Challenges Hindering ECD Centres' Use of Electronic Records: A Case of Gweru Urban, Zimbabwe

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ABSTRACT

Computerisation has led to rapid and many changes in the way educational systems operate. ECD centres keep a wide range of records for a variety of reasons. Consequently, it is the responsibility of all ECD centres to have a comprehensive records management focus, on the analysis of the information in the records and the medium on which the information is kept. Despite the fact that electronic records are generally easier to access and share, easier to edit and environment friendly, it seemed ECD centres in Gweru urban lagged behind in technological development by avoiding to become paperless in document recording. Progressive institutions are going digital, but many child centres seemed stuck, doing the bulk of record keeping on paper and by hand. A case study involving 14 ECD care-givers and five ECD administrators in Gweru urban was conducted to determine causes of the very minimal use of ICT in record keeping and to obtain participant views on how the perceived limited use of ICT in record keeping by ECD teachers and administrators could be attended to. Data were generated via open- ended questionnaires and one focus group at one ECD centre. The Qualitative paradigm guided the study. The study was an explanatory case study design involving 14 ECD care-givers and 5 ECD administrators in Gweru urban. The findings of the study indicated that while some participants cherished keeping of ECD records electronically, there was a perceived minimum use of ICT in record keeping at ECD centres and opinions were divided on the usefulness of keeping e-records at ECD level. Most centres would not give heed to the call for electronic ECD records due to several perceived prohibitive variables, among which were absence of required resources and lack of ITC skills by ECD caregivers. Collaboration between stakeholders to promote growth of electronic ECD centres, adequate promotion of knowledge on benefits of managing ECD records electronically and training for users and developers of ECD record keepers, were main recommendations of the study.

Key words: ECD Centres, record keeping, e-records, records – management

INTRODUCTION

In the digital age, computerisation has led to rapid and many changes in the way educational systems operate. Teaching and learning have taken on board technology in a variety of ways. Record keeping is one key activity in didactic set ups, be it at lower or higher levels of teaching. Due to the range of activities that take place and the nature of learners, Early Child Development (ECD) centres are bound to keep a variety of records for varied reasons. Both ECD administration and caregivers are mandated to keep records, which serve a wide range of purposes. ECD records are of different types, and they depend on the activities at the centres. ECD record management practice is vital in any ECD service providing institution, in a bid to ensure quality service delivery. ECD records are important tools that centres require in order to attain the goals of ECD education. The purpose of record management is to ensure quality, accuracy, accessibility and security of information in both paper and electronic systems (The United States Department of Labour, 2013). ECD service delivery partly depends on records keeping processes at the centres and on the knowledge of caregivers and managers at ECD centres. Consequently, it is the responsibility of all ECD centres to have a comprehensive records management focus, on the analysis of the information in the records and the medium on which the information is kept. Even though electronic records are generally considered easier to access and share, easier to edit and environment friendly, it seemed ECD centres in Gweru urban lagged behind in technological development by avoiding becoming paperless in document recording. This observation was

made many a time by researchers of this study as they engaged in Teaching Practice supervision of Zimbabwe Open University students attached at Early Childhood Development centres and schools. Progressive institutions are going digital, but many child centres seemed stuck, doing the bulk of record keeping on paper and by hand. It was against this background that this study was undertaken.

Statement of the problem

Every modern organisation should consider to electronically design, develop and use appropriate electronic records to effectively manage organisational or institutional information. Although electronic records are generally viewed as advantageous due to ease of access and sharing, easy to edit and being environment friendly, it would seem that some ECD centres in Gweru urban are stuck, doing the bulk of record keeping on paper and by hand. They lag in technological development in record keeping while some progressive institutions are going digital, and this is a cause for concern.

