Journal of Early Childhood Care and Education
Vol. 2, 2018, 35–50

Early Childhood Learning Videos on YouTube: A Thematic Analysis of Viewer's Perceptions

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Abstract

The study was aimed to investigate the opinions of viewers who have watched early childhood education videos on YouTube regarding their acceptance and suitability of videos for the purpose of Early Childhood Learning (ECL). Furthermore, study focused to explore whether these videos can be useful and effective for the preschool children to educate them basics of knowledge. A qualitative phenomenological approach was used to investigate the perceptions of viewers about their experience of the early childhood learning videos through comments. Ten (10) videos with over 01 million views and uploaded on YouTube within a period of last 02 years were considered as sample of study through purposive homogenous sampling technique. Furthermore, only comments in sensible English language were selected as sample comments for analysis and interpretation purpose. From the selected videos, comments were scraped with the help of open source data mining software (ytcomments). Qualitative thematic sentiment analysis technique was applied to identify significant meanings and themes from the comments of the viewers. The sentiment analysis was supported by the use of NVivo 12 software. Analytical findings emphasized that viewers have a positive perception towards the usefulness and effectiveness of Early Childhood Learning YouTube videos.

Keywords: Youtube, early childhood, digital learning, acceptance, e-learning

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Introduction

Utilization of audio video aids specifically multimedia for the purpose of learning is not a new concept but which type of media to be used and how it will be used has changed extremely with the technological innovations and advancements. Use of multimedia sources in classroom scenario for learning is being employed by the educators since early 1920s (Li, 2016). With the passage of time, technological advancements brought multiple options such as projectors, VHS, DVDs, laptops, tablets, smart phones etc. Especially Web 2.0 technologies made the interactions and collaborations more accessible and quick. Similarly, social media sites have also allowed people to generate and share information globally (Michniuk, 2014). Early childhood learning is also utilizing technology and innovation to bring improvements and long lasting achievements. Early age children have more tendencies to learn different concepts, words, and absorption of information from versatile sources. Hence social media sources can also be utilized for the early childhood learning (Curenton, 2008).

YouTube is one such social media source which has gained popularity over the past few years and it has also been utilized in classroom scenarios as an effective educational tool (Riley, 2017). An advocate for the early education community conducted a survey from more than 800 early childhood educators to explore how early childhood educators are utilizing technology for learning purpose. This survey was conducted from various early education centres across United States of America and main question asked in this survey was the utilization of technical advices in early childhood classrooms as well as attitudes of early childhood educators towards technological sources (Heriyanto, 2018). The results of the survey indicated that 90% of the early childhood educators had the access to technology and they are regularly using it in their schools. Results also showed that 88% of the early childhood teachers utilize the technical devices atleast once in a week. Majority of the early childhood teachers have integrated the use of technical gadgets in their lessons through tablets, desktops, or even interactive white boards; so that the teaching and learning environment can be enhanced and stronger relationships can be built between children and content of the subject. In terms of technical devices, survey results revealed that 80% of the early childhood teachers use ipads or tablets in classrooms, 51% use integrated computers and 45% have preferred interactive whiteboards for enhanced learning of early age children (Curenton, 2008). Source of YouTube can be used in different ways for the purpose of learning such as improvement in academic writings of students. In this regards, Jones and Cuthrell (Jones & Curthell, 2011) evaluated the educational values of YouTube videos for academic

writing and indicated that there is a great value of learning through the experiences of MOOCs and there is also a need for innovation and new trends, so that the learning experiences for users can improve. Sources of YouTube can also be utilized for the development of standardized modules in curriculum for every subject or trait (Godwin, Khan &Yellowlees, 2017). It was observed by Sharma that little evidences have been explored and reported for the use of YouTube videos and participatory culture depicted by the early age students for the teaching and learning experiences (Sharma, Myers, Doherty &Harbutt, 2015).

