

## **E-counselling implementation: Students' life stories and counselling technologies in perspective**

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### **ABSTRACT**

Given the current global trend of mimicking real life situations into digital counselling games and its related digital counselling platforms, we decided to contextually understand from the Ghanaian senior high school students, their life challenges arising from their life stories. The study also explores the extent to which ICT is currently being used to provide counselling services to students. Questionnaires and interviews were used to collect data from selected students and a school counsellor. The selected students were made to write about their life stories subjectively. The content of the data was analyzed. After that, students' financial status was identified as the main challenge to their academic pursuit, though several other difficulties were revealed in the study. The study also showed that students had little knowledge about the use of ICT in counselling and only used email as the only digital tool for counselling delivery. The purpose of the study is to use the findings as a basis to develop a digital counselling game in our next study. Again, the study is intended to serve as a guide for researchers when designing a digital counselling platforms for senior high schools.

**Keywords:** E-counselling; Face-to-face counselling; Student's life story; Digital counselling game.

### **1. INTRODUCTION**

The history of e-counselling (Tate, Jackvony & Wing 2003) or online counselling (Shiller 2009) began in October 1972 (Wardell 2008). The first online counselling was demonstrated between computers at Stanford and University of California, Los Angeles in International Conference on Computer Communication (Wardell 2008). Since then, the rapidly expanding field of the e-counselling raises concerns among practitioners about the efficiency of the traditional face-to-face counselling in relation to the emerging new method of e-counselling (McHugh 2009, Wang et al. 2010). Given that, the internet and its related web resources, has taken counselling service beyond the face-to-face to electronic-based counselling services (Brown 2011). However, the essence of the emerging pace of technology in counselling is not meant to replace the existing traditional face-to-face counselling method. The face-to-face counselling method is nonetheless still a necessity and applicable (Zamani 2009). Tait (1999) also emphasizes the need to re-consider the face-to-face counselling method in counselling delivery. Thus, ICT needs to be integrated into the traditional face-to-face counselling for the diversity in counselling delivery (Obi et al. 2012) in order to alleviate the problems connected with the face-to-face counselling method. In this regard, the efficiency of the counselling methods needs to be rigorously explored in order to meet the needs of clients. Counselling in the Ghanaian senior high schools has existed for years until 2007 when the Ministry of Education re-emphasize the need to resource the centres with state-of-the-art facilities in order to augment the services (NERIC 2007). Conversely, the first researcher's prior experience as a teacher confirms that some educational counsellors in Ghana are reluctant to adapt to the emerging counselling technologies, and this is mainly due to their incapacity to use technology.

Sanders and Rosenfield (1998) define e-counselling as a counselling method through the medium of telecommunication technologies such as telephone, internet and teleconferencing. Digital counselling game is gradually emerging as an effective tool to leverage students into holistic self-

management and development (Bada 2013). However, mimicking students' life challenges into digital counselling games and its related platforms is unconventional in the Ghanaian context, and this is undoubtedly a new dimension of rendering counselling services to students. Sedano (2010) describes the contextual digital game as hyper-contextual. Hyper-contextualised game is a locally designed game which seeks to depict the context for which it is developed (Sedano 2010). The study is therefore focused on the understanding of the students' life challenges arising from their life stories. The study also examines the current use of ICT in the counselling units of the senior high schools. The content of the collected data from the participants was analyzed in line with the Interpretivists philosophical paradigm. It is clear and common that the deviant behavior of students stems from the challenges they face in life. Students explore all the available means in order to survive and this may lead to unacceptable societal behavior (Ghana education Service 1995). Duveskog et al. (2009) outline drug abuse, alcoholism, domestic violence and rape as social vices that have a negative impact on students and the society as a whole. The Ghanaian society frowns on this deviant behaviour (Ghana education Service 1995). Devising appropriate tools and framework to encourage students to tell the difficulties in their lives can help counsellors to deliver efficient counselling services to them. School counselling services are expected to help individual students to access and derive benefits from, career development and self-actualization. Thus, to achieve such effectiveness, there is a need for diversification of counselling methods to accommodate all students especially students living in remote areas. Duveskog et al. (2009) have demonstrated in their story-based platform for HIV/AIDS counselling in Tanzania that the essentiality and success of contextual digital platforms are largely dependent on the views of students and the challenges in their lives.

## **2. STATEMENT OF THE RESEARCH PROBLEM**

The education sector's medium-term development plan for 2010-2013 in Ghana identified the use of ICT skills and knowledge as a key challenge facing the senior high school sector. It discovered the problem that a sizeable number of the senior high students and counsellors are technically incapable of using ICT tools and the internet resources to facilitate counselling services (Ministry of Education 2009). It is common that some students have inherent difficulties that affect their academic work. Some of these problems are due to the challenges in their lives, and this may hinder their capabilities to perform well academically. The emerging social vices such as drug abuse, rape etc, in Ghana are on the ascendancy especially in the senior high school sector (Ghana education Service 1995). While students often get addicted to these social vices outside the confines of the school, others are being influenced by their peers within the school set-up. This is alarming and has led many students astray resulting in poor academic performance (Ghana education Service 1995). The use of alcohol and other related problems are increasingly becoming a public health concern, and they represent one of the leading causes of preventable deaths, illnesses and injuries (Ghana education Service 1995). The researcher recognizes the serious nature of the problem and intends to understand it from the life stories of students, their difficulties and how it affects their academic work. However, there is the need for e-counselling designers to probe into the students' life stories in order to design a counselling platform as part of user-centered design approach, thereby improving on user experience. A digital counselling game can also be developed in order to mimic the life challenges of students, thereby helping students to cope with their challenges when it comes.