Research questions

This study was guided by the following research questions:

1. Which ECD records are not kept electronically at child centres?

2. Which records are kept electronically at ECD centres?

3. What do administrators and care givers perceive as advantages and disadvantages of keeping e-records at ECD centres?

4. Why are some ECD centres not keeping ECD records electronically?

5. How could the perceived challenges be redressed or minimised?

Significance of the study

Views and suggestions given in this study, by caregivers and ECD centres' administrators would help ECD teachers and administrators to view keeping of e-records at ECD centres in a positive way and discuss the best ways of incorporating modern technology in the management of ECD centres and activities taking place at these centres. This would lead to the development of technologically oriented and creative ECD caregivers and administrators in the 21st century and beyond. Since education and technology are intertwined, the learner and the community at large would benefit, in the long run, from technological growth at ECD centres. Levels in the lag in technological development at learners would be reduced.

Theoretical framework

The Unified theory of acceptance and use of technology (UTAUT) model was chosen to guide the study. The unified theory of acceptance and use of technology (UTAUT) is a technology acceptance model formulated by Venkatesh and others in "User acceptance of information technology: Toward a unified view" Venkates et al (2023). The UTAUT aims to explain user intentions to use an information system and subsequent usage behavior. The theory holds that there are four key constructs: 1) performance expectancy, 2) effort expectancy, 3) social influence, and 4) facilitating conditions. Thus, UTAUT examines the acceptance of technology determined by the effects of performance expectancy, effort expectancy, social influence and facilitating conditions (Marikyan & Papagiannidis, 2023).

The first three are direct determinants of usage intention and behavior, and the fourth is a direct determinant of user behavior. Gender, age, experience, and voluntariness of use are posited to moderate the impact of the four key constructs on usage intention and behavior. The theory was developed through a review and consolidation of the constructs of eight models that earlier research had employed to explain information systems usage behaviour (theory of reasoned action, technology acceptance model, motivational model, theory of planned behavior, a combined theory of planned behavior/technology acceptance model, model of personal computer use, diffusion of innovations theory, and social cognitive theory (Marikyan, & Papagiannidis, 2023, Theory Hub: Unified Theory of Acceptance and Use of Technology).

Review of related literature

This review of related literature comprises the following sections:

1. Types of records kept at ECD Centres
2. Benefits of keeping electronic records
3. Disadvantages and Challenges of keeping electronic records
4. Suggestions of redressing limited use of ICT records at ECD Centres

Types of records kept at ECD Centres

ECD centers comprise stand-alone privately owned ones and those attached to primary schools. There are official records that are supposed to be kept by all ECD centers and pre-schools in Zimbabwe. These include social record, developmental checklist record, environmental checklist record, health record, anecdotal record and Ministry documents, (Chiparange and Saruchera, 2016). The purpose of each record is clearly stipulated in the statutory instruments/syllabus. Chiparange and Saruchera (2016, p136) discuss some of these records, thus:

Anecdotal record: It is a brief description of an incident focusing on the child's social, emotional, physical, aesthetic and cognitive development and is written soon after it has occurred. The teacher should record some extra- ordinary or unusual piece of learning by the child or an important development in relation to other leaners.

Environmental checklist: This is used to check on the safety of playing materials and equipment.

Health records: Heath record may be used to show information based on the medicine to be taken by children not feeling well and their other health problems. It may also show the child's nutritional status. The type of food that the child does not take may also be recorded so that care givers at the ECD center may not give it to the child. Measurements such as weight and height of the child should also be taken.

Social records: The social record may show stipulated variables such as name, surname, date of birth, distance from school, names of parent/guardian, denomination of parent/guardian, their occupation and contact details.

The health and social records are useful in that they enable caregivers to be familiar with the child's home and cultural background, factors which, if positive and conducive, would lead to effective instruction and emotional and psychological development of the child.

According to Ojo and Obimuyiwa (2019, p.185), manual records are those kept in the form of printed documents kept in hardcopy files, in the shelves or in the drawers, "while electronic method involves storing of vital information in electronic devices such as computers, flash drives, card readers and disks." However, Chiparange and Saruchera (2016) and the Ministry syllabus did not mention whether the records referred to in the Zimbabwe context were manual or electronic.