Therefore, digital technology has been increasingly becoming an integral part of pre-schooler's or early age children's lives. Vast numbers of effects of digitalization are evident on early childhood learning process. Utilization of digital technology has also shaped and evolved parenting practices because more resources are now easily and cheaply available to the parents which can be utilized by them as an effective tool for preschool learning of their children. Due to this fact, it can be assumed that availability of early childhood learning videos on social media platform of YouTube can be helpful and productive for parents as well as early childhood educators. Such assumption needs an exploration to investigate the acceptance of such videos and their suitability for the early childhood learning purpose.

Literature Review

Early childhood education is commonly known as nursery education and is abbreviated as ECE. ECE is a branch of education that is usually related to teaching children from the age range of 02 years to 08 years old. This is the time of life for a child when he/she is in the phase of learning more quickly and efficiently. Because at this stage brain of a young child is clearer and absorption of knowledge is at the highest pace. In conventional schooling, scholars have defined early childhood as the time of child in school consisting of pre-school, kindergarten, nursery, Montessori, and primary education. This usually ranges from 02 years age till 08 years age of the child. Curenton (Curenton, 2008) has defined this time of life of a child as "first sense of self" and has considered this time as the most important time of child's life as he or she is developing the most and experiencing the most in their life.

Special attention is needed for educating the children at this point of life. At national level, there is a need to provide most attention to the learning of children and special curriculum development is need of the time. ECE in Pakistan has gained much importance in previous decade, but still the policy makers and the educational practitioners have not understood the true spirit of this educational system. Without proper

planning, the test and run process has brought new challenges to the current scenario of ECE in Pakistan. Both public and private sector has been trying to bring improvement to the ECE in Pakistan. Yet, lack of coordination and cooperation among the policy makers and the implementers has resulted in not much fruitful results (Godwin, Khan &Yellowlees, 2017).

An epic milestone in the educational system of Pakistan was the introduction of National Education Policy of 2009. On the ECE, there was a strong emphasis on the introduction and development of ECE in Pakistan in NEP 2009. The policy makers were of the concern that a separate and specialized curriculum should be developed for the ECE in Pakistan and should be implemented to it's full to bring improvement to the ECE in Pakistan (Pakistan Education Statistics 2015-2016)

In case of private sector, UN has launched its "Sustainable Development Goals" which is commonly known as "Agenda 2030". SDG consists of a total of 17 goals and 164 targets which UN is trying to achieve by the year 2030. The fourth goal of SDG is provision of quality education especially at primary and secondary level to everyone. One of the major targets to be achieved through goal 04 of SDG is "By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education". Pakistan education statistics report 2015-2016 has included this goal to meet the requirements of SDG in Pakistan (Khan, Amin, Kakli, Piracha, & Zia, 2017)

Figure 1: Sustainable Development Goals (SDG) Source: (Khan, Amin, Kakli, Piracha, & Zia, 2017)

SDG4 Outcomes

Targets	
4.1	Quality primary/secondary education for all
4.2	Early childhood & pre-primary education
4.3	Equal access to TVET & higher education
4.4	Relevant skills for work
4.5	Gender equality & equal access for all
4.6	Youth and adult literacy
4.7	Global citizenship education for sustainability
Means of implementation	
4.a	Safe & inclusive learning environments
4.b	Scholarships for higher education
4.c	Teachers' training and working conditions

Figure 2: SDG4 Outcomes Source: (Khan, Amin, Kakli, Piracha, & Zia, 2017)

EDUCATION 2030 TARGETS IN PAKISTAN EDUCATION STATISTICS 2015-2016

4.2: By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education

Concepts	
Readiness	8. Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being, by sex
	9. Percentage of children under 5 years experiencing positive and stimulating home learning environments
Participation	10. Participation rate in organized learning (one year before the official primary entry age), by sex
	11. Gross pre-primary enrolment ratio
Provision	12. Number of years of (a) free and (b) compulsory pre-primary education guaranteed in legal frameworks

Figure 3: Early Childhood and Pre-Primary Education Source: (Khan, Amin, Kakli, Piracha, & Zia, 2017)