## **3. CONTEXT AND THEORETICAL FRAMEWORK**

The study is mainly focused on the e-counselling implementation in the Ghanaian senior high school sector. Ghana is located in the western part of sub-Saharan Africa. The country, previously known as the Gold Coast, was under the British colony until independence on March 6, 1957. The history of education in Ghana dates back to the colonial and post-independence period (Zame *et al.* 2008). Given that the country was a former British colony, most civil institutions, including the educational system were inherited from the British. The educational system was modelled exactly like that of Britain until the post-independence era when major reforms were introduced (Zame *et al.* 2008). In the old educational system handed down to us by Britain, the duration of basic education was ten years, comprising six years of primary school and four years of middle school. After this level, one could join the working force or proceed to higher level called secondary school

(now called senior high school). The secondary school lasted for seven years altogether. After five years one would obtain the GCE Ordinary Level ('O' Level), and then two more years to obtain the GCE Advanced Level ('A' Level). After the 'A' Level, one could then proceed to the University provided the required grades were obtained. It was not until the late 1980s, when major reforms were undertaken (History of education n.d). The old system was restructured, abolishing the middle school and shortening the secondary level from seven to five years.

The 2007 education reform was introduced to transform the sector by introducing ICT as a main program in the senior high school curriculum to meet the change in technology. Although the 2008 educational policy act 778 has since been the current educational policy, but it only place emphasis on the 2007 educational reform with minor changes. Zame *et al.* (2008) identified inadequate leadership, management and administrative training as the main challenges associated with the head teachers to oversee the administration of schools. They also reiterated that less effort had been put in place to address those challenges. In line with that they were of the view that the reform could have made provisions for effective leadership and management. It is common in Ghana that most head teachers are teachers who have risen to the leadership position due to long services. This does not give automatic administrative skills to manage an educational institution. Zame *et al.* (2008) have also called for the educational policy implementers to recognize the strong relationship between implementation of educational reform, effective schools, and the leadership abilities of head teachers. They identified these relationships as equipping the head teachers with the knowledge, skills, and disposition to handle effective school organizations. The core aim of an educational system which seeks to train students in the academic perspective as well as improve the good moral standards would not be achieved if the head teachers, counsellors and other auxiliary staff do not have the requisite and well nurtured skills to efficiently and effectively manage a school with a particular focus on counselling.

### **Technologies in counselling**

Zamani (2009) and Shiller (2009) identified email, chat, video-conferencing and text messaging or short message system (SMS) as widely used e-counselling tools in counselling sessions. Future-based simulation with role-playing (game) in which learners' imaginations are engaged (Jarvis and Gangitano, 2007) is one of the most effective strategies for learning and to develop a career and life management.

**Counselling games:** Game is a competition among players or against oneself. Bada (2013) describes games as a set of activities that involves one or more players who has goals, constraints, payoffs and consequence. The motivational aspect of a game is to win or play for fun (Bada, 2013). The thrilling part is the failure to attain the desired winning points. This, intention drives people to continue playing. Students may have perceived winning as the motivational factor, but games are usually meant to carry a message or to educate. Digitizing a real life situation in the form of game is currently an important tool to sensitize and expose students to the realities of life.

**Email:** Electronic mail, widely known as email, is a form of communication transmitted electronically using computers. It is tremendously faster than all previous means of communication, for instance sending letters using the traditional postal system. It is therefore not surprising that email has been widely adopted by a large section of the world's population as their preferred means of communication. It is widely used in business communication because of its nearly instantaneous nature. Sending email is free, except the cost of paying for the infrastructure such as a computer and Internet connection. Zamani (2009) points out that email is an ideal platform or medium for people with different time schedules, providing an opportunity for introspective responses. Nevertheless, sending email is associated with security issues which makes it difficult for a counsellor to guarantee a water-tight confidentiality. Ralls (2011) worries about the confidentiality issues associated with the use of email in counselling, and cautions that email conversations are not secured without any means to protect it. However, he advocates that confidential information on the internet can be shared over a secured server; otherwise, only general information could be requested and provided. Indeed, emails can also be encrypted over the internet for secure confidential materials.

**Instant messaging and chat:** Instant messaging and chat are communication technologies which use text-based communication (Jennings et al. 2006). The communication often involves two or more people over the Internet or other related networks. Instant messaging (IM) is a private network communication between two users, whereas a chat session is the network communication between two or more users (Jennings et al. 2006). Chat provides virtual group session for chatting, and permits more than one person for information sharing or counselling services. Counsellors could virtually engage students into counselling with the intent of providing group or individual counselling. Zamani (2009) described chat and IM as synchronous (happens in real-time), and noted that participants have to be logged on at the same time for chatting or messaging. In this regard, time and scheduling become vital since parties have to be on the platform at the same time. Chat or IM sessions can either be private, where each user is invited to join the session, or public, where users also join the session on their own initiative (Jennings et al. 2006). In addition, some IM systems allow file transfers, webcam usage, using privacy controls, maintaining buddy lists, voice chat sessions, and other options (Jennings et al., 2006). Grohol (2003) also identified chat as one of the widely use forums for online counselling in the world. Chats and IM platforms virtually run on portable device, ranging from standard mobile phones (Aker and Mbiti, 2010) to smart phones.

