# Association for Information Systems AIS Electronic Library (AISeL)

**CONF-IRM 2019 Proceedings** 

International Conference on Information Resources Management (CONF-IRM)

5-2019

# Online counselling services for Youth@risk

Retha de la Harpe Cape Peninsula University of Technology, delaharper@cput.ac.za

C Settley Cape Peninsula University of Technology, c.settley@gmail.com

R Cilliers Cape Peninsula University of Technology, cilliersr@cput.ac.za

Follow this and additional works at: https://aisel.aisnet.org/confirm2019

#### **Recommended** Citation

de la Harpe, Retha; Settley, C; and Cilliers, R, "Online counselling services for Youth@risk" (2019). CONF-IRM 2019 Proceedings. 32. https://aisel.aisnet.org/confirm2019/32

This material is brought to you by the International Conference on Information Resources Management (CONF-IRM) at AIS Electronic Library (AISeL). It has been accepted for inclusion in CONF-IRM 2019 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

# Online counselling services for Youth@risk

R de la Harpe Cape Peninsula University of Technology <u>delaharper@cput.ac.za</u> R Cilliers Cape Peninsula University of Technology cilliersr@cput.ac.za

C Settley Cape Peninsula University of Technology <u>c.settley@gmail.com</u>

**Abstract:** Youth today suffer from many socio-economic problems and struggle to operate in the current economic environment. Wellbeing service provision to youth@risk is inadequate to deal with the complexities of societal challenges which are amplified by the fast technology advances in a continuously changing environment. This paper aims to consider the provision of online counselling to enhance current face-to-face services from the provider's perspective. The case of a volunteer-based online counselling service that has been in operation since 2010 is considered to establish the aspects that influence this type pf service. Related literature was reviewed to determine the issues reported from current studies and a taxonomy of digital services was used to analyse the service objectives of the service provider. Data collected from sessions with the facilitators and observations of a chat session was analysed to establish their experience of online counselling. The findings were interpreted to answer the research question. The contribution of this paper is in response to the many appeals for more empirical research on real cases. It can be concluded that an online counselling service is a viable extension of face-to-face counselling but more research is needed to understand its benefit to the clients and the ability to ensure a sustained service, especially in developing contexts.

Keywords: IT Enabled Wellbeing Support Services; Youth@risk; Online counselling; Online chatting

# **1. Introduction**

Youth today suffer from many socio-economic problems and struggle to operate in the current economic environment. The critical issue of the large number of unemployed young people between the ages of 15 and 34 is a matter that requires urgent, comprehensive and innovative thinking. In South Africa the 9.7 million young people, of which approximately 3.5 million are unemployed (National Youth Policy, 2015) are exposed to diverse factors that result in behaviours that place them at risk, e.g. violence, substance abuse, risky sexual behaviour, physical inactivity, etc. (Reddy et al. 2010). Failure to address the development priorities of youth potentially undermines social cohesion and social reproduction (Frye & Kirsten, 2012). It is therefore appropriate to refer to this group as youth@risk and the wellbeing of youth@risk, both socially and economically, can thus be identified as a priority research area.

Wellbeing can be addressed through services that provide access to information; career guidance and counselling and other support structures, however current support services are often insufficient to deal with demand. This situation is even worse in underserved communities since such communities are complex social ecosystems where services are inadequate for the local needs (Joly, Cipolla, & Manzini, 2014). In many cases such services rely on volunteers where the voluntary community sector (VCS) provides value-driven services on behalf of statuary organisations (Warwick, Young, & Lievesley, 2014).

Information is increasingly digitised and the economy has already started shifting from being product based to one based on services, specifically digital services (Williams, Chatterjee, & Rossi, 2008). However, few studies focus on services distributed through digital channels (Hofemann, Raatikainen, Myllärniemi, & Norja, 2014) while Ostrom et al. (2010) list the leveraging of technology to advance services as one of their ten research priorities. Digital services are defined as "services that that are obtained and/or arranged through a digital transaction (information, software modules, or consumer goods) over Internet Protocol (IP)" (Williams et al., 2008: 506). The service experience is thus influenced by the social interaction between users over an IT platform (Hofemann et al., 2014). Technology like internet, computers and smart devices can be seen as service enablers and can provide services in new ways. The introduction of digital technologies in service provision creates many new innovation opportunities but a holistic understanding is needed across the dimensions of the service provider's services, digital environment and organisational properties (Nylén & Holmström, 2015). In this paper an online counselling service provider is considered with a specific focus on the information services delivered via articles and guizzes and online chats that are part of their free services.