GROSS ENROLMENT RATIO AT PRE-PRIMARY LEVEL IN PAKISTAN FOR THE YEAR 2015-2016

Gross Enrolment Ratio (GER) in Pre-Primary			
	Male	Female	Total
Pakistan	**79.4%**	**69.1%**	**74.4%**
Punjab	83.0%	77.6%	80.4%
Sindh	66.8%	54.4%	60.9%
KP	88.7%	76.9%	83.0%
Balochistan	71.6%	38.6%	56.1%
AJK	74.5%	70.7%	72.7%
FATA	117.9%	69.9%	94.8%
GB	44.4%	33.8%	39.3%
ICT	57.2%	83.2%	67.1%

Figure 4: GER at Pre-Primary Level Source: (Khan, Amin, Kakli, Piracha, & Zia, 2017)

In the year 2017, ministry of federal education & professional training, Government of Pakistan has issued a curriculum for early childhood care and education. The base of the curriculum was also the SDG of 2015. As per this curriculum, the ECE should be goal and objective oriented. There should be interactivity in the material to be studied by the children. The content to be taught to the children must be quality driven and relevant. Visual aids should be used for teaching languages and textual information to the students. The teaching material for teaching ECE to the children should be incisive (Curriculum for ECE, 2017). As per the UNESCO Education strategy 2014, Children aged 2-5 years should be taught in separate classrooms by teachers using adapted ECE materials and the religious schools should also offer pre-primary services of varying quality to the children (Mahmud, 2014)

Aims and Objectives of the Study

Following aims and objectives were achieved through this study in an exploratory perspective:

- To investigate the opinions of viewers who have watched the early childhood learning videos posted on YouTube, regarding their acceptance for such videos and suitability of videos for the purpose of Early Childhood Learning.

- To explore whether these videos can be useful and effective for the preschool children in educating them the basics of knowledge (Colors, Shapes, Sounds, Animals, etc.).

Research Questions

Following are the research questions of the study:

- Are early childhood learning videos on YouTube acceptable by parents or early childhood educators?
- Are these early childhood learning videos suitable for the purpose of early childhood learning?
- Can early childhood videos on YouTube be useful and effective for preschool children's learning?

Delimitations of the Study

Following were the delimitations of the study which were identified before the finalization of the methodology:

- Only YouTube Videos uploaded by Authentic YouTube Channels were considered.
- Only YouTube videos uploaded in the last 02 Years were considered.
- Only comments from the registered viewers of the YouTube were considered.
- Only comments in Sensible English were considered.

Methodology

Researchers followed the qualitative phenomenological research approach in which the perceptions and opinions for under studied phenomenon were explored as experienced by the individuals or group of individuals in a course of time. Phenomenological approach helped the researchers in describing how individuals have experienced a certain phenomenon where biases and pre-conceived assumptions were set aside about the experiences, responses, and feelings of individuals for a particular situation. Adoption of phenomenological approach helped in understanding how viewers of early childhood learning videos have experienced this particular situation or phenomenon.

Population

The qualitative phenomenological study considered those registered YouTube channels which are specifically operating for the purpose of early childhood learning as the population of study. YouTube is a social

media platform where videos of both registered and unregistered members are posted. However, for this particular study, only those registered channels constituted the population whose sole purpose is provision of early childhood learning through their videos on their YouTube channel.

Sample

Out of the population, only Ten (10) YouTube videos from these registered YouTube channels having more than one million (01million) views each were selected as the sample for the study. A qualitative non-probability sampling technique was adopted to select the sample in which the sample was selected through purposive homogenous sampling and only those ten (10) videos were selected as sample which had homogeneity (i.e. early childhood learning purpose and one million views).

Instrument for Data Collection

Instrument used for the data collection was the data mining tool where open source online software (available at www.github.com) was used for scraping of comments from these YouTube videos. The software has the name "ytcomments" which enabled the researchers to scrape the comments from selected YouTube video and compiling them into a Microsoft Excel sheet for the purpose of coding and analysis.