**Video conferencing:** Down (2009) described video-conferencing as a method of conferencing between two or more locations where both sound and vision are transmitted and received. The platform allows simultaneous interactive communication between users. Optional sources include still images and/or moving sequences from a video recorder, a DVD or a PC (Down 2009). Suler (2000) describes video conferencing as synchronous and provides participants with the visual and spoken communication. According to Down (2009) a basic video conference requires a television camera to capture images of the participants, a microphone to pick up their speech and a means of transferring sound and vision information to the remote location. Video Conferencing requires the participants to sit in front of a camera and are indeed expected to have compatible video equipment (Zamani 2009). Suler (2000) discussed the importance of video conferencing in psychotherapy in cyberspace for which he discovered that video conferencing provides multiple sensory cues, such as visual appearance, body language and vocal expression that can provide valuable information for understanding the client. Zamani (2009) also argued that video conferencing may be less ambiguous than typed text, which may lead to fewer misunderstandings. As much as speaking is faster than typing, video conferencing conveys information more quickly, and readily has a consequential benefit to those who express themselves better through speaking than writing. Down (2009) indicated that the quality of the received images can be compromised by the technology. The body language can be lost if movement is jerky or picture quality is reduced (Down, 2009). Also, there may be delays in the sound. When this happens, it is not good to continue exchanging information using the platform. The session becomes inappropriate because the sound comes in pieces and it becomes extremely difficult to put the pieces together in order to understand each other (Down, 2009).

#### **4. RESEARCH METHODOLOGY**

In this section, we present the data collection procedure, research questions and the research approach of the study. Data was collected from selected students and the school counsellor of Osei Kyeretwie Senior High School (OKESS). Stratified random sampling technique was used for the students' selection. The school population was classified into four groups called strata. "The strata are formed based on members' shared attributes and characteristics" (Investopedia 2014). The four groups are made up of four streams (years of study) which comprises the year one to four. Stratum in this research represents each stream of students according to their years of study. The basic idea of using this technique is to collect data evenly in order to minimize bias towards the levels of educational experiences.

Students were asked to write about their life stories in their own words, though there were other related questions that also touched on counselling technologies. Students and the school counsellor answered questions pertaining to this study. Students were interviewed after filling in the questionnaires. The simple random sampling technique was then applied to each stratum. The essence of the questions regarding students' life stories motivated the idea of giving out the questionnaires to students to go home (or dormitories), to be filled at their comfort and return by a

stipulated date. Eventually, thirty (30) students out of the intended fifty (50) students responded to the questionnaires. Nineteen (19) students out of 30 collected questionnaires responded in writing about their life stories. However, the remaining eleven (11) students who did not respond to the question that touched on their life stories may have done so due to the challenges encountered during the data collection stage. The key challenge was the difficulty to convince students to write about their life stories. Students who declined in answering the question about their life stories opened up to the researcher regarding the reasons for the declination upon a follow-up interview. They disclosed the fear of the data getting into the public domain was the main reason, though the confidentiality of the data was assured.

#### **4.1 Research questions**

Table 4.1 below represents the research questions and the purpose of the study.

***Table 4.1: Research questions and their respective purpose***

	<b>Research question</b>	<b>Purpose (objective)</b>
<b>RQ1</b>	How do students' life challenges affect their academic work?	To listen to students' life stories, and to deduce from them how their life challenges affect their academic work.
<b>RQ2</b>	To what extent does the counsellor and students use counselling technologies in schools, especially games to facilitate counselling services?	To find out the extent to which counsellors and students know and use e-counselling methods in schools.

#### **4.2 Research approach**

The content of the data was thematically analyzed using a qualitative research technique. The analysis focuses on providing answers to the research questions which are based on the students' life stories and their effect on their academic work. The analysis is also geared towards the extent to which ICT is used in the delivery of counselling services in the senior high school sector. Qualitative research questions are mostly "open-ended" that seek to give participants the room to respond in their own words, and these responses often tend to be more complex (Denzin and Lincoln 1994). Again, Denzin and Lincoln (1994) identified case study, personal experience, introspective, life story, interview, observational, historical, interactional and visual texts as typical examples of qualitative research. For this reason, qualitative research was appropriately deemed necessary for the study. The content of the students' responses was analyzed in line with the Interpretivists philosophical paradigm.

### **5. ANALYSIS AND RESULTS**

The section takes a look at the analysis of the data and the outcome arising from it. It focuses on the students' life challenges through their life stories. Also, the section takes a look at the analysis and the outcome of the current technologies in the school counselling unit, and this is discussed in Section 5.2.

#### **5.1 Students' life stories**

Data about individual students, especially about their life stories is crucial. This may jeopardize their life prospect either in a short term or long term if considerable care is not taken to protect the data. In this regard, a formal letter was forwarded to the headmaster of the selected school, and also to each selected students for their concern regarding students' life stories. Students' names and serial numbers were not recorded on the questionnaires, and thus has no link to the participants (students).

The researcher identified and categorized the challenges after going through the responded questionnaires as *financial problems (F)*, *academic challenges (A)*, *career challenges (C)* and *Psycho-social (health) problems (P)* as the main challenges upon the analysis of the data collected. Table 5.1 summarizes the responses from the nineteen (19) students who wrote about their life stories.