Online counselling is also referred to as e-therapy, cyber therapy, web counselling, cyber counselling and Internet counselling with related definitions (Dowling & Rickwood, 2013; Kofsopoulou et al., 2015; Mishna et al., 2013; Richards & Vigono, 2013). The following adapted definition will be used for the term online counselling chatting: technology-enabled text-based communication over the web that allows participants to rapidly exchange messages, and thereby, mimics spoken dialogue (Hoermann et al., 2015).

Based on the above, the problem that this paper attempts to address is that current face-to-face wellbeing service provisions to youth@risk is inadequate to deal with the complexities of societal challenges. The demand for wellbeing services is affected by the sensitivity around issues with associated stigma that prevent people from openly seeking help as well as not recognising the youth's and local intermediary's ability to take ownership of their own collective wellbeing by developing their personal agency (Sanders et al., 2015). In addition there is a lack of access to service providers who are overburdened and under–resourced and this affect the overall sustainability of the services provided. Before the wellbeing of youth@risk can be successfully addressed the service providers themselves need to be equipped and supported by the service system in which they operate.

The aim of this paper is to gain insight into the complexities of providing online support services from the service provider's perspective. There is a need for more research to understand the nature and value proposition of online counselling services (Dowling & Rickwood, 2013; Gibson et al., 2018; Hoermann et al., 2017; Kofsopoulou et al., 2015; Kupczynski et al., 2017; Mishna et al., 2013; Reynolds et al., 2015; Richards & Vigono, 2013; Sefi & Hanley, 2012; Wong et al., 2018). The research question that frames this research is: What are the complexities experienced by a volunteer-based support service provider to operate in an online space? The methods used were: a thematic literature review; content analysis of documents about the case; interviews, a co-design session and observations of a facilitation session.

The paper is organised as follows: The main concepts were discussed in the introduction section followed by an overview of a digital service. The research methodology section is followed by

a description of the case. Lastly the findings are discussed and the paper is concluded with a brief reflection and recommendations for further research.

## 2. Components of an IT enabled services

The goal of this section is to consider the different design considerations and service objectives of an online service model. Managing digital service innovation requires a consideration of factors leading to uncertainty across the following dimensions: the services, in this case community wellbeing support service; its digital environment; and organisational properties, in this case of the NGO providing the online service (Nylén & Holmström, 2015). Services are typically provided by a service provider to consumers - the recipients of the service – through different channels. Services differ from products in the sense that while products are tangible, services are not. Furthermore an important differentiation between face-to-face services and digital services is that the service provider their supra-functional needs, including emotional, aspirational, cultural and social (Williams et al., 2008). Services are complex in that they may include a hybrid of places, systems of communication as well as people and organisations (Manzini in Meroni & Sangiorgi, 2011). In Service research there is thus a need for a different approach to research for design, development and implementation of services.

If a digital service is to be regarded as a transformative service then it is important to be able to analyse the services holistically according to its ability to reach specific outcomes. A taxonomy developed by Williams, Chatterjee and Rossi (2008) is a useful starting point as it allows one to classify and compare the dimensions of a current digital service which can then indicate how to improve it. The taxonomy describes two broad categories, namely design dimensions and service provider objectives. The design dimensions are service delivery, service maturity, malleability (provider and user) and pricing and funding. The key questions are indicated in Table 1 for each design dimension.

Service delivery	How are services provided and what are the range of requirements for participation
Service maturity	How does the nature of the interaction change at different phases of technological adoption?
Malleability	How able are the service to adapt to changing market needs or requirements.
Pricing and funding	What are the strategies to capture revenue?
T11 1 D '	

Table 1: Design dimensions of digital services (William, Chatterjee & Rossi 2008)

Furthermore, the taxonomy classifies service provider objectives according to the following objectives: business (in our case the wellbeing support service provider and recipients); technological (the IT enabled platform); and interaction (the touch point between the recipient of the service and the service). Key objectives for each dimension are indicated in Table 2. The objectives of the service provider will be analysed based on the service provider objectives.

Business objectives	Technological objectives	Interaction objectives
Capital	Functionality	User Experience, Nature of interaction over
Building a successful business	Novelty	longer term
Brand establishment	Performance	Meeting user needs
Customer loyalty		Ability to evolve
Offering superior customer service		Designing for variance

Table 2: Service provider objectives adapted from Williams, Chatterjee and Rossi (2008)

# **3. Research Methodology**

The approach used in this paper is based on an interpretive research paradigm where the experiences and views of the human participants are interpreted by attaching meaning to their sense-making of using the online service. A single case of a volunteer-based online counseling service provider is used. Data is collected from secondary sources such as related literature and documents; Google analytics statistics from the service provider web site; co-design session with facilitators and observation of a facilitation session; and interviewing the Non Government Organisation (NGO) representative using service design methods as design probes. The qualitative data was analysed by coding, categorizing and by deriving themes and the statistics were used to profile the service. The unit of analysis is the service provided by a community development agent (NGO) and the unit of observation is the experience of the facilitators providing the service. The findings were interpreted to answer the research questions that guided the research.