Data Analysis Technique

The comments compiled and organized in Microsoft Excel Sheet were initially coded manually to align the content with their respective themes and same coding procedure was replicated in NVivo 12 software to support the analytical results. Comment data was coded and analyzed through the "thematic sentiment analysis technique" which identified the themes on the basis of objectives of the study. In the process of sentiment analysis, sentiments as "positive, neutral, and negative" were assessed for each theme. Furthermore, NVivo 12 software has also been utilized as supportive analytical software. Analytical findings and results are interpreted on the basis of thematic sentiment analysis with the support of NVivo results.

Research Findings

This part of the research includes analysis and interpretation of findings for the data collected through the data mining tool (ytcomments) from the selected YouTube videos of early childhood learning. The

qualitative thematic sentiment analysis for the data is organized and interpreted into three themes or categories which are as under.

a) Acceptance for Early Childhood Learning

Figure 5: Word-Cloud for Acceptance of Early Childhood Videos

The Word-Cloud figure from NVivo software is presenting most frequently used words within the comments of the viewers for the ECL videos on YouTube. Word-Cloud provides those words which were dominant in the views of respondents. Words with large font size were the most widely used words such as video, nice, good, and great etc. an overview of above provided word-cloud is depicting that ECL videos on YouTube were accepted by viewers through the use of words like great, awesome, stunning, good, thank, pretty etc. The opinions in the form of comments from the viewers who have watched early childhood learning videos on authentic YouTube registered channels provided the sentiments about the acceptance of such videos for early childhood learning. Comments in sensible English from the registered viewers of the YouTube upon the YouTube videos which have been uploaded in the last two years indicated that majority of the viewers positively accepted these YouTube videos for the purpose of early childhood learning. These registered viewers were parents as well as the early childhood educators and their comments in sensible English indicated that authentic registered YouTube channels are providing such videos which can be accepted for the learning

and education of pre-schoolers as well as for early years of education. The analytical findings from the NVivo 12 software are:

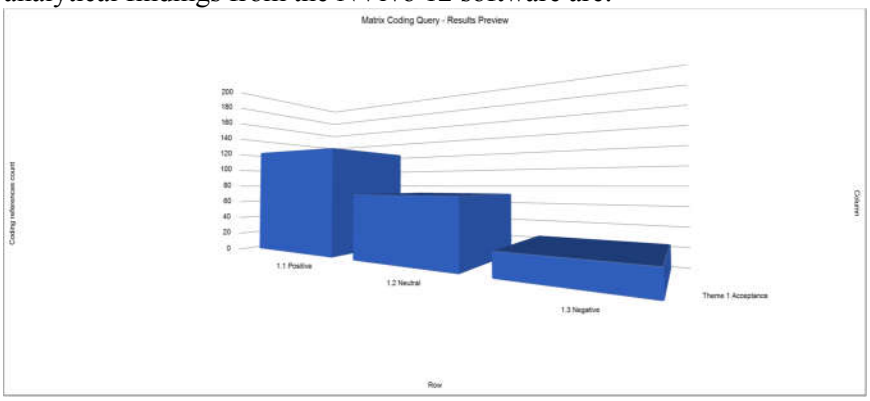

Figure 6: Matrix Coding Query Results Presenting Opinions of Viewers in Positive, Negative, or Neutral Sentiments for Acceptance of Videos for Early Childhood Learning

The output of NVivo 12 as matrix coding query chart represented that majority of the comments showed a positive sentiment for the acceptance of YouTube videos for early childhood learning purpose. A nominal number of viewers had negative sentiments about acceptance of these videos. Hence, it can be interpreted that, at a large scale YouTube videos for ECL posted by the authentic and registered YouTube channels are accepted by the viewers (parents and early childhood educators) for the said purpose.

b) Suitability for the Early Childhood Learning

Figure 7: Word-Cloud for Suitability of Early Childhood Learning Videos

Word-Cloud Figure presenting most frequently used words in the comments of viewers in respect of suitability of videos posted on YouTube for the purpose of Early Childhood Learning. In the next step, it was investigated that whether these YouTube videos are considered suitable by the parents or early childhood educators for the early age children specifically for the purpose of their learning. The analytical findings in the form of sentiments indicated that such videos are considered suitable along with their acceptance by elders.