**Table 5.1** Summaries of the students' background, Life's challenges and reasons

No.	Age /sex	Challenge(s) F/A/C/P	Summary of reason(s)
1	20 F	A /P	<ul style="list-style-type: none"> <li>Lost her mother through death</li> <li>Delays in the school (OKESS) dining hall. This affects class and her academic work.</li> <li>School lacks facilities for academic work.</li> </ul>
2	18 M	F /A /P	<ul style="list-style-type: none"> <li>Parents divorced and staying with grandmother</li> <li>Trade on vacation holidays to raise money for school.</li> </ul>
3	17 M	F/A	<ul style="list-style-type: none"> <li>Lost his parents. Gets support from siblings.</li> <li>Trade after school for support</li> <li>Less time to learn</li> </ul>
4	16 F	A/P	<ul style="list-style-type: none"> <li>Lost her mother and father married away</li> <li>Living with her uncle</li> </ul>
5	16 M	F/A	<ul style="list-style-type: none"> <li>Living with parents, but difficult for parents to support him financial and academic.</li> </ul>
6	16 M	F/A	<ul style="list-style-type: none"> <li>Living with both parents, but father is jobless.</li> <li>Hawks on the street to sell sachet water for self-support.</li> <li>Very limited time to study.</li> </ul>
7	18 M	H	<ul style="list-style-type: none"> <li>battling with health problems</li> <li>But he failed to clarify the health condition.</li> </ul>
8	17 F	F/A/C	<ul style="list-style-type: none"> <li>Problems with organizing and managing her studies.</li> <li>Have no idea of her future career</li> <li>Difficulty in paying fees</li> </ul>
9	18 F	A	<ul style="list-style-type: none"> <li>Lives with parents</li> <li>Peers influenced her into lesbianism and this makes her academic work challenging.</li> </ul>
10	15 M	F/A/C	<ul style="list-style-type: none"> <li>Lives with parents with five siblings.</li> <li>Father is a police but difficult to take care of 6 children.</li> </ul>
11	19 M	F/C /P	<ul style="list-style-type: none"> <li>Lost his father. Lives with mother.</li> <li>Supported by uncle. Uncle is a teacher.</li> </ul>
12	19 M	F	<ul style="list-style-type: none"> <li>Lives with parents in a rented apartment.</li> </ul>
13	18 M	P	<ul style="list-style-type: none"> <li>Living with mother. Father stays elsewhere.</li> <li>lacks father's care</li> </ul>
14	16 M	P	<ul style="list-style-type: none"> <li>Lives with mother and grandparents</li> <li>Grandfather is a missionary.</li> <li>Parents are divorced.</li> </ul>

15	18 M	F	<ul style="list-style-type: none"> <li>• Lives with her parents</li> <li>• Brother finances his education</li> <li>• Wash cars for self-support.</li> <li>• Difficulty in paying fees.</li> </ul>
16	20 M	F / A	<ul style="list-style-type: none"> <li>• Lives with parents</li> <li>• Father works as a quality control officer.</li> <li>• Walks long distance to school. Misses some early lessons.</li> <li>• Hawk on street to support mother.</li> </ul>
17	19 F	P	<ul style="list-style-type: none"> <li>• Parents divorced</li> <li>• Lives with a family member.</li> <li>• Grieve over fatherly love, and how it has affected her academic and social life.</li> </ul>
18	17 F	F/C	<ul style="list-style-type: none"> <li>• Lives with parents</li> <li>• Does not know what career to choose for the future</li> </ul>
19	16 M	F/ P	<ul style="list-style-type: none"> <li>• Lost father. Lives with uncle</li> <li>• Uncle partially supports education</li> <li>• Mother is jobless</li> </ul>

The life story (No. 6 from Table 5.1) below represents a story of sixteen year male student who lives in a *compound house* with both parents. Compound house is a contextual term that describes a rented open house for two or more people or families. This is the extract of the story:

*"I was with my parents in Sekyere east and my father decided to move to the city to work to be able to get money to cater for my siblings and I. At that time all my father's brothers and sisters have moved to Kumasi remaining one. Three months after my father have went to Accra to work, every day the remaining one of his brother you come to our house and talk saying that my father have been sending us money without given him some. This brother day in and day out threat my mother with a knife to kill her so after one year so after one year my father came to pick us into the city. Until now my father is a casual worker and he only gets paid when he goes to work. Sometimes one month and my father will not go to work because there is no work to do and because of this he is not paid. My mother is not able to carry things as a result of carrying food and charcoal to cater for us when my father was not around and because of this she always complains of his head.*

*This has made me suffer a lot in life. I started selling water by the roadside when I was seven years old. After seven months I had a road accident when I decided to cross a road to sell water to someone. I was sent to the hospital and when I got well, I stopped selling the water. Two months later what we will eat was even a problem and this made me to sell soap anytime I close from school and weekends as well. Later, other people in the same house also started selling soap and this made my mother to stop selling soap and move on to sell **tom brown and wheat** till today. This has affected my educational performance and sometimes gets insulted by friends for selling as a male senior high school student"*

Sekyere East is a province in the Ashanti region of Ghana for which he first resided with the family. He was clear in the beginning that financial problems forced the father into the city from the rural community in search of greener pastures, but a paternal uncle who had a direct link to the father in terms of sending money through him denied them access to the money. He again admitted that the relationship between the mother and the uncle was not a good one, and this had brought about internal wrangling among them. He was quick to add that the uncle had threatened and still kept on threatening to kill the mother. This indeed was not conducive enough for the family and particularly for him as a student. Eventually, the father moved them from Sekyere East to Kumasi (a city in the Ashanti region of Ghana). The father is a casual worker. He does not work on a regular basis, so he gets paid based on how many times (hours) he works.

As innocent as he was at seven years, he started trading sachet water after school hours and weekends as a street hawker to make money for self-support and the support of the family. Sadly, he was once hit by a car while hawking on the streets to sell his tradable items. The mother's business was not also regular, and her financial support for the family was not good enough. The mother stopped selling soap after she noticed a competition from the same compound house. She then moved on to sell another food item called "tom brown". *Tom brown* is a kind of local food in Ghana. He was quick to add that his life and educational performance was affected, and the worst of it all was that he got stigmatized by friends because of the street hawking. It is uncommon for a male high school student to hawk sachet water on the street and this may have accounted for the stigma.