Martina and Ngulube (2019) conducted interviews with some District Education Officers and the Provincial Education Director in Bulawayo province who confirmed that each primary school was supposed to prepare and have the following types of records: property records, finance records, administrative records, health and safety records, personnel records, school curriculum records, school pupil records, school management records and school governing body records. However, the researchers found that out of 86 schools, only one had an electronic records management programme. The rest could have neglected managing their electronic records or some did not have such records at all in the first place.

It can be observed that there are some similarities between records stipulated for ECD centers and those for primary schools. Records that are mandated by owners of ECD centres or by the Ministry are statutory records. Schools are not prohibited from keeping other records which are not statutory. Hanior (2018) citing Adebayo 2014) says the non-statutory records in Nigeria include (i) Cash book (ii) Stock book (iii) Punishment

book (iv) Calendar (v) Inventory book (vi) Staff meeting minute book (vii) School magazine (viii) Inspection or supervision report file (ix) Confidential report forms and (x) Requisition book. Hence, the records that are supposed to be kept may vary from country to country, school to school or ECD centre to another ECD centre.

Records, whether statutory or not, serve "… as a bank where vital and crucial information concerning both students and the school are deposited for future reference and retrieval" (Ujah, 2016, cited in Hanior, 2018, p. 121), and even for immediate reference when the need arises. For instance, they may serve to check whether a leaner has already paid fees or not and should therefore write the examination, to find out whether parents and teachers are adhering to what they agreed in the previous meeting, and so on. Hence, the proper and accurate keeping of school records is very important.

Types of electronic records include electronic images, electronic mail messages and databases (Matina and Ngulube, 2018). Zebrok and Smyrnova-Trybulska (2015) refer to electronic records as e-registers. They say (p. 95) that:

An electronic register is software used to gather all and any information about the activities of a school. E-registers record lesson topics, attendance data, leaners' grades or scores, information on the teaching and learning process, personal data, etc. In addition, e-registers have various features - they can print school reports, student IDs, grade sheets, letters, and can synchronise data with other applications.

Benefits of keeping electronic records

Several benefits of keeping electronic records have been documented. These include satisfying governance (or for administrative effectiveness), identity, research, memory, and organisational accountability needs (Matina & Ngulube, 2019, Ojo & Obimuyiwa, 2019). Teachers or school authorities may use the electronic records to check on the attendance of leaners and communicate their findings with parents. This may lead to improved student attendance rates as a major advantage (Zebrok and Smyrnova-Trybulska, 2015). Further, these researchers contend that e-registers make management by school heads more efficient, improve the documentation of the teaching process, facilitate the work of the teacher, and make it more difficult for students to resort to acts of be indiscipline.

Disadvantages and Challenges of keeping electronic records

Despite electronic records having some benefits as stated above, they may also have their own disadvantages. Matina and Ngulube (2019, para. 36) support this view by saying "Electronic records pose a unique challenge when compared to traditional paper-based records." Failure to manage the records may have a negative impact on school governance, educational productivity, community needs and even on the Ministry regulations. Some of the challenges were that (1) electronic records depend upon specific hardware and software to be created, maintained, accessed, and used (technological obsolescence), (2) electronic media has a limited lifespan and is fragile, and (3) shortage or lack of electricity supply, and in some cases, internet connectivity, may affect the use of electronic records. E-records are 'fragile' because they can be corrupted or rendered unreadable by the stroke of just one key (Hanior, 2018, p. 124).

Chiparange and Saruchera (2016) have pointed out the challenge of using a developmental checklist as that it is concerned with first-hand information, so that if there is large class enrolment, the teacher can fail to record an important incident because he/she was concentrating on another leaner.