### 4. Issues identified from the literature review

Related literature was reviewed and themes were identified from the literature analysis. Although the literature reviewed cannot yet be regarded as a systematic literature review because it may not be complete, the documents were sourced using the keywords online-counseling and related terms. In many cases documents referring to the document included in the list of reviewed documents, were also included if deemed relevant. Twenty-three documents were found to be relevant and a list of codes was created using Atlas ti until saturation point was reached. Three documents did not provide any new codes and 149 codes were generated from twenty documents. Through a process of categorization sub categories were identified and finally 10 themes were derived. Below is a table with a summary of the identified themes.

	many to memes were derived. Below is a table with a summary of the identified memes.			
	Counselors find that text chats do not necessarily cater for emotional expressions and body			
chats 1	language as non-verbal cues. However, text writing could also be cathartic where people have to			
e	express their problem by describing it. Reading text may also make thoughts more concrete and			
8	at the same time the counselor has more time to think about a suitable response. Concerns about			
t	text counseling are about the conversation depth, communication cues and modalities, e.g.			
(	(a)synchronous. There could be a potential loss of information and a sense of connection with			
t	the person in need. Online chats today, is the preferred medium of communication of young			
I	people (Bambling, 2008; Kupizynski et al., 2017; Richards, 2009; Mishna et al., 2013; Richards			
ć	& Vigono, 2013).			
Counseling	There is an increase in need for counseling and specifically for sensitive issues and problems			
V	with associated stigma. There are many vulnerable people who have limited access to			
I	professional counseling services (Hoermann et al., 2017; Kofsopoulou et al., 2015); Mishna et			
	al., 2013; Richards,2009; Richards & Vigono, 2013).			
	Online chatting provides for anonymous conversations which means that the privacy and			
ethics & a	confidentiality of the persons in need are protected. However, building trust may be a problem			
privacy a	and the consequences of the chat may not be foreseen. There is a need for ethics in practice that			
S	specifically considers an online environment. Ethical dimensions Dowling & Rickwood, 2013;			
l	Kofsopoulou et al., 2015; Kupizynski et al., 2017; Mishna et al., 2013; Richards, 2009;			
I	Richards & Vigono, 2013; Sefi & Hanley, 2012; Wong et al., 2018)			
<b>Online</b>	The information should be categorized and stored in a database and its quality should support			
information t	the requirements of self-help material (Richards, 2009).			
	Online services can be accessed across geographical areas, outside office hours and when			
	needed. Such services have the ability to enhance existing face-to-face services and could be			
	regarded as a gateway to other services. There is a need for evaluation of such services to			
	determine the impact on those receiving the services. Young people today use ICT as the norm			
	and can be regarded as digital natives who prefer informal support over professional help. The			
	role of the online counselor needs to be understood to align the services to the needs and			
-	preferences of the persons in need. In cases where such services are provided by volunteers it is			
	essential for supervision by a professional and for profession boundaries to be respected.			