In fact, he also presented an emotional answer to a separate question that touched on the life challenges and the efforts to tackle them. He attributed most of the challenges to the number of siblings in the family. He said they were seven in number. Three each of them were currently studying at the Universities and the Senior High Schools respectively. The remaining one could not make it to the University. With this, he explained further that the father, who shouldered all the responsibility found it difficult to pay all the fees and cater for their welfare. Although he has not been able to find any solution to his life challenges, he revealed that he had had a face-to-face encounter with the school counsellor. Again, in response to a question on how he intended to end or minimize these challenges to have a smooth education, he vehemently stated that selling sachet water on the street was the only way to successfully complete the senior high school education since he could not think of any better solution to his predicaments. Ghana's economy is not robust enough to oversee the responsibility of helping needy students in education, though there are few non-governmental organizations that contribute to their social responsibilities by helping the needy.

The story above is a challenging one, and a threat to the academic work of a first year student who has just gained admission into a Senior High School. He also revealed that the encountered challenges were never shared with anyone including a counsellor until he gained admission into the senior high school. Three key challenges have been identified in the life story and they are *financial constraints*, *family wrangling*, which is a potential threat to his academic work, and *hawking tradable* items on the streets after school and weekends. Though, her financial constraints may not have been solved by a counsellor, but counsellors could have guided him to cope well with the situation and to lead him on to other opportunities rather than the hawking. Certainly, counselling is not meant to provide solutions to clients, but seeks to guide students on how to cope or deal with life challenges or perennial life challenges when they come, hence digital counselling games. However, counselling guides and leads individual students to make good decisions based on their current situation regarding self-management and development.

Threats by the uncle may have a psychological effect on the child upbringing. At that age, he is still ductile, malleable and susceptible to the environmental influence. The students are expected to use the after class time and weekends to study, but his case is the contrary, and this may affect his academic work resulting in probable withdrawal. Students who perform poorly at the end of every academic year are being withdrawn. Figure 4.1 is the researcher's code book arising from the analysis of the students' life stories.



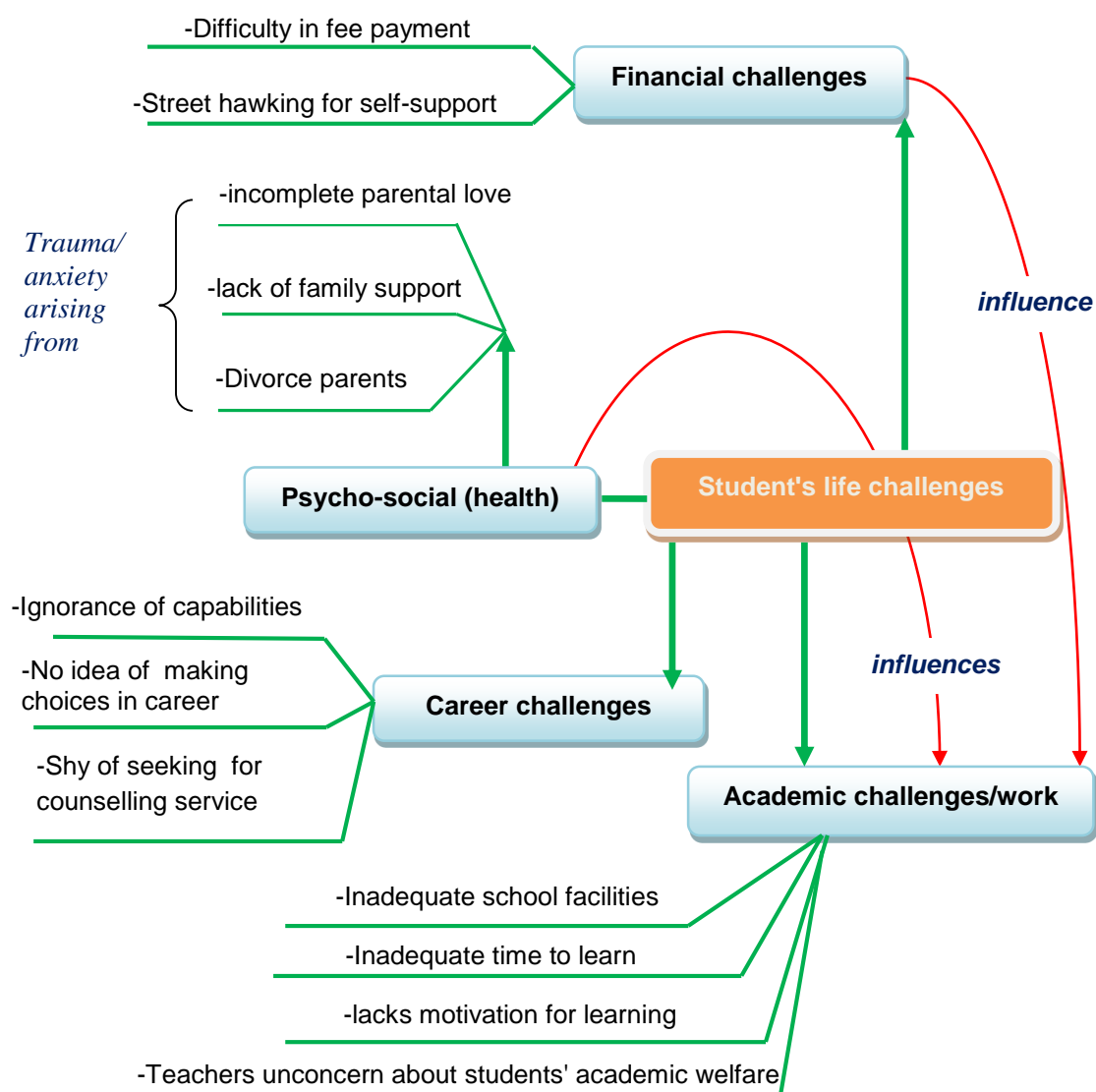


Figure 5.1: Mind map of the students' life challenges arising from their life stories