Some general challenges of records, regardless of whether they are electronic or manual were cited as;

a. Fire outbreaks- fire may destroy records, sometimes beyond retrieval or repair.

b. Flooding, especially in low lying places in rural ECD centres. For example, in Nigeria, many schools were affected in 2012 due to flooding (Hanior, 2018).

c. Pests and rodents: pests and rodents such as mice and cockroaches may chew and damage cardboard boxes, books, art projects, plastic bags, electric wires and other computer hardware.

d. Improper storage: which implies that it would take precious time to retrieve the documents. Improper storage may also result in mixing up things, etc.

e. Irresponsibility on the part of teachers and secretariat staff: Irresponsibility on the part of teachers and secretariat staff may result in falsification of school records. Unauthorized persons like the class prefect or non-academic staff may be asked to mark class registers or to fill in other records. They may not do it properly since they are not trained or experienced for that. The result would be inaccurate, exaggerated or false information, resulting in negative consequences to the institution.

f. Inadequate supervision of teachers, secretarial and other staff members: This means that the teachers or other staff members, if not properly supervised, may keep shady records or may keep nothing at all.

g. Lack of records manual and filing guidelines: If these are lacking the ECD centres and schools may have a huge task preparing and maintaining these records.

Suggestions of redressing limited use of ICT records at ECD Centres

In the reviewed literature the general suggestions for redressing the ICT records were:

(a) there should be regular and systematic monitoring of pre-school caregivers through observation and feedback by educational officials (Chiparange & Saruchera, 2016),

(b) there is need for record management manual and policy at the centers (Matina and Ngulube, 2019),

(c) electronic records should have appropriate security- well kept, well ventilated, antivirus and password protected (Matina & Ngulube, 2019), and

(d) there is need for technical support - more computers, more printers, cameras installed at ECD centers, internet which is readily available, secure, and reliable (Zebrok & Smyrnova-Trybulska, 2015).

In general, the record challenges mentioned in the previous section above can be redressed by ECD centres and schools if they have technical support, financial support and support in the form of proper training and induction programmes. All stakeholders (parents, teachers, administrators, care givers, and the Ministry authorities) need to work together in the records keeping, usage and management systems to enhance educational productivity of the leaners.

METHODOLOGY

The qualitative paradigm was used to ground the study. The qualitative research gains access to people's social and cultural constructions of their reality (David, 2014). In this study the qualitative research was employed because it is contextual, being collected in a natural, real life setting often, over a long time. In 2021, data were generated from eight ECD centres and at the beginning of 2023, data were generated from additional six ECD centres. In line, with the characteristics of qualitative research outlined by David (2014) and Mason (2002) the study was carried out through contact within the real-life setting (Early childhood development centres) and the main focus of the study was to understand how the caregivers and ECD centre administrators acted and accounted for their actions in record keeping at ECD centres. The explanatory case study involved 14 ECD care-givers and five ECD administrators in Gweru urban areas. The explanatory case study design was used because the phenomenon which was investigated was heavily influenced by the context, namely, the ECD settings. The design was suited to the provision of contextualized data (David, 2014).

Open questionnaire data were subjected to interpretations including voices of those who were studied as well as those of the researchers. Verbatim accounts of participants were objectively coded. According to Yin (1994) case study research is an empirical inquiry that investigates a contemporary phenomenon within its real-life context and is associated with 'what' 'how' and 'why' questions, and such questions guided this study. Purposive and convenience sampling were employed. Information-rich cases which were most easily accessible were sampled for data generation. Participants were guaranteed of informed consent. Participants

were given the choice to take part in the study. An open-ended questionnaire which was self- administered to the participants gave information on the purpose of the research and expected benefits. In reporting the findings, participants were made anonymous.

FINDINGS

Demographic Data

All the 19 participants were women and five of them were administrators- cum- care givers or teachers. This could be an indication that the domain of Early Childhood Development is women dominated and that in developing countries childcare is largely for women. Eight out of 19 participants had taught for a period ranging from 0-5 years, four had taught from a period ranging from 6-10 years and seven had taught at ECD level for more than ten years. Fifteen participants were teaching either ECD(A) or ECD(B) while four were teaching either Grade 1 or 2.

Questionnaire contributions

Q1: State the ECD records that are kept electronically at your ECD centre.

