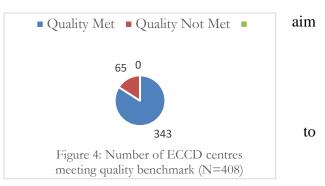
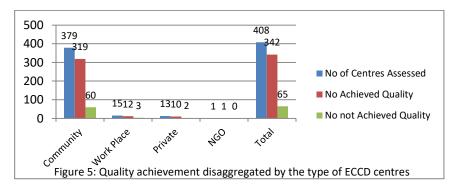


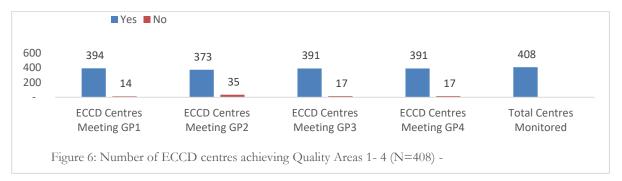
Figure 3: Percentage of centres with Health Linkages

Figure 4 shows only 84% of the total ECCD centres monitored have met the quality benchmark. An ECCD centre meets the quality criteria if it meets all the four guiding principles or quality criteria. A guiding principle is met if an ECCD centre meets 50% of the indicators corresponding to each guiding principle. Further figure 4 shows that 16% of the ECCD centres demonstrate structural weaknesses or quality gaps in one or more of the four or all the guiding principles.

Figure 5 highlights the analysis of quality benchmark achievement disaggregated by type of ECCD centres. Of the 408 ECCD centres monitored, 343 ECCD centres have achieved quality threshold results and 65 have not achieved quality benchmark, including 319 community ECCD centres, 12 work place based centres, 10 private centres only one NGO ECCD centre.



The breakdown by each of the four areas or guiding principles is presented in Figure 6. All of the centres assessed did reasonably well in all the four areas and there is also consistency in the achievement levels in the four areas.



The results indicate that corresponding to guiding principle or quality area one, 96.5% of ECCD centres assessed, created safe and protective environments for young children thereby ensuring wellbeing of the children through safe and protective learning environment (e.g. play and learning area is safe for all children; the environment is free of abuse or humiliating punishment; safe drinking water is accessible for all).

With regard to guiding principle 2, 91.4% of the ECCD centres assessed demonstrate that the centres meet the physical, social-emotional, linguistic and cognitive developmental needs of young children (e.g. children are active and engage in gross motor activities; facilitators are trained in child rights; ECCD facilitators/ caregivers use home language of the majority of children; activities and routines promote child's development of skills such as reasoning, higher order thinking, and problem solving skills).

Similarly, 95.8 % of the ECCD centres assessed achieved guiding principle or quality area 3. This demonstrates that these centres created enabling environment for children through supporting and encouraging active engagement, implemented child centred teaching-learning that improved learning outcomes of all children (e.g. ECCD facilitators are present for their sessions; facilitator develops age appropriate schedule of activities and routines and follows this routine; ethical guidelines or "code of conduct" for appropriate behavior are in place for ECCD facilitators).

The 95.8% of ECCD centres assessed indicates that centres actively collaborate with parents and local community members in planning, managing, decision making and improving early education for their children (e.g. ECCD Management Committee exists and represents a cross-section of the community; parenting education sessions are regularly conducted; facilitators actively engage parents in ongoing communication and collaboration to assess, plan, and implement activities with children).

The distribution of the achievement of quality in all the four areas or guiding principles disaggregated by Dzongkhags is as presented in gure 7 below. The analysis indicates that all of the 20 Dzongkhags have fared well in terms of maintaining quality in all respects. The weakest area (GP 2) which scored 91.4%, indicates that the support for children's development in all of the domains is deficient and inconsistent, thereby indicating lack of facilitators' capacity and need for further professional development in these areas.