### **Counsellor's views on students' life challenges**

The school counsellor was made to answer questions relating to students' life challenges and the technologies used by the counselling unit. The school has a male counsellor within the age range of 31 to 40. He has a bachelor degree in the counselling profession, and has been in the school within 1 to 5 years practicing as a counsellor. The counsellor lives outside the school campus, a distance of 1 to 5km away. Although he conceded that the school has limited accommodation for the staff on campus, he was positive th/ 3222at staying outside the confines of the school environment was not the best. This was because it affected his duties and the profession as a whole, considering the contextual boarding system of education in Ghana. Thus, he was not able to exercise his responsibilities accordingly. He further explained that helping and guiding students was not limited to a time frame, and the profession required a lot of time to discharge counselling services to students within a regular or off the regular school time. The counsellor again was affirmative that students normally came to him to discuss their life challenges. He was quick to add that some of the students were not confident enough to disclose certain vital information about their life challenges. He further alluded to the fact

that his main challenge in the profession was the ability to lure students into divulging vital information that threatened their academic work

He also added that it was against the profession to accuse anyone of illegal act if he or she did not disclose it. Probing further, he explained that such unacceptable behaviour would go against the rules of the school and any student caught up in the act would be expelled from the school. However, a student was free to seek for counselling voluntarily devoid of any punishment. The counsellor spoke about drug addiction and bullying as some of the specific examples that students discussed with him. He also added that some of the stories were horrible and really put the academic performance of students in jeopardy. He, however, declined in giving specific examples of what he meant by horrible. Additionally, many students shared with him their financial challenges that impeded their academic work, and sometimes he got tempted by students to lend them money. However, he was quick to add that financial problems might have been the challenges of many students, but with a sound mind and good academic and career plan students could make it through.

## **5.2 Technologies in the school counselling unit**

The second research question is aimed at identifying the current counselling technologies used by the school and the students. The counsellor and the selected students answered questions to that effect. For this reason, several questions were asked, highlighting the tools and methods of counselling. Most of the questions were directed to the school counsellor, though students were also asked to give their views about the use of ICT in the school counselling. Subsequently, follow up interviews were conducted to ascertain views from the students regarding a digital game as a model for counselling.

### ***Counsellor's perspective***

The content of the questionnaires answered by the counsellor revealed that the school often organizes symposia and related counselling activities including orientation programs for students. Inviting experts from different fields to speak to students is important for counselling activities in the school. Students who are not courageous enough to see counsellors for help or guidance may have the opportunity in such programs to learn and plan. The forums and symposia are organized for students through a public address system. The counsellor revealed that the school engagement with students is limited within the confines of the school and he does not conduct counselling services for students in remote areas. However, in attempts to find out about the counselling method used by the school to send feedback to students or parents, he mentioned letter writing or typing, mobile phone calls and face-to-face session as the often used methods. He also added that email is rarely used to send feedback to parents. He was quick to add that the unit was not connected to the internet. Certainly, the entire school was not connected to the internet at the time this study was conducted except the students' ICT laboratory. He revealed further that there were challenges in implementing e-counselling technologies in the school and Ghana at large. He did not mention these challenges. Subsequent study will seek to unravel these challenges, and recommend measures for its effective integration.

On the question of digital game in counselling, the counsellor again expressed his desire for using games to aid in the counselling session. He disclosed that he had never seen any contextual digital game in Ghana especially for the senior high school sector. As a result, he expressed that integrating digital game into counselling would help students to understand and develop rapidly. The counsellor was positive about having learnt hope-centered model for career development (HCMCD) (Niles *et al.*, 2010) during his studies at the university. Consequently, the researcher briefed the counsellor on digitizing the hope-centered model for career development. On his last general comment about a digital game into counselling he expressed that the present generation had an insatiable taste for technology and the development of such programs would help minimize the workload of counsellors. Again, he was of the view that a large student population could be dealt with effectively and efficiently through such games.

### **Students' perspective**

With respect to students' responses to ICT in counselling, they were enthusiastic and wished to be engaged in a counselling session with the counsellor remotely. Some revealed that they could discuss and divulge information that could not easily be discussed face-to-face with the counsellor. Some students expressed worries about the ban imposed by the school authorities on the use of mobile phones and other digital devices while on the school campus. They further expressed their concern about the integration of ICT into counselling because the school rules had forbidden keeping electronic devices on school campus. On the contrary, others also expressed their dissatisfaction about the ICT integration simply because of their inability to use the ICT.