	Regulation of online services; reimbursement models; and guidelines for clinical emergencies need to be considered. The duration of the sessions and can be determined by the availability of the counselor and the need of the person and clients seem to be more likely to return for follow-up sessions. There is evidence of client satisfaction and changed perceptions towards the value of such services. There is a need to determine the training needs of counselors for the different online counseling service types as opposed to face-to-face counseling (Bambling, 2008; Bradford et al., 2014; Dowling & Rickwood, 2013; Harris & Birnmaum, 2015; Hoermann et al., 2017; Kofsopoulou et al., 2015; Kupizynski et al., 2017; Milne et al., 2016; Mishna et al., 2013; Reynolds et al., 2015; Richards, 2009; Richards & Vigono, 2013; Rickwood et al., 2015; Sefi & Hanley, 2012; Wong et al., 2018; Zainudin & Yusop, 2018).
<b>Barriers</b> to	Some barriers to online services are: slow communication; higher levels of distress; ability to
online	deal with complex issues; emotional burden carried by counselors for long sessions; dealing
counseling	with technology constraints; time to respond; and longer sessions could lead to higher levels of
services	distress and lack of emotional capacity of counsellors (Bradford et al., 2014; Dowling &
	Rickwood, 2013; Kupizynski et al., 2017; Mishna et al., 2013; Reynolds et al., 2015; Richards
	& Richardson, 2012).
Benefits of	The convenience and availability of online services could meet the demand for such services
online	and provides for greater transparency and disclosure. It is possible for early and preventative
counseling	interventions in response to the self-initiated seeking for help and person can be stabilized when
services	experiencing a dangerous situation. It provides an opportunity for clients to reflect in a safe
	environment. It is easier to discuss more sensitive topics and matters associated with stigma (Bambling, 2008; Hoermann et al., 2017; Kupizynski et al., 2017; Mishna et al., 2013; Richards, 2009; Richards & Richardson, 2012; Richards & Vigono, 2013; Sefi & Hanley, 2012; Wong et al., 2018; Zainudin & Yyusop, 2018).
Relationshi	There is enough evidence that the relationship between the client and facilitator is a positive
p between	experience and therapeutic online alliances are formed. It allows for disinhibition for sensitive
client and	topics and is less intimidating for clients to cater for emotional safety. The problem is revealed
facilitator	immediately and provides for a more focused discussion (Bambling et al., 2008; Dowling &
	Rickwood, 2012; Kupizynski et al., 2017; Mishna et al., 2013; Richards, 2009; Richards &
	Vigono, 2013; Sefi & Hanley, 2012).
<b>Research on</b>	More research on online counseling services is needed. Evidence is needed for interventions and
online	it is important to determine the benefits gained by the clients. More research is needed about the
counseling	role and experiences of the facilitators (Bambling, 2008; Dowling & Rickwood, 2013; Gibson
services	et al., 2018; Hoermann et al., 2017; Mishna et al., 2013; Reynolds et al., 2015; Richards, 2009;
	Richards & Richardson, 2012; Richards & Vigono, 2013; Rickwood et al., 2015; Sefi &
	Hanley, 2012; Wong et al., 2018; Zainudin & Yusop, 2018).
Technology-	Technology is becoming increasingly important in healthcare services provision but could still
enabled	constrain the service provision in practice. There are still several technology constraints relating
counseling	to connectivity, network problems and the cost of data. The use of ICT is increasing rapidly and
services	enables users access to information for self help allowing for learning and self-exploration
	(Bambling et al., 2008; Kofsopoulou et al., 2015; Kupizynski et al., 2017; Mishna et al., 2013;
	Reynolds et al., 2015; Richards, 2009)
	Table 3: Themes derived from related literature

The codes that appeared the most in the literature reviewed are related to the online services theme (evolving nature (12), versus face-to-face (14)); benefits of online counseling services (16); sensitive topics and stigma (16); and research (16). Limited information was obtained about information relating to typical issues and it may be necessary to extend the search to also include online information services in future literature reviews.

# 5. The MobieG case

MobieG is an online counselling service offered by a NGO in South Africa that has been in operation since 2010. They have counselled more than 186,000 people and currently receive approximately 8,000 visitors per month on their current platforms. The counselling service is available from Sunday to Thursday between 19:00 and 21:30 in the form of chats and anyone

with access to the internet can use the service at <u>www.mobieg.co.za</u>. Figure 1 illustrates the current service model.

#### 5.1 Service provider: NGO

The service is provided by an NGO that takes care of the recruitment of volunteer facilitators and professional experts such as psychologists, psychiatrists, midwives, nurses, legal experts, other NGOs that deal with substance abuse, violence, and healthcare as well as government agencies and units dealing with health, social development and crime. The NGO also provides training to the volunteer facilitators as lay counsellors. Furthermore, relevant information articles and quizzes are designed as a response to the typical issues identified through the service and is always available on the Internet, mobile web sites and application. A software developer volunteers his time to develop new information technology components for the IT platform and maintain the current system to enable the services.

#### **5.2 Service Differentiators**

The key differentiators of their service are listed in Table 4.

- Anonymity the facilitators cannot identify the persons in need of assistance and vice versa
- Free service the only cost is to access the digital platforms through the Internet or mobile applications
- Real-time action permanent access to information articles and quizzes and regular access to life chats during identified periods
- Easy access anyone with access to the Internet can access relevant and practice-oriented information anytime and anywhere and obtain immediate assistance during the life support sessions
- Text-based primary input and output are based on text which positively impacts on cost factors and possible unstable internet connectivity.
- Life skills facilitation any concern can be addressed by the facilitators or referrals to professional specialists
- No discrimination anyone can access the service regardless of age, gender, race or culture

# Table 4: Service differentiators

#### **5.3 Facilitation**

Facilitators are recruited from the geographic area of the group responsible for the chat sessions to provide the initial services as lay counsellors. They only provide an initial "stabilising" service to inform, educate, stabilize and refer clients. If necessary, they refer the client to professionals or relevant experts. The facilitators provide basic advice in the form of online text-based chats. The digital counselling service coordinator has the responsibility to coordinate the services; allocate advisors; moderate discussions; intervene in the case of serious situations, e.g. when the person tries to commit suicide.