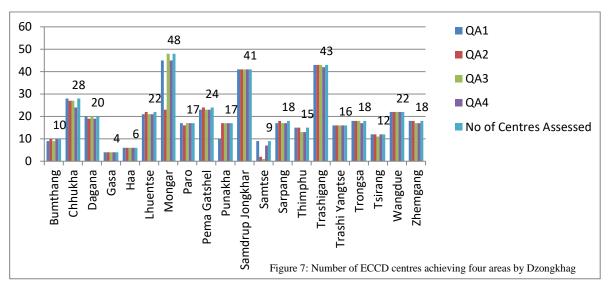


Figure 8 highlights the analysis of the ECCD centres that have achieved each of the four areas or the guiding principles disaggregated by type of ECCD centre. All other types of centres achieved quality area one, except community ECCD centres, where only 4% of the centres have not achieved quality benchmark. Private and work place based ECCD centres fared well in area one and three while they are weaker in areas two and four, which are concerned with support for developmental needs and parent involvement. On the whole, achievement in all the four areas across all types of ECCD centres is above par, with all scores above 80%.

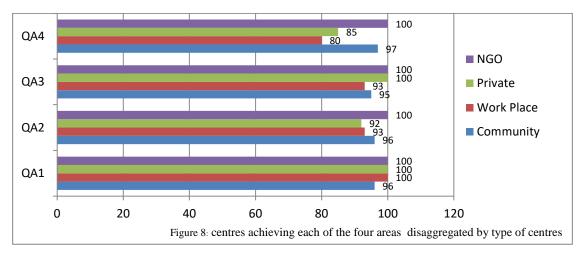


Figure 9 below features the analysis of quality area one by specific indicators. Area one has five indicators of which 76% of the centres assessed have achieved indicator 1.1, 94% achieved indicator 1.2 and 1.3, while 89% achieved indicator 1.4 and 97% achieved indicator 1.5.

As shown in figure 9, with only 76% of centres achieving indicator 1.1 as compared to the other indicators, the suggestion is that not all ECCD centres have adequate space or area for learning activities that are safe and comfortable. Indicator 1.2 which concerns availability of safe drinking water scoring 89% indicates that the majority of the centres provide safe drinking water for children. Similarly, indicator 1.3 which also scored 89% indicate that only about 27 of the 208 ECCD centres have issues with availability of toilets. Indicator 1.4 concerns distance to ECCD centres, where 44 of the 208 ECCD centres assessed have issues. The fact that 12 ECCD centres have issues with abusive behaviours as indicated in indicator 1.5, suggest that unacceptable behaviour management practices exist in some centres.

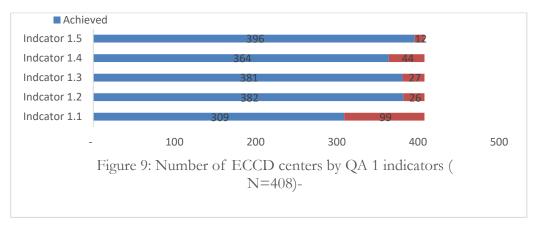
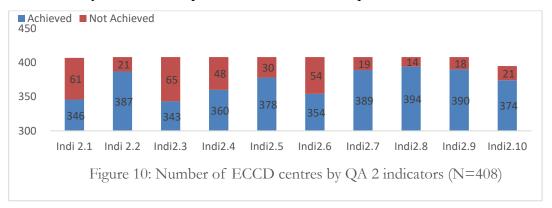


Figure 10 below illustrates the analysis of quality area 2 by specific indicators. Quality Area 2 has ten indicators. 85 percent of the centres assessed have achieved indicator 2.1; 95% achieved indicator 2.2; 84% achieved indicator 2.3; 88% achieved indicator 2.4; 93% achieved indicator 2.5; 87% achieved indicator 2.6; 95% achieved indicator 2.7; 97% achieved indicator 2.8; 96% achieved indicator 2.9 and

92% achieved indicator 2.10.