Contributions to the questions were as given in Table 1 below.

Table 1: ECD Records Kept Electronically

Stated record	Number of responses
Financial records	**1**
Registration forms	**1**
Attendance registers	**3**
Skills Checklists	**2**
Schemes of work	**5**
Lesson plans	**1**
Social record book	**1**
Pre-reading book	**2**
Individual progress record	**1**
None	**8**

Five times, participants opined that schemes of work were designed electronically, twice it was indicated that Skills Development checklists were kept electronically, while five participants gave the view that ECD centres kept e- Attendance registers. Only once was it stated that individual progress record, social record, lesson plans, registration forms and financial records were kept electronically at ECD centres. In addition, seven participants gave the view that no ECD records were kept electronically at their centres of operation. The responses by participants to Question 1, generally showed rather insignificant use of electronic records at ECD centres and this could be a sign of lag in technological development at ECD centres**.**

Q2: State the ECD records that are not kept electronically at your ECD centre.

Data generated on Question 2, were as presented in Table 2 below.

Table 2: ECD Records Not Kept Electronically

Stated record	Number of responses
Logbook	**7**
Inventory	**7**
Child Study	**7**
Anecdotal	**9**
Outreach record	**5**
Attendance registers	**14**
Skills Checklists	**14**
Schemes of work	**10**
Lesson plans	**12**
Social record book	**15**
Pre-reading book	**16**
Individual progress record	**17**

Seven participants gave the view that Logbooks, Inventory records and Child study records were not kept electrically while 9 participants indicated that at ECD centres Anecdotal records were not kept electronically, and 5 others stated that the Outreach records were not kept electronically. It was opined 14 times that Attendance registers and Skills Developmental lists were not kept electronically. Ten participants gave the opinion that Schemes of work were not kept electronically, whereas twelve were of the view that Lesson plans were not kept electronically. Fifteen times, it was stated that Social records were not monitored electronically and 17 participants opined Pre-reading records were not kept electronically. Probably, records such as Anecdotal and Child study were listed by fewer participants because they are mainly designed for learners at ECD(A) and ECD(B) only. That only five participants stated the Outreach records were not kept electronically could indirectly imply that at some centres, caregivers do not take part in Community outreach programmes. Opinions showed that most of the ECD records were not kept electronically. To further establish this general observation question 3 was paused.

.**Q3:** In your opinion what are the advantages of keeping ECD records electronically?

Nine of the participants subscribed to the view that use of electronic records was in line with movement towards paperless societies. In support of this view the following contributions were made by some participants:

C12: E-records save stationery and regains space.

C11: Electronically kept records are easily accessible and reduces amounts of paper used.

C17: Contributes to a cleaner working environment.

C18: Storage is orderly and issues of illegible handwriting are done away with.

Seven participants were of the opinion that electronically kept records had the advantage of being easily editable, were easy to read and easy to share or circulate even to parents. The following contributions buttressed this finding:

C3: Encourage consistent recording and updating.

C7: You can neatly alter information easily.

C9: Changes can be made easily.

C15: E-records can be shared easily with modern members of staff and modern parents- they appreciate that

Electronically kept ECD records were considered as easy to use, portable and easy to share by six participants. In line with these sentiments, the following contributions were made:

C11: Storage is orderly.

C13: Easy to use- very fast to retrieve.

C16: Not a hassle to carry around.

Two participants gave the view that electronically kept records are not easily damaged and they are easy to back up in case of disaster.

Two participants shared the view that use of e-records in ECD contribute to the modernity and appreciation of the institution. The two participants made the following contributions:

C15: Everybody cherishes newness or being contemporary

C 16: Use of e-records is a sign of creativeness and being modern is a need in modern society

Q4: State what you think are drawbacks of keeping ECD records electronically?

Eleven participants opined that ECD staff members lack ICT skills and this presented itself as a hindrance in keeping ECD records electronically. In some of this view the following contributions were made:

C9: If you cannot use a computer, it's difficult to keep records electronically.