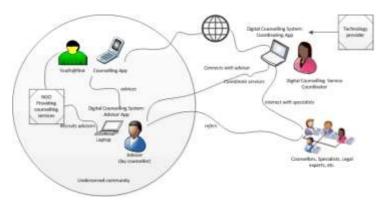


Figure 1: Components of the MobieG wellbeing support services

The online facilitation is done through chats during counselling sessions where the session coordinator allocates chats to the available facilitators where one facilitator can simultaneously chat with up to five persons at any given time. Counselling sessions are conducted at venues that are made available by partners for free, for example churches in the vicinity, and facilitators have to use their own laptops with the host of the venue providing the online access. The facilitators are all volunteers who have a passion for doing something worthwhile that could benefit people in need.

#### 5.4 Statistics of Use

Next the page views for the period of 1 January 2016 to 10 September 2018 are given to provide an overview of the services provided and the persons seeking for advice.

Service accessed	Page views	%
Total	1,294,650.00	100.00
Articles	661,614.00	51.10
Quizzes	233,719.00	18.05
Chat	98,593.00	7.62
Other (help, services, groups, etc.)	300,724.00	23.23

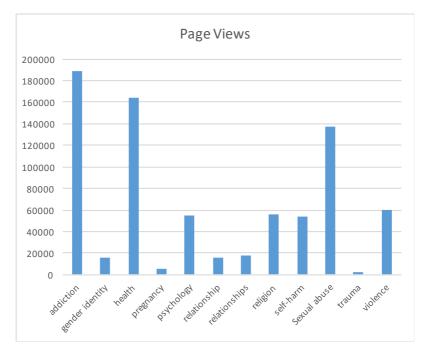


Table : Page views summary

Figure 2: The distribution of seeking for information of the issues on the website

It follows from the page views statistics (Table 5) that the information services in the form of articles (total available: 178) and quizzes (total available: 32) are used mostly (69.15%) versus the chats (7.62%). This confirms the need for self-help to access informal services. The lower percentage for the chat sessions could be explained by the limited availability of this online facility of 2 hours per day for 5 days a week.

Next the issues mostly accessed indicated by the bar chart (Figure 2). The page view statistics provide an indication of the issues for which information are mostly searched. Addiction (e.g. alcohol, marijuana, methamphetamine, methcathinone, nyope and pornography), health (abortion, chancroid, chlamydia, contraception, eating-disorder, female-circumcision, genital-

herpes, gonorrhea, HIV-AIDS, human-papiloma-virus, male-circumcision, molluscumcontagiosum, pubic-crab-lice, scabies, stds and syphilis), sexual abuse (adultgrooming, blessers, lolly-lounges, pornography, sexting and human trafficking) and violence (gangs, abuse, anger, bullying, domestic-violence and rape). It is clear from the list of issues that these are typical of socio-economic challenges that affect the wellbeing of people and that most of the topics could be associated with stigma and/or be regarded as sensitive topics (Bambling et al., 2008; Dowling & Rickwood, 2015; Kofsopoulou et al., 2015; Milne et al., 2016; Mishna et al., 2013; Richars & Vigono, 2013; Zainudin & Yusop, 2018).

#### **5.5 Service Provider experiences**

Next the concerns of the facilitators are discussed. Data was collected using a brainstorming method with 13 facilitators.