As elaborated in figure 10, with only 85% of centres achieving indicator 2.1 as compared to the other indicators, the suggestion is that children in about 61 centres do not have adequate opportunity to engage in diverse gross motor physical activities such as running, climbing and crawling which are critical to physical development. Indicator 2.2 which relates to opportunities for engagement in fine motor development activities suggests that about 21 ECCD centres do not have sufficient time and resources allocated for fine motor activities. Data on indicator 2.3, there suggests that 65 ECCD centres do not have proper linkage with health services and therefore do not have regular health services provided for children. The fact that 48 centres have not fulfilled indicator 2.4 validates that children do not engage in skills-based health education in these centres. Indicator 2.5 concerns emotional development, where about 30 centres have not met the quality requirement. This suggests that there are not many opportunities for children to engage in regular interactions with peers and facilitators to develop their ability to express and regulate emotions and behaviour. The fact that 54 centres have not met indicator 2.6 suggests that these many facilitators do not have knowledge or training on child rights and protection. Indicator 2.7 relates to use of home language in ECCD centres to boost children's motivation and confidence to open up, express and communicate, where 19 centres have not met the requirement. Similarly, indicator 2.8 concerns creating a language rich environment in the centre and stimulating oral language development, where 14 centres have not met the standard.

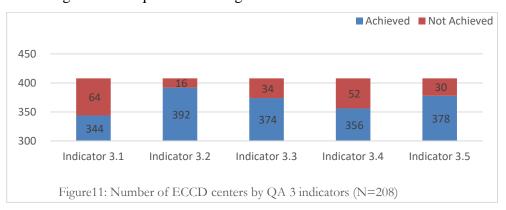
Indicator 2.9 concerns promoting cognitive stimulation and development of skills such as reasoning and problem solving through consistent schedules and opportunities for active learning. 18 centres have not met this indicator suggesting that there are no opportunities for such stimulating activities and experiences. Indicator 2.10 relates to promotion of emergent literacy and numeracy, where 21 centres have not met the benchmark. This suggests that activities and learning experiences that develop literacy and numeracy are either not practiced at all or not adequate.



The findings of quality area 3 by specific indicators are highlighted in figure 11 below. This quality area has five indicators that aim at enhancing active engagement of children, child centred teaching and

improving learning outcomes of children. The data show that 84% of the centres assessed have achieved indicator 3.1 while 96% achieved indicator 3.2; 92% achieved indicator 3.3; 87% achieved indicator 3.4 and 93% achieved indicator 3.5.

While the majority of the ECCD centres assessed have achieved these indicators, it is also evident that some centres have not achieved all of the indicators. The fact that 64 ECCD centres have not achieved indicator 3.1 demonstrates that ECCD facilitators are not regularly in ECCD centres for various reasons or that there are not enough facilitators in centres as per existing ratios. The issue could be attributed to a shortage of ECCD facilitators in many centres considering rigid recruitment policies and Dzongkhag Education Offices challenged with deployment of facilitators as acknowledged by the Ministry of Education. The indicator 3.2 examines if ECCD Facilitators have developed plans and routines for effective operation of the centres. The fact that only 16 centres have failed to meet this requirement indicates that there are proper plans and schedules prepared and that plans are effectively implemented by the facilitators in majority of the centres. Indicator 3.3 scrutinizes practices related to assessment of learning outcomes to ensure that children progress in their development. In this regard, only 34 centres have not met the standard, indicating lack of developmentally appropriate assessment and documentation practices. The indicator 3.4 looks at if ECCD facilitators are provided with support to enhance their professional capacity and practice, where it has been found that such support is lacking in about 54 centres. The indicator 3.5 examines if there is a code of conduct for ECCD facilitators and if it is effectively implemented. The data shows that 30 ECCD centres have not met the requirement, indicating that the requirement to sign the code of conduct made in these centres.



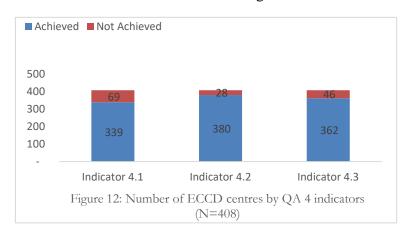
The figure 12 below examines the quality area four by indicators. This particular area focuses on how effectively ECCD centres collaborate with parents and local communities and how their active involvement in planning and decision-making helps improve ECCD centre programme. The data show 83% of the centres assessed have achieved indicator 4.1 while 93% achieved indicator 4.2 and 89% achieved indicator 4.3.