None of the selected students responded positively for having used any online tools for counselling. They showed ignorance of e-counselling and eventually attributed their ignorance to the school for failing to educate them about the use, and alerting them of the availability of such method of counselling. Besides that, the study also revealed a serious problem of students lacking the basic knowledge in ICT. This is a challenge to the effective integration of counselling games. Integrating the digital platforms into the school counselling services required an absolute training and orientation of e-counselling tools for easy adaptation by students. Students were also made to respond to questions relating to e-counselling implementation, especially digital games in the Ghanaian context. Students were questioned on how digital counselling game could help in their development. The respondents provided their views and explained in their own words about the relevance of counselling game platforms. Fifteen students clearly agreed that counselling games could help them adapt and plan well for their lives. Three students partially agreed, four students disagreed and 8 students had no idea of the relevance of a counselling game in education.

## **6. DISCUSSIONS**

To help students achieve success and good career choice, educational counsellors ought to probe into the students' life challenges. Thus, counsellors may be advantaged to deal with certain perennial problems associated with students' life stories. ICT facilitates counselling, and provides an opportunity for counsellors and students to diversify counselling methods (Zamani 2009), thereby aiding in academic perseverance. In this study, the expectations of students' life stories were not fully met though there were key findings that merit to be discussed.

The key finding of the study revealed financial challenges by students. Students hinted on the inability to pay their school fees and other educational responsibilities that involves payment of money. The Ghanaian economy expects parents to be responsible for the upbringing and welfare of their wards. Consequently, the challenges are not solely attributed to the students, but the parents as well. The specific challenges associated with finance are the inability of parents to pay their ward school fees and take care of their welfare. Some students were candid to demonstrate that they had to hawk tradable items on the street to make money for their welfare, and for their family support. The high school dropout rate is attributed to the inability to pay school fees (Hunt 2008). Research has indicated that direct and indirect schooling costs are important factors in the child's enrolment and attendance to school (Hunt 2008). Psychologically, a child's well-being and upbringing is partially dependent on how well the family is coordinated and responsive to the needs of the child (ACA 2007). The life stories of the students showed that some students have been living since childhood as orphans and some with their single parents. Certainly, the love and parental guidance are lost. Students in such a situation often find themselves in the hands of wrong relatives who maltreat and care less about their welfare. Consequently, some students will go all out to adopt certain unacceptable societal behavior such as prostitution and sale of drugs in order to make ends meet (Ghana Education service 1995).

According to Kuhn (2004) trust is a fundamental ingredient to leverage an individual to open up or divulge vital information that borders on deviant attitudes. Findings from the interviews conducted revealed that students have low confidence in the teaching staff. They felt that some teachers were only concerned about imparting knowledge and have less concern about the factors that influenced their academic work, psycho-social behavior and career development. Teaching and non-teaching

staff are by virtue of the profession responsible to act as a role model to students, and get involved indirectly with the students' well-fare by law or by nature (Khan et al. 2012 ). Building trust between students and staff is a necessity to leverage students to open up in a counselling session (Kuhn 2004). On the contrary, some students get lured or blackmailed into a relationship with the very best teachers who ought to be responsible for their welfare. The researcher's prior experience as a teacher confirms that certain life challenges such as drug addiction, prostitution and bullying destabilize students' concentration for academic pursuit (Ghana Education service 1995). On the other hand, students do not confide in counsellors during their face-to-face session, and on the other hand, the fear of information getting into the public domain deters students from consulting counsellors. The eventual consequence is either their academic performance is affected or they get dropped out of the school.

In a nutshell, the study shows that students are eager for guidance in life in order to avoid being engulfed in social vices that will put their lives and academic work in jeopardy, but the confidence and regular meeting with the school counsellor has become a problem. Therefore, e-counselling platforms become essential to get students counselled remotely without declaring their identity. Fifteen students (out of the 30) agreed that a digital game in counselling could help them improve and develop rapidly. Students revealed that they were often afraid to contact the counsellor to divulge private information about their lives to him due to the lack of trust they have in counsellors. The idea of digitizing counselling model in the form of a game in the future compelled the students to reveal that the school authorities do not allow any electronic devices such as laptops and tablets in the school. The senior high education in Ghana is a preparatory stage to offer students the opportunity to identify and make good career choices based on their interest. Counselling units in schools are meant to facilitate and lay the ground for students to identify their potentials and to nurture them (ACA 2007). However, the study revealed that some students did not have a clear career goal and were not able to link up their current studies to their career choice. Moreover, educational counselling is a continual process to help students to deal with their challenges, and to keep the students on track towards life development. A digital game in counselling is absolutely a new counselling dimension in the Ghanaian context. Students showed ignorance of a counselling game, especially a game that depicted a counselling model.

Finally, the research revealed that integrating state-of-the-art ICT into counselling in the Ghanaian context would come with several challenges as opined by the counsellor. The challenges are partly attributed to the inability of the school to provide the needed support to integrate ICT into the counselling. However, senior high school education uses the internally generated funds to run the day to day activities of the sector. Conversely, the internally generated fund is determined by the Ghana Education Service. The head teachers do not have their own authority to add or decrease any charges proposed by the education service. In this regard, head teachers blame their inability to efficiently resource the counselling department to inadequate funds (Myjoyonline 2014). Duveskog et al. (2009) discovered that the demand for counselling professionals is rising; nonetheless few of the counselling professionals could use and integrate ICT into counselling in the African context. About 70% of counsellors in the Ghanaian senior high schools are beyond the age of 40 and thus technically incapable of handling and integrating ICT into counselling. The motivation to advise the authorities to integrate ICT-mediated counselling is lost. It is obvious from the counsellor's view that the school does not encourage ICT-mediated counselling and limited capital resources have been committed into the realization of fully integrated e-counselling platforms. The internally generated fund to oversee the running of the school does not make provision for counselling. The study identified only face-to-face sessions in counselling and email (rarely used) for sending feedback to parents or students. Again, the findings revealed that the school counselling unit was not connected to the internet at the time this study was conducted. The counsellor revealed that he + his own internet facility to send the emails to parents. However, there are several digital platforms that can be used in counselling sessions.