	Challenges to Sustainable Business objectives	Challenges to Technological objectives	Challenges to Interaction objectives
Service delivery	It is an online volunteer-based support service; More facilitators are needed in other regions who are committed and available when needed; There is an ongoing need for support through more facilitators, venues for facilitation sessions, technology (computers, internet access) and for more profes- sionals to deal with referrals.	It relies on connectivity and a range of social media platforms and mobile devices; There is a need for an additional Platform for facilitators to communicate with each other; Digital Platforms are not always stable, it may be too slow or the internet connection might not work properly.	Users and facilitators are not identified during the interactions; Technology that both enables and constrains interaction, e.g. anonymity of people seeking help hides people who are not sincere and also limits the interpretation of the extend of the issue without the ability to also read body language, tone of voice, etc.
Service maturity	Facilitators need minimum training for online chatting; An assisted service for the online chats are available during scheduled sessions.	It provides the service over multi-channels.	The development of skills is an ongoing need due to the complexity of the issues and added complexity introduced by the IT platform.
Malle- ability	The service is entirely digital; It is difficult to predict future technology preferences of the users; Users are not affected by changes but new users are acquired when new channels are introduced (high).	Malleability is low however, with a high risk because changes to the software, different platforms and devices rely on the availability of the volunteer IT developer; Changes are made reactively requires continuous updates.	Potentially high provided an expert volunteer IT developer with an understanding of diverse users is available; Culture and spoken language differences make it difficult to deal with specific cultural practices that are unknown to facilitators where they have specific cultural assumptions.
Pricing and funding	The entire service is managed by a small group with passion, tenacity and resilience. Users do not pay for the service and employees are not paid for their time or expertise - there is currently no source of income. Buy-in: the NGO struggles to get buy-in from the government or financial organisation despite the statistics of the number of people they have serviced.	The technology components need to be in an open source environment unless technology vendors donate propriety technology components; The cost of continuously changing the digital components.	Users are able to find the service and interact with it on their own but without any feedback it is unclear how they perceive its value; Short sessions result in Chat sessions with insufficient time to deal with major issues or to conclude a chat within a session and inability to follow up on problem cases.

 Table 6: Matrix of Barriers to Service Objectives

The data was coded and grouped into categories according to a digital service taxonomy reconceptualised from a human–centered technology design perspective to prioritise the service experience and constraints (Table 6).

# 6. Discussion

It appears as if MobieG offers much needed support typical of the voluntary community sector to a social service system that reports a severe scarcity of social and ancillary workers. NGO's are also particularly under resourced, often short on space and adequate infrastructure and this is evident from the business challenges with a lack of buy-in; limited finances; difficulty to recruit and retain facilitators and venues; the need to extend the services to other regions. They are often only partly subsidised by government, and depend on low salaries or volunteer services (USAID/South Africa, 2011). The online support service offered by MobieG contributes in a unique manner by extending the reach of social and counselling services onto a digital platform and is an example of digital innovation. This supports the view of Hoermann et al. (2017) that clients are willing to accept assistance from volunteers.

An important positive aspect of this service is that it allows young people to help themselves - they can read articles with practical information about their issues and they can also complete quizzes that will also inform them about the outcome of the issues that concern them and that also directs them with possible options to take (Rickwood et al., 2015). The young persons are able to develop their personal agency (Sanders et al., 2015) that give them some degree of control and agency over the service (Anderson et al., 2013).

In addition, there is enough evidence that the youth@risk as the target group use the service but there is no mechanism to establish whether they have actually gained from the service – this supports the need for evaluation instruments (Hoermann et al., 2017; Sefi & Hanley, 2012). Although digital services allow for a wider target group, they remain faceless. This challenge needs to be specifically addressed otherwise the quality of the service can only be determined from the direction of the service provider.

The digital solutions offer the possibility to help more than one person at a time with several parallel conversations between the advisor and counselling recipients. It also provides for the possibility of seeking for assistance anonymously thus making it possible to discuss sensitive topics. The sheer amount of clients they assisted via their website and portal of 186,065 sine April 2014 is testament to the reach and potential of the service. However, the organisers report that the service continues to grow and that the need by far exceeds current capacity and in the long term the service is just not sustainable. The current service model is showing strain. An important area to investigate is why the government and financial institutes are not buying in to the concept and what the barriers might be. The lack of funding has the consequence of the entire service relying heavily on the commitment of a small group of people and since the service is not financially viable other service models need to be considered.

The technology challenges relate to the continuous and fast technology advances but also to the unpredictable changing preferences of platforms and devices by the youth@risk. This problem is even worse in underserved communities that lag behind since they have to rely on second and third generation phones. People in these communities also struggle with connectivity, in some cases a lack of electricity and they often have limited digital literacy. All these resonate with the access, literacy, decreasing disparity, health and happiness wellbeing outcomes

considered in underserved contexts. This service, however, does not have to adapt to the user needs but instead to their technology preferences for online interactions. The service cannot be provided without the IT platform and even when it is not stable it can have serious consequences, e.g. when someone who wants to commit suicide can no longer be supported because the server stopped working - you cannot really say to a young person in need that they need to wait until the technology problems are sorted out.