C16: Lack of skills and expertise in using electronic gadgets is a disadvantage.

The opinion that use of ECD electronically kept records was an expensive venture was given by eight participants. Some sentiments were given as follows:

C1: Electronic gadgets are expensive to procure even by and for ECD staff.

C7: Schools can't afford.

Absence of power was viewed as a disadvantage in using electronic records by ten participants.

C15: When there is no electricity work can be disrupted.

C2: Computer gadgets can run out of power.

C5: Without electricity the idea of keeping electronic records, is a dream.

C16: Power outages or shortages are a hindrance in trying to keep e-records at centres

The opinion that safety and confidentiality could not be guaranteed in keeping electronic records was expressed by 7 participants. The following contributions were made:

C3: Loss of e-records is highly possible. In the case of virus attack, one easily loses the records.

C5: Confidentiality is hard to warrant – information can leak easily- if one doesn't have a concealed password

C3 and C15: E-records are vulnerable to hacking

Q5: Is there minimal or maximum use of ICT in record keeping at ECD centres? Give reasons for your answer.

Seventeen out of 19 participants were of the view that there was minimal use of ICT in record keeping at ECD centres while only two participants acknowledged full use of ICT in record keeping at ECD centres. Absence of ICT equipment, absence of electricity and the actual essence of specific ECD records were cited as reasons for limited use of ICT in record keeping at ECD centres. The following contributions buttress these opinions:

C2: Because most records, including attendance registers require handwriting.

C10: The centre has no electricity or any other source of power

C12: Most of the times electricity will not be around and the machines are very few.

C15: Limited number of computer gadgets and continuous power cuts.

C16: Most centres are not financially stable to procure ICT gadgets

One out of the two who gave the opinion that at their ECD centres there was full use of ICT made the following contribution.

C11: We have realised that keeping records electronically will save us from buying too much bond paper, and the staff at the centre keeps abreast of technological development

Q6: What could be done to redress limited use of e-records or further maximise the use of ICT in record keeping?

Responses to question 6 were as presented in Table 3.

Table 3: Suggested Amends by Caregivers

Suggested amends	Number of responses
Provision of computers /laptops/ smart phones	16
Staff development on use of ICT	8
Provision of power	4

Sixteen out of 19 participants suggested availing of computers to facilitate keeping of ECD records electronically, while eight participants recommended staff development on use of electronic ECD records. In line with these views the followings sentiments were given:

C11: Introduce more computers and teach us how to use them.

C10: Centre to provide gadgets like laptops and Smart phones.

C14: Continuously teach teachers about not lagging behind use of ICT in keeping records and importance of keeping records electronically.

C5: Fund raise to buy ICT tools.

Only four contributors gave the view that to guarantee meaningful keeping of e-records at ECD centres, power should be provided. One of the participants made the following contribution:

C15: Introduction of solar systems at centres could make a dream come true.

Q7: What other comments do you wish to make?

Some of the comments which were made include the following:

C8: Keeping ECD records electronically should be the in thing- it should be the new normal since we are in the world of technology where everything is almost computerised.

C11: It is always wise to keep records on hard and soft copy.

C16: ECD centres should embrace use of ICT in record keeping as it is fast, modern, accurate.

Focus group contributions

Views given in the focus group were largely the same as given in the questionnaire contributions, but the following opinions were distinctly given.

In the focus group participants shared the view that centres and schools did not expect staff to keep e-records. On this view the following sentiments were given*:*

It is not a requirement by the centres or schools to keep ECD records electronically.

Nowhere is it mandatory for ECD records to be kept electronically.

We aren't required or forced to produced e-records at the centres, *paper documents are still acceptable.*

Some participants gave the view that staff did not make personal effort to use e-records. On this view the following sentiment was given, among others:

Tradition is the issue; staff members aren't just willing to use e-records even if power and computers are available.