## **7. CONCLUSION AND FUTURE RESEARCH**

Ghana is still underdeveloped and the nation is beaming with all sense of delight to improve on the education sector. However, less attention has been drawn to counselling. Academic performance of students is largely influenced by several factors, and there is the need to identify the challenges. Life's challenges may hinder the capabilities and potentials of a child just as this study has

revealed. It is clear from the study that some students have inherent life stories which may have never been shared with anyone including counsellors. Others may have discussed their challenges with peers with no strategic measures to curb or deal with them. It is true that good academic work and career choice require absolute resilience, concentration and perseverance to attain. The research analysis has demonstrated that good academic and career choice are largely influenced by students' life challenges. Conventionally, deviant attitudes in the Senior High Schools in Ghana are alarming, especially in the boarding houses. Students embark on campus unrest in the name of being unfairly treated by school authorities. Again, much of the students' unrest is due to the measures by the school to tame and improve on a disciplinary level. Bullying is common in the senior high schools (Estyn project 2006). Teenage pregnancy is still on the increase. The Ghanaian society frowns on these social vices and the effective solution is through counselling. Technologies in counselling have come to stay and require their usage to the fullest to reach many students in counselling delivery. Thus, ICT must be explored rigorously to provide a good strategy to help students in counselling delivery (Obi et al. 2012). This opens up the dimension of e-counselling through a digital game. Several counselling models have been designed to help students to develop and manage their lives without necessarily seeking for counselling at all times.

Future research would consider developing an emotion detection software that will automatically categorize students' emotions based on their life challenges. After that a life story-based digital counselling game will be developed using a design science approach based on the current findings. The study is a continuous process to augment the counselling of students contextually and into a global perspective. The game shall consider modelling hope centered model for career development (HCMCD) to help students in their self-support development.

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**Key changes to all the reviewers:**

- The “ STATEMENT TO THE RESEARCH PROBLEM” is a new Section added to the work.
- CONTEXT AND MOTIVATION modified to CONTEXT AND THEORETICAL FRAMEWORK with the addition of more literature.
- Research objective is removed and incorporated into the research questions.
- The references have all been changed to the Harvard referencing style.

**Reviewer A**

Indeed, the school has only one counsellor, but unlike Doctors, the Ghanaian context sees it as normal and do not have any problem with a male counsellor rendering services to female students likewise female counsellor to male students.

Counselling tools have been suggested in “3. CONTEXT AND THEORITICAL  
FRAMEWORK” as suggested

**Reviewer B**

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- 1 The conceptualized framework has been developed and included as **"CONTEXT AND THEORITICAL RAMEWORK"**
- 2 The 'discussion of results has been modified with citation as you recommended.
- 3 Harvard referencing style is noted and changes have been done in all the references.

**Reviewer C**

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**Abstract:** The abstract's comment has been considered and re-ordered as per the suggestion.

**Context and motivation:**

The '**Context and motivation**' is changed to "Context and Theoretical framework".

Noticed the lapses. The whole content has been re-developed with additional information to reflect the theoretical framework with appropriate references.

**Research methodology:**

As suggested some information has been taken off from the analysis and results and added to the research methods' section.

The research objectives carries a similar message as the questions, so as per the reviewers comment, we have completely taken off the objectives. Hence, the numbering has changed. Thematic analysis was also considered as suggested.

**Section 4.** provides a brief discussion of the difficulties in the data collection. i.e *"Students were afraid that the data might leak into the public. Again, only 30 students returned the questionnaire instead of the intended 50. Also, only 19 students wrote about their life stories instead of the 30 who returned the questionnaire"*.

**Discussion:**

**Noticed:**

Some of the deviant behaviors of students are due to their inability to go for face-to-face counselling session and this may be due to lack of trust they have in their counsellors and staff s the students have revealed (discussed in Section 6 paragraph 3 and 4). However, the use of ICT offers opportunity for students to go for counselling sessions anonymously. Counselling games may be another way for students to self- develop.

**Analysis and results:**

The information about the mind map summarizes the students' responses and this is clearly discussed in the "DISCUSSION SECTION". Eg. The financial part where students are not able to pay their fees and more from the mind map.

**Reviewer D**

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Language editing has been done as suggested.



The research problem is formulated separately in Section 2.

The focus of the paper is geared towards listening to students' life stories and the current technologies used by the school in counselling delivery.

The idea is to detect emotions from the text content using Natural language processing tool and to base on the students' life stories In order to develop a game platform to help students in our next study. It is a continuous study field.

However, common e-counselling tools have been discussed in the Section 3

Future research will focus more on designing a game platform of which ethical issues, advantages and approaches/strategies of counselling platforms will thoroughly be explored and discussed.

### **Methodology:**

Section 4.2 is a brief discussion of qualitative research.

The research's paradigm was clearly stated from the introduction in the last paragraph and also in Section 4.2. I.e ***"The content of the students' responses was analyzed in line with the Interpretivists philosophical paradigm"***.

The number of participants (students and a counselor) was clearly stated. It can be found in Section 4 paragraph 2. 30 students and a counsellor.

Noted and corrected. The study is content analysis.

### **Findings:**

The use of the percentages in the findings has been revised. The study is mainly focusing on the content analysis (the participant's responses).

The quotations are direct statements from the participants. However, we noticed that the manuscript has a lot of quotations. We have revised most of the quotations to reflect your suggestions.