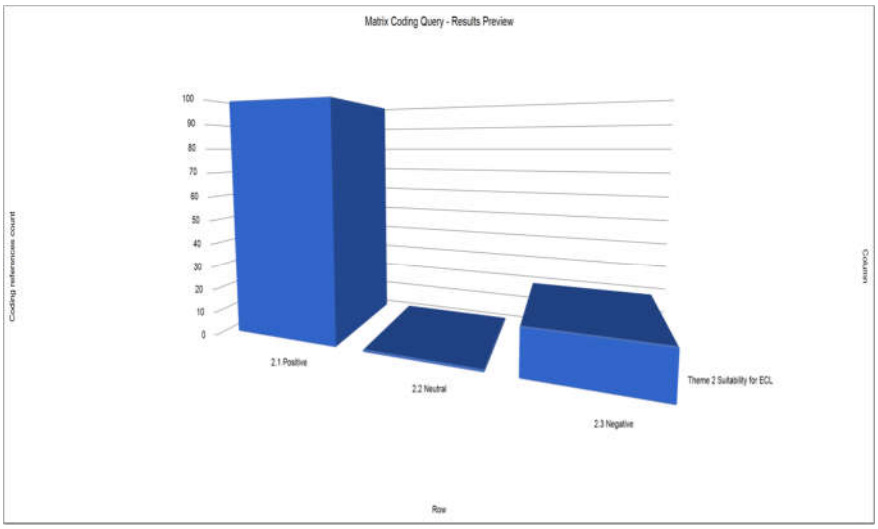

Figure 8: Matrix Coding Query Results Presenting Opinions of Viewers in Positive, Negative, or Neutral Sentiments for Suitability of Videos for Early Childhood Learning Purpose

Sentiment analysis supported by the NVivo 12 software indicated that majority of the viewers consider the selected YouTube videos suitable for the learning purpose of early age children. The analytical findings also supported the fact that selected videos are not only accepted in the diversified cultures but the content of selected videos was also considered suitable for learning of children in different cultures and scenarios because the viewers (parents and early childhood educators) were from the diversified cultural backgrounds.

c) Usefulness and Effectiveness for Early Childhood Learning.

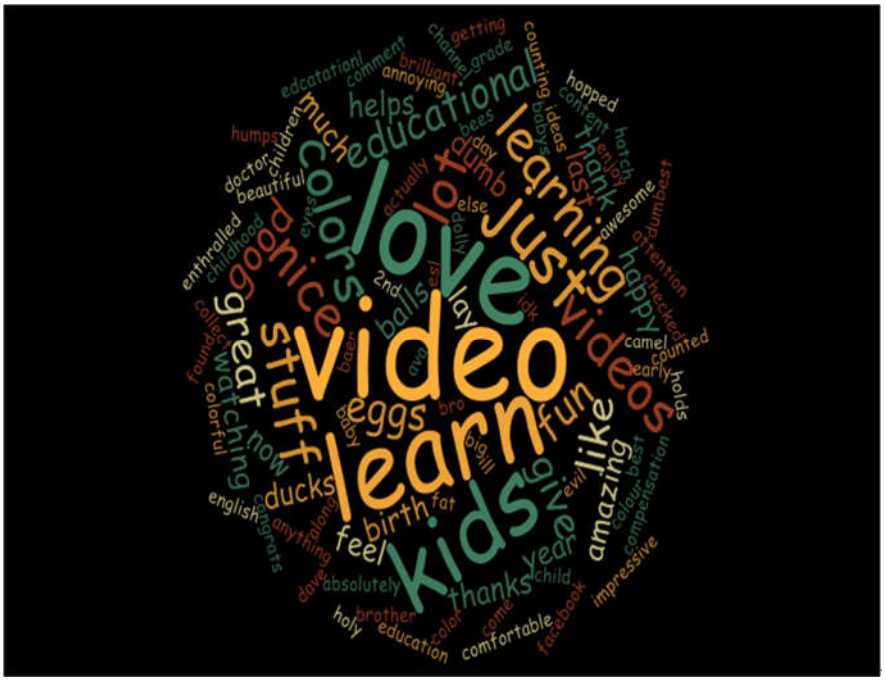

Figure 9: Word-Cloud for Usefulness and Effectiveness of Early Childhood Learning Videos.