While the majority of the ECCD centres assessed have achieved the indicators it is also evident that

some centres have not achieved all of the indicators. The fact that 69 ECCD centres have not achieved indicator 4.1 validates that ECCD centres are not engaging communities and families effectively in the ECCD programmes in the centres, even as parents' involvement is central to the quality of programmes. Lack of communication and engagement with parents could impede support for centres as well as learning outcomes of children as the gap between centre and home could lead to lack of understanding of the ECCD programme on the part of the parents and a lack of awareness of the social and cultural environment of children on the part of the facilitators.

The indicator 4.2 emphasizes need for parenting education as an import aspect of the ECCD centre programme and 28 centres have not met the quality standard in this context. The fact that these centres did not meet the requirement indicates the lack of consistent efforts to promote parenting education. Parenting education interventions have multidimensional benefits for parents not just in improving their own parenting skills and child care practices, but also in enhancing their own knowledge and skills related to health, nutrition, protection of children, well-being, and responsibilities.

The indicator 4.3 examines if ECCD centres have centre management committees instituted to support the management, operation and sustainability of centres. The fact that 46 centres failed to meet this indicator validates that centre management committees are either not existent or not effective in these



centres. The centre management committee is pivotal in enhancing the management of centres whereby the committees contribute significantly to mobilizing parents' participation in the centre and exploring resources, as much as helping in the planning, implementation and review of programmes in the ECCD centres.

5. Conclusion

Considering that 105 of the existing 513 ECCD centres, particularly in the four Thromdes, were not assessed for quality, there is a need to strengthen coordination for consistent monitoring of ECCD centres and strategies to improve the monitoring mechanism by way of capacity building of field monitors and DEOs, and digitizing the data entry and compilation system.

As quality of ECCD centres is dependent largely on the capacity of ECCD Facilitators, there is a need to strengthen support for professional development of ECCD Facilitators through refreshers trainings and in-service trainings such as diploma in ECCD.

Furthermore, given that support for ECCD centres by local governments, parent schools and Dzongkhag

Education are not consistent across the 20 Dzongkhags and four Thromdes, there is a need to strengthen accountability for all stakeholders towards ECCD Centres, with clarity of roles and responsibilities in the operational guidelines and assessment tools. Furthermore, the accountability of ECCD Facilitators and parent schools need to be clearly defined and strengthened.

As close to 15 percent of community ECCD centres do not have proper WASH facilities, as evident from the assessment, there is a need to provide proper toilets and sanitation facilities in these centres.

REFERENCES

Bhise, C. D., & Sonawat, R. Measuring the Quality in Early Childhood Education. https://sajep.org/wp-content/uploads/2015/06/1.-Measuring-Quality-in-Early-Education.pdf

Britto, P. R., Yoshikawa, H., & Boller, K. (2011). Quality of Early Childhood Development Programs in Global Contexts: Rationale for Investment, Conceptual Framework and Implications for Equity. Social Policy Report. Volume 25, Number 2. *Society for Research in Child Development*

Dahlberg, G., Moss, P., & Pence, A. R. (1999). *Beyond quality in early childhood education and care: Postmodern perspectives*. Psychology Press.

Gillham, B., & Thompson, J. (Eds.). (2005). *Child Safety: Problem and Prevention from Pre-School to Adolescence: A Handbook for Professionals*. Routledge

Hurst, K., & Smith, A. B. (1995). *Monitoring quality in early childhood education*. Wellington: Ministry of Education, Research Division.

 $Katz,\,L.\,G.,\,\&\,\,Chard,\,S.\,\,C.\,\,(1996).\,\,The\,\,contribution\,\,of\,\,documentation\,\,to\,\,the\,\,quality\,\,of\,\,early\,\,childhood\,\,education.\,\,\,https://books.google.com/books?hl=en&lr=&id=r-uApOe9uGgC&oi=fnd&pg=PA9&dq=Katz,+L.+G.,+%26+Chard,+S.+C.+(1996).+The+contribution+of+documentation+to+the+quality+of+early+childhood+education+&ots=dD4j0uxT1T&sig=zYMOGipKoW1hYg32TRJkh_Y7eO8.}$

Laevers, F. (Ed.). (1994). *Defining and assessing quality in early childhood education* (Vol. 16). Leuven University Press