The challenges to the interaction objectives address the point where the service provider interacts with the recipients of the service. If the service interface does not make this possible then the service cannot be delivered. Seamless interaction is particularly challenging and complex because of the very nature of the service. Many of the barriers relate to the constraints of the service itself. Being text-based there is the difficulty of interacting and interpreting without visual cues, not being able to following up or having very limited time on complex cases. In this case the advantage of using the service anonymously for sensitive issues is also a drawback especially when the facilitators need to deal with cultural and contextual issues and are then unable to connect on that level exactly because the person in need cannot be seen in their own context. Interaction is also constrained by cultural and language barriers. In a multicultural and multi-lingual country like South Africa an understanding of different cultural contexts becomes extremely complex if not impossible. There is clear need for counsellors from different cultural backgrounds and geographical context who will have contextual understanding of different cultural practices and value systems. This would also address the difficulty of communicating in language that is not your mother tongue, especially when talking about deeply personal issues. The current service effectively excludes a large part of the population as English is not spoken well in many contexts

Barriers to transformational and wellbeing outcomes from the perspective of the NGO have been identified. These challenges are associated with the financial sustainability of the business model, the reliance on volunteers, unstable connectivity and access to newer technology in underserved communities, as well as interaction barriers caused by the text–based technology as the only channel. Furthermore, the difficulty in measuring the quality and affect on wellbeing of the service from a consumer perspective is acknowledged.

# 7. Conclusion

The aim of this paper was to gain insights in the complexities of digital services from the service provider perspective and the findings resonate with the literature findings and also contribute to the need for more research by reporting on a real case. The answer to the research question posed in this paper is that the complexities associated with a volunteer-based online counseling service are about understanding the user experiences at the touch point of the service and the value to the client as the facilitator form a relationship with clients as they communicate about an issue and to what extend technology enables this; but also the difficulties of integrating a sustainable online counseling services with existing care services to extend the provision to people who do not usually have access to such services.

It can be concluded that online counselling could be a viable enhancement of face-to-face counseling services and in fact has the potential to reach many more people, especially those affected by socio-economic factors typical in developing contexts. However, it is not clear how such a service can be integrated in existing healthcare services. It is also not clear how the clients, who are invisible to the service provider, can benefit from the service and in fact if there is an improvement of their situations. The biggest challenge seems to be in the lack of a business

model to reduce the dependence of the service on a few volunteers. A number of important avenues for future research have been identified. More specifically to understand the service from a client perspective to establish to what extend the service addresses the problems experience by the clients. This will be challenging since the clients are "faceless" and their anonymity needs to be respected to allow them to respond to their experience when seeking help for sensitive topics. Further research is also needed to measure the change of the clients' wellbeing to determine the level of transformation in underserved contexts. Even if the need for such a service is determined, it can only if it can be sustained and further research is needed to understand online services as a component of a healthcare ecosystem in the context of underserved communities.

#### 8. References

- Anderson, L., Ostrom, A. L., Corus, C., Fisk, R. P., Gallan, A. S., Giraldo, M., ... Williams, J. D. (2013). Transformative service research: An agenda for the future. *Journal of Business Research*, 66(8), 1203–1210
- Bambling, M. King, R. Reid, W. & Wegner, K. (2008). Online counselling: The experience of counsellors providing synchronous single-session counselling to young people, Counselling and Psychotherapy Research, 8(2), 110 — 116
- Bradford, S., Rickwood, D. & Boer, D. (2014). Health Professionals' Attitudes towards Electronic Psychosocial Assessments in Youth Mental Healthcare. Health, 6, 1822-1833
- Dowling, M. & Rickwood, D. (2013). Online Counseling and Therapy for Mental Health Problems: A Systematic Review of Individual Synchronous Interventions Using Chat, Journal of Technology in Human Services, 31(1), 1-21
- Frye, I. & Kirsten, M. 2012. Theme issue on poverty and inequality in South Africa. *Development Southern Africa*, 29(1), 1-2
- Gibson, D.G. Tamrat, T. & Mehl, G. (2018). The State of Digital Interventions for Demand Generation in Low- and Middle-Income Countries: Considerations, Emerging Approaches, and Research Gaps, Global Health: Science and Practice, 6(1), S49-S60
- Harris, B. & Birnbaum, R. (2015). Ethical and Legal Implications on the Use of Technology in Counselling, Clinical Social Work Journal, 43, 133–141
- Hoermann, S. McCabe, K.L. Milne, D.N. & Calvo, R.A. (2017). Application of Synchronous Text-Based Dialogue Systems in Mental Health Interventions: Systematic Review. Journal Medical Internet Research. 19(8), e267
- Hofemann, S. Raatikainen, M. Myllärniemi, V. & Norja, T. (2014). Experiences in Applying Service Design to Digital Services, 134–148
- Joly, P. Cipolla, C. & Manzini, E. (2014). Informal, Formal, Collaborative identifying new models of services within favelas of Rio de Janeiro, 57–66
- Kotsopoulou, A. Melis, A. Koutsompou, V. Karasarlidou, C. (2015). E-therapy: the ethics behind the process. International Conference on Communication, Management and Information Technology (ICCMIT2015). Procedia Computer Science 65, 492 – 499
- Kupczynski, L. Garza, K. & Mundy, M. (2017). Counselors' Perceptions of Online and Face to Face Counseling. The Online Journal of Counseling and Education, 6(1), 1-17
- Meroni, A. & Sangiorgi, D. (2011). Design for services. Gower Publishing, Ltd.
- Mishna, F. Bogo, M. & Sawyer, J. (2015). Cyber Counseling: Illuminating Benefits and Challenges. *Clinical Social Work Journal*, 43, 169–178