Word-Cloud figurative analysis from NVivo software presenting most repetitively used words within the comments of viewers such as learn, video, love, great, learning, helps, educational etc. this word-cloud is presenting the opinions of viewers regarding the usefulness and effectiveness of videos on YouTube specifically for Early Childhood Learning. In the final steps, it was analyzed whether the selected videos were considered useful and effective for the pre-school children in their education for the acquisition of basic knowledge such as colors, shapes, sounds, names, animals, etc. Coding of the viewer's comments for this theme indicated that majority of the viewers had the perception that selected videos can be termed as useful and effective for the basic learning of early age children.

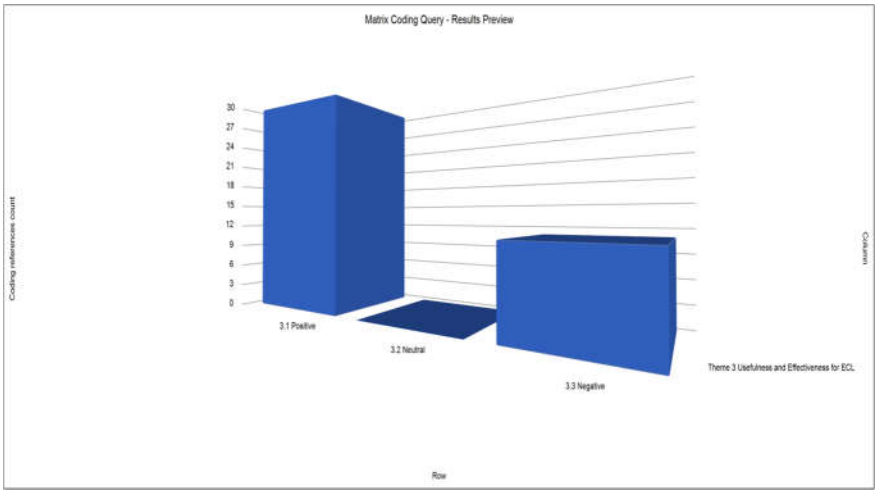

Figure 10. Matrix Coding Query Results Presenting Opinions of Viewers in Positive, Negative, or Neutral Sentiments for Usefulness and Effectiveness of Videos for Early Childhood Learning

Sentiment analysis supported by the NVivo 12 output showed that majority of the viewers (parents and early childhood educators) considered the usefulness and effectiveness of selected videos positive through their comments and only fewer numbers of comments were in the negative sentiments. It has also been observed that there were almost no comments expressing the neutrality of viewers regarding the usefulness and effectiveness of selected videos for basic learning of pre-schoolers particularly in respect of colors, shapes, sounds, names, animals, etc.

Conclusion and Recommendation

The study was conducted to investigate the opinions of YouTube video viewers for the acceptance of such videos and suitability of videos specifically for the purpose of early childhood learning. The study also focused to explore whether such videos can be useful and effective for the pre-school children in their learning of basic knowledge such as colors, shapes, sounds, names, animals, etc. The objectives of the study were exploration of acceptance, suitability, usefulness, and effectiveness of early childhood learning videos posted on the registered YouTube channels for the purpose of ECE. Study adopted the qualitative phenomenological approach where the required data was scraped from the comments through the utilization of data mining software (ytcomments).

Thematic sentiment analysis on the data provided the analytical findings which are interpreted accordingly with the support of NVivo 12 software.