La Paro, K. M., Thomason, A. C., Lower, J. K., Kintner-Duffy, V. L., & Cassidy, D. J. (2012). Examining the definition and measurement of quality in early childhood education: A review of studies using the ECERS-R from 2003 to 2010. *Early Childhood Research & Practice*, *14*(1)

McCoy, D. C., Yoshikawa, H., Ziol-Guest, K. M., Duncan, G. J., Schindler, H. S., Magnuson, K., ... & Shonkoff, J. P. (2017). Impacts of early childhood education on medium-and long-term educational outcomes. *Educational Researcher*, 46(8), 474-487

Monda, T. M. (2012). Influence of teaching and learning materials on children performance in pre-

schools in Borabu district, Nyamira County, Kenya (Doctoral dissertation, University of Nairobi, Kenya)

Olaleye, O., Florence, O., & Omotayo, K. A. (2009). Assessment of quality in early childhood education in Ekiti-State Nigeria. *World Applied Sciences Journal*, 7(5), 683-688.

Pisani, L., Dyenka, K., Sharma, P., Chhetri, N., Dang, S., Gayleg, K., & Wangdi, C. (2017). Bhutan's national ECCD impact evaluation: Local, national, and global perspectives. *Early Child Development and Care*, 187(10), 1511-1527

Shonkoff, J. P. (2010). Building a new biodevelopmental framework to guide the future of early childhood policy. *Child development*, *81*(1), 357-367

Taguma, M., Litjens, I., & Makowiecki, K. (2012). *Quality matters in early childhood education and care: Finland*. OECD Publishing. 2, rue Andre Pascal, F-75775 Paris Cedex 16, France

Tobin, J. (2005). Quality in early childhood education: An anthropologist's perspective. *Early Education* and *Development*, *16*(4), 421-434.

Underdown, A. (2006). Young children's health and well-being. McGraw-Hill Education (UK)

Yoshikawa, H., Weiland, C., Brooks-Gunn, J., Burchinal, M. R., Espinosa, L. M., Gormley, W. T., & Zaslow, M. J. (2013). *Investing in our future: The evidence base on preschool education*, http://disde.minedu.gob.pe/bitstream/handle/20.500.12799/4015/Investing%20in%20 Our%20 Future%20The%20Evidence%20Base%20on%20Preschool%20Education.pdf? sequence=1&isAllowed=y

RABSEL – the CERD Educational JournalGuidelines for Manuscript

RABSEL – the CERD educational journal

The CERD *Educational Journal* is published twice a year in spring and autumn by the Centre for Educational Research and Development, Paro College of Education, Royal University of Bhutan. The Journal welcomes contributors which promote the exchange of ideas and rational discourse between practicing educators, researchers, planners, administrators, educational thinkers and practitioners, learners and policy makers from Bhutan and abroad. To this end the Journal publishes articles on empirical and theoretical studies, research reports, commentaries and scholarly reviews that attempt a systematic analysis or synthesis of educational processes and systems from different viewpoints and approaches.

Notes for Contributors

Manuscripts are considered for publication with the understanding that they are original material and have not been submitted elsewhere for publication. Submission of a paper to a professional journal is considered to be a definite indication of the author's commitment to publish in that journal. A paper submitted to this journal while it is under review by another journal is regarded as unacceptable. Submitting an already published manuscript is considered to be unethical. The author should consult the Editor if he or she has any questions to whether or not the paper is suitable for publication.

Editorial Procedures

CERD *Educational Journal* is a research journal. All papers considered appropriate for this journal are reviewed anonymously by at least two outside reviewers. The review process usually takes one to two months. Papers are accepted for publication subject to no substantive, stylistic editing. <u>The Editor reserves the right to make any necessary minor changes in the papers, or request the author to do so, or reject the paper submitted.</u> A copy of the edited paper along with the first proofs will be sent to the author for proofreading. They should be corrected and returned to the Editor within

10 days. Once the final version of the paper has been accepted, authors are requested not to make further changes to the text.