DISCUSSION

When participants were requested to state records that are kept electronically at ECD centres, an array of records was given. Records were given as follows: Financial records (by 1 participant), registration forms (by 1 participant), attendance registers (by 3 participants), skills check lists (by 2 participants) , schemes of work (by 5 participants) , lesson plans (by 1 participant), social record book (by 1 participant), pre-reading book (by 2 participants) and individual progress record (by 1 participant).The finding that several ECD record are kept electronically is in support with Obotu et.al (2018) who say that at any institution, different types of records are kept , depending on the activities taking place at an institution. At ECD centres many activities take place and they include actual teaching, observation of children, administrative duties, inter alia and all the different activities demand record keeping which is meant to serve diverse functions. Some functions relate directly to children's learning, to ECD administration, to the Ministry of Primary Education and to parents and guardians of children. The finding that participants indicated very minimal use of electronic ECD records buttresses Chetleg (2010) cited by Obotu et al (2018) who is of the opinion that implementation of electronically kept records has had limited success.

Participants indicated severally that ECD records were not kept electronically as indicated by findings for Question 2. The finding that participants indicated very minimal use of electronic ECD records buttresses Chetleg (2010), cited by Obuto et al (2018) who is of the opinion that implementation of electronically kept

records has had limited success. Seventeen out of 19 participants were of the view that there was marginal use of ICT in record keeping at ECD centres while only two participants acknowledged full use of ICT in record keeping at ECD centres.

Nine of the participants subscribed to the view that use of electronic records was in line with movement towards paperless societies. This finding is tandem with Chetleg (2010) in Obuto et al (2018) who opines that electronic records are a growing phenomenon that is considered a cornerstone of modern healthcare systems of the current information age to the extent that failure to adopt electronic records system may constitute a deviation from the standard of care.

Seven participants were of the opinion that electronically kept records had the advantage of being easily editable and were easy to read. This opinion is in support of Girish & Richard (2006) in Obuto et al (2018) who say illegible handwriting and use of confusing abbreviation limit the value of paper-based records.

Electronically kept ECD records were considered as easy to use, portable, readable and easy to share by six participants. Some participants gave the view that electronically kept records are not easily damaged and they are easy to back up in case of disaster. This finding contradicted Dollar (2002) who gives the opinion that, unlike paper, loss of electronic records is guaranteed unless actively managed and that paper can be archived for 100 years. This shows much differences in opinion.

In sharing views on the drawbacks of keeping ECD records electronically, participants opined that ECD staff lack of ICT skills presented itself was a hindrance in keeping ECD records electronically. Absence of power and the expense of installing power systems was viewed as a disadvantage in using electronic records. The opinion that safety and confidentiality could not be guaranteed in keeping electronic records was expressed too by participants. All the three findings in this research support the findings in a study conducted by Obote, et al (2018).

Some focus group contributions including the view that centres and schools did not expect staff to keep e-records. It is not a requirement by the centres or schools to keep ECD records electronically and that staff did not make personal effort to use e-records even if resources necessary for the development and use of electronic records at ECD centres and that tradition and age were the issue, staff were all not in tandem with any of the consulted literature but the opinions expressed in the focus group and via the questionnaire match clearly with variables or constructs in the UTAUT model, which are: performance expectancy, effort expectancy, social influence, and facilitating conditions.

CONCLUSION

Several records are kept at ECD centres in Gweru urban since ECD records are vital tools that centres require in order to attain the visions of ECD education. Due to several hindrances, development or creation and monitoring of electronic records was viewed as very minimal, although participants perceived use of electronic records as relevant to modern times and having many merits.

RECOMMENDATIONS

The researchers recommend the following:

1. Training of ECD staff by ECD centres to improve their appreciation of ICT and their ICT skills to make them more relevant in the present day technologically driven educational upkeep.

2. Ministry of Primary Education should be involved in the funding of E-records system development and actual implementation of use of E-records at ECD centres.

3. ECD centres should not depend entirely on power supply by Zimbabwe Electricity Distribution Company but should purchase and use stand by power sources.

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