It is interpreted on the basis of analytical findings that use of digital technology has become essential part of pre-schooler's lives for the purpose of entertainment as well as for the learning. Parenting practices have also evolved and in this era of technological advancements, it is easy and cheap to have access of different technological devices which can be used as a tool for early childhood learning. YouTube is one such social media platform which has a dual use of entertainment as well as education. YouTube is also being utilized as an audio visual source or tool for the ECE by parents and also by early childhood educators. YouTube channels specifically registered for the purpose of ECE are providing a number of learning videos in an interactive and interesting format for pre-school children. While using YouTube or any other digital device for entertainment or education purpose, the most important thing to be considered by the parents and early childhood educators is supervision and monitoring. Use of any information source in an unsupervised and unmonitored situation can have severe negative effects on the users especially in case of pre-school children.

Theme 01 Findings: There is acceptance of YouTube videos posted by the registered YouTube channels by the viewers (Parents and ECE educators) for the purpose of early childhood learning.

Theme 02 Findings: The content of the early childhood learning videos on YouTube channels is considered suitable for the learning of children by viewers (Parents and ECE educators).

Theme 03 Findings: Monitored and supervised learning through early childhood videos on YouTube is proved to be useful and effective for the acquisition of basic knowledge by pre-schoolers.

Recommendations

Recommendations suggested on the basis of analytical findings for acceptance, suitability, and usefulness and effectiveness of early childhood learning videos of YouTube are; 1) Parents as well as ECE educators should adopt the YouTube ECE videos for the learning purpose of young age children 2) Use of any digital device, social networking platform especially YouTube by young children must be monitored and supervised by elders 3) Material or content used in the YouTube early childhood learning videos should be adapted in real life practical context 4) Technological learning tools must be integrated in the curriculum of ECE.

References

Curenton, S. (2008). Early childhood leaders and literacy. *Early Childhood Research Quarterly*, *23*(4), 597-598. http://dx.doi.org/10.1016/j.ecresq.2008.03.002

Godwin, H., Khan, M., & Yellowlees, P. (2017). The educational potential of youtube. *Academic Psychiatry*, *41*(6), 823-827. doi: 10.1007/s40596-017-0809-y

Heriyanto, D. (2018). The effectiveness of using youtube for vocabulary mastery. *ETERNAL (English Teaching Journal)*, *6*(1). doi: 10.26877/eternal.v6i1.2290\

Jones, T., &Cuthrell, K. (2011). YouTube: Educational potentials and pitfalls. *Computers in The Schools*, *28*(1), 75-85. http://dx.doi.org/10.1080/07380569.2011.553149

Li, Y. (2016). Transforming conventional teaching classroom to learner-centred teaching classroom using multimedia-mediated learning module. *International Journal of Information and Education Technology*, *6*(2), 105-112. doi: 10.7763/ijiet.2016.v6.667

Khan, N., Amin, N., Kakli, M. I., Piracha, Z. F., & Zia, M. A. (2017). *Pakistan Education Statistics*. Islamabad: National Education Management Information System Academy of Educational Planning and Management Ministry of Federal Education & Professional Training Islamabad.

Michniuk, A. (2014). YouTube – YouLearn. Education via YouTube? *E-Mentor*, *56* (4), 37-43. doi: 10.15219/em56.1122

Riley, J. (2017). Integrating youtube videos in online teacher education courses. *Journal of Teaching and Learning with Technology,* 6(1), 81-84. doi: 10.14434/jotlt.v6.n1.19526

Sharma, N., Myers, G., Doherty, I., &Harbutt, D. (2015). Innovations and developments. *Education for Primary Care*, *26*(1), 30-33. doi: 10.1080/14739879.2015.11494306

Mahmud. M. (2014). Teacher training in support of early childhood education in Pakistan*: A case study of the Teachers' Resource Centre*. The United Nations Educational, Scientific and Cultural Organization 7, Place de Fontenoy, 75352 Paris 07 SP, France CLD ED-2013/WS/38

Citation of this Article:
Yaqoob, N., Bibi, T. & Mansoor, M. O. (2018). Early childhood learning videos on youtube: A thematic analysis of viewer's perceptions. *Journal of Early Childhood Care and Education, 2,* 35–50.