- Milne, D.N. Hoermann, S. & Calvo, R.A. (2016). A trial of real-time text-based support for young people. CHI - Computing and Mental Health Workshop; CHI 2016; 08 May 2016; San Jose, California, USA. 2016
- National Youth Policy: 2015 2020. (2015, April 1) www.thepresidency.gov.za/MediaLib/Downloads/Downloads/NYP Policy 2020 Report.pdf
- Nylén, D. & Holmström, J. (2015). Digital innovation strategy: A framework for diagnosing and improving digital product and service innovation. *Business Horizons*, 58(1), 57–67
- Ostrom, A. L. Bitner, M. J. Brown, S. W. Burkhard, K. A. Goul, M. Smith-Daniels, V. & Rabinovich, E. (2010). Moving Forward and Making a Difference: Research Priorities for the Science of Service. *Journal of Service Research*, *13*(1), 4–36
- Reddy, S.P. James, S. Sewpaul, R. Koopman, F, Funani, N.I. Sifunda, S. Josie, J. Masuka, P. Kambaran, N.S. & Omardien, R.G. (2010). Umthente Ihlaba Usamila The South African Youth Risk Behaviour Survey 2008. Cape Town: South Africa Medical Research Council, South Africa. <u>http://www.mrc.ac.za/healthpromotion/healthpromotion.htm</u> (Accessed 8 November 2015)
- Reynolds, J. Griffiths, K.M. Cunningham, J.A. Bennett, K. & Bennett, A. (2015). Clinical Practice Models for the Use of E-Mental Health Resources in Primary Health Care by Health Professionals and Peer Workers: A Conceptual Framework. *Journal of Medical Internet Research, Mental Health*
- Richards, D. (2009). Features and benefits of online counselling: Trinity College online mental health community,British Journal of Guidance & Counselling, 37(3), 231 242
- Richards, D. Richardson, T. (2012). Computer-based psychological treatments for depression: A systematic review and meta-analysis. Clinical Psychology Review, 32, 329–342
- Richards D. & Viganó, N. (2013). Online Counseling: A Narrative and Critical Review of the Literature. Journal of Clinical Psychology, 69(9), 994–1011
- Rickwood, D.J. Mazzer, K.R. & Telford, N.R. (2015). Social influences on seeking help from mental health services, in-person and online, during adolescence and young adulthood. BMC Psychiatry, 15(40)
- Sanders, J. Munford, R. Thimasarn-Anwar, T. Liebenberg, L, & Ungar, M. (2015). The role of positive youth development practices in building resilience and enhancing wellbeing for at-risk youth. *Child Abuse & Neglect*, *42*, 40–53
- Sefi, A. & Hanley, T. (2012). Examining the complexities of measuring effectiveness of online counselling for young people using routine evaluation data, Pastoral Care in Education. International Journal of Personal, Social and Emotional Development, 30(1), 49-64

USAID/South Africa. (2011). Social Welfare Workforce: Strengthening for the OVC, 1–5

- Warwick, L. Young, R. & Lievesley, M. (2014). Exploring the value of a design for service approach to develop public services in the Community Voluntary Sector: a comparative analysis. *International Journal of Design in Society*, 7 (2), 19-33
- Williams, K. Chatterjee, S., & Rossi, M. (2008). Design of emerging digital services: taxonomy. *European Journal of Information Systems*, 17(5), 505–517
- Wong, K.P. Bonn, G. Tam, C.L. & Wong, C.P. (2018). Preferences for Online and/or Faceto-Face Counseling among University Students in Malaysia. *Frontiers in Psychology*, 9:64

Zainudin, Z.N. & Yusop, Y.M. (2018). Cyber- Counseling: Is It Really New? International Research Journal of Education and Sciences (IRJES), 2(2)