MANUSCRIPT SUBMISSION GUIDELINES:

The CERD *Educational Journal* is a multidisciplinary publication presenting research and scholarly reviews related to education. Guidelines specified herein were prepared for the convenience of authors, reviewers and publishers.

Types of articles

Three types of manuscripts are appropriate for submission to CERD journal (a) Reports of empirical research, (b) Scholarly reviews (c) Project reports

Reports of empirical research

Reports of empirical research are descriptions of research studies. These studies must have clear and important implications for education and/or research. CERD considers research representing diverse methodologies, including group design, single-subject research, case study etc. The major criteria for publication are quality of design, implementation, and writing, as well as importance to the field.

Scholarly Review

Scholarly papers take the form of essays that represent well-developed arguments on philosophical, theoretical, or practical problems in the field of education. They are not required to adhere to an empirical research design (i.e., methods, data collection, and data analysis). Instead scholarly papers pose analytical or conceptual frameworks.

Scholarly papers should contain as many of the following as are applicable, preferably in this order: (1) objectives or purposes of the inquiry; (2) the philosophical, theoretical, or practical

argument; (3) literature, sources, or evidence to support the argument/analysis; (4) conclusions and implications of the argument; and (5) significance of the argument

Project reports

These articles will be shorter and more preliminary reports about interesting educational projects (innovative courses, learning communities, etc.). Several of these reports could be published in each issue. The focus of a project report is on the progress or outcomes of an academic innovation that addresses issues in education.

PREPARATION OF MANUSCRIPT

- 1. The complete title of the paper, the names of the author(s), institutional affiliations, e-mails, and other identifying material should be typed on a separate sheet/the title page only to assure anonymity in the review process. The first text page of the article should have the complete title of the manuscript, but not the names of the author(s).
- 2. The length of manuscripts should be not more than 5000 words.
- 3. All manuscripts should be sent with an abstract of 150–200 words and 4 to 5 keywords. The abstract should be placed preceding the paper.
- 4. Articles should be double spaced and 12-point, Times New Roman font. **Do not** use forced section, page breaks, or automatic footnotes.
- 5. *Make sure to* provide complete, APA-formatted references and text citations, making sure the two correspond exactly. Pages 207–281 of the *APA Manual* (fifth ed.) detail these guidelines.
- 6. Change all instances of passive voice to **active voice** whenever possible, as these changes will be necessary before publication. Spell out each acronym at its first use.
- 7. Set all margins to 1 inch.

- 8. Format for 8½ in. x 11 in. paper. Do not format for A4 paper.
- 9. Please type all copy upper and lower case—do not use all capitals or small capitals.
- 10. Place all figures and tables in a separate file. Tables need not be double spaced. Indicate the location of tables and figures in text in boldface, enclosed in angle brackets, on a separate line.

Example: < Fig. 1 here>

All figures must be camera-ready, suitable for reproduction. Figures will not normally be redrawn by the publisher.

- 11. Please use your tab key and centering functions to do head alignment, paragraph indents, etc. DO NOT USE THE SPACE BAR.
- 12. Use endnotes as sparingly as possible. Number them with Arabic numerals starting with 1 and continuing through the article; for example: "(see Note 1)." Do not use footnotes.

Artwork

Figures must be provided as production-ready. Do not use rules or tick marks smaller than 1 point in size. Acceptable electronic formats for figures or other art are: TIFF, EPS, Word, or Excel. If you have trouble loading Excel files, copy and paste them into a Word document. Scans must be of high resolution. Scans done at lower resolutions will have a very poor print quality even if they look crisp and clear on a laser printout.

Permission

Obtaining written permission for material such as figures, tables, art, and extensive quotes taken directly—or adapted in minor ways—from another source is the author's responsibility. Authors should never assume that material taken from software or downloaded from the Internet may be used without obtaining permission. Make sure to use proper referencing and citation format. Remember plagiarism is a serious academic crime.

Copyright

After your article has been published, you also have the ownership right for your original academic work.

Submit your manuscript to:

All manuscripts submitted will be considered for publication. Manuscripts (two copies) should be sent to:

The Dean

Centre for Educational Research and Development Paro College of Education Royal University of Bhutan

Tele Fax. 08-271620

Phone: 08272829/08272011