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Counselors and Their Use of ICT Tools in Maximizing Counseling Services

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ABSTRACT

The guidance and counseling program and its strategies have then evolved from one that was heavily influenced by Western orientation to one that is best suited for the Filipinos. In the advent of technological advances that ushers the information age with its new type of economy and the culture, the Filipino counselors found themselves in the crossroad where technology and practice are colliding. A total of 53 counselors from 17 schools (4 from Luzon, 6 from Visayas, 4 from Mindanao and 3 from NCR) participated in a survey. Counselors used a variety of ICT tools (tablets, office tools, desktop publishing, database, FB, MySpace, instant messaging, text messaging and mobile phone) to augment their one-on-one encounter with the clients. Counselors' age, licensure status, and internet resources at home and at work were factors that affected their technology self-efficacy. Gender and type of institution did not have significant bearing on the counselors' technology self-efficacy.

Keywords **-** ICT Tools, technology, counseling, self-efficacy, maximizing counseling services

INTRODUCTION

Information and communication technology (ICT) is a generic term that includes any communication device or application that is used to create, design, store, transmit, interpret, and manipulate information in its different formats (Tapscott& Williams, 2010; Castells, 2001). Its contribution to social and economic progress (UNCTAD, 2011) and education (Mastascusa et al., 2011; Selwyn, 2011) gave rise to the importance of understanding and the evaluation of technological self-efficacy.

With the emergence of next generation smart phones, computers, and Internet services, the effect of these ICT tools has become more significant in the academe and its student services. As one of the most crucial elements of the academic service, guidance and counseling professionals need to ascertain the possible effect and influence of technology tools on their craft.

The guidance program in the Philippines is intertwined with the economic and political situation during the 1930's. The first psychological clinic in the Philippines, established in 1932 by Dr. Sinforoso Padilla, dealt with student discipline and emotional, academic, and vocational problems (Kapunan, 1974 p. 22; Villar, 2007 p. 11).From one that was heavily influenced by Western orientation, it has evolved to one that is best suited for the Filipino culture (Gines, p. 76; Kapunan, p. 22; Villar, p. 12; Salazar-Clemena, 2002, p. 254).

In the global arena where technology and the prevalence of information systems encourage a new type of economy and culture (Greenhaus & Callanan, 2006, p. 797; Tapscott & Williams, 2010, p. 634-365), changes in the guidance program in the Philippines are nothing but necessary. For example, the creation or passage of the Guidance and Counseling Act of 2004 or the Republic Act 9258 tasks the guidance and counseling profession to use an integrated approach in the development of a well-functioning individual (Villar, 2007). This development has a significant effect on the counseling profession and is met with mixed results as the law requires guidance and counseling professionals to be certified or licensed and to use methods that are new to them (Garcia, 2012), and among these methods is the information and communication technology with its array of tools.

Despite Philippine's self-proclaimed status as the world's center for social media, only 13%-25% Filipinos were connected to the internet in 2008 (Zook, 2011). Even with the highest concentration of ICT-related resources, Manila had only 0.3 per 100 people broadband subscriber with a computer penetration

rate estimated to be 7.2 per 100 people (Montecillo, 2013; Vinluan, 2011). In the absence of clear-cut guidelines and standards that address the quality and the effective and proper use of these technologies, the guidance and counseling profession needs to understand the capabilities, benefits, and shortcomings of such systems in actual use (Bobek et al., 2005 p. 364).

The pervasiveness of information and communication technology in the society is also another facet to consider. For example, the Internet with the potential for remote delivery of test selection, orientation, administration, scoring, profiling, interpretive report writing, and multimedia functions, as well as adding potential cost-effective capability in communication and links to related information could be a great tool for counselors with numerous clients (Harris-Bowlsbey & Sampson, 2005; McCarthy et al., 2003; Heinlen et al., 2003; Oravec, 2000; Sampson, 2000). The increased accessibility and the exponential amount of information available through the Internet have made the services of counselors more important (McCarthy et al., 2003). The Internet also provides unique opportunity for counselors to learn about much resources and their relative use for clients (McCarhy et al., 2003; Oravec, 2000).

A number of studies advocate improving the counseling services further with the utilization of tools like SMS, email, blogs, and social networking sites to supplement counseling especially in situations where distance and availability are of concern (Vinluan, 2011 p. 33; Martin, 2011 p. 34). However, other studies caution that online public disclosure of private information can yield negative consequences for users and that the use of online social networks raises issues bordering on ethical and personal conduct (Heinlen et al., 2003; Oravec, 2000). Nevertheless, the use of ICT tools enhances the counselors' belief in one's capability to deliver what is expected of them.

Albert Bandura (2001) explained that self-efficacy refers to one's beliefs in one's capabilities to organize and execute the courses of action required to produce a given outcome and is founded on the social cognitive theory that he developed. He saw four general sources of self-efficacy: performance accomplishments, vicarious experiences, verbal persuasion, and physiological states (Bandura, 1997). While these sources are helpful in influencing self-efficacy, identifying specific factors related to these general sources in a particular context is also valuable. Technology self-efficacy (TSE) is a specific application of a more general and encompassing construct of self-efficacy (McDonald & Siegall, 1992). The personal belief in performing a technologically sophisticated new undertaking is considered in TSE. According to Brown et al. (2010), TSE plays a crucial role

in the preparation and implementation of educators who can use educational technology to enhance student learning. Self-efficacy items can be measured by its magnitude wherein participants respond if they could accomplish a certain task. Confidence in completing tasks utilizing numerical scales measures the strength.

Prior experience and active participation (through hands-on training) is a significant indicator of positive technology-related self-efficacy. Studies have revealed that the opportunity to interact and master new technologies equates to a more constructive attitude in future performance (Brinkerhoff, 2006; Torkzadeh & Van Dyke, 2002; Compeau & Higgins, 1995; Murphy, et al., 1989). According to Compeau & Higgins (1995), other important contributors to technology self-efficacy are social persuasion and organizational support since encouragement and organizational assistance change one's perception of technology acceptance.

The lack of access to physical resources is one of the main reasons for not adapting technology (Butler & Sellboom, 2002; Burkhardt& Brass, 1990). The role of age in TSE has also revealed that older individuals have a lower level of TSE than their younger equal. Another controversial factor is gender in which a sizeable research examined the familiar notion that male has a higher level of technology-related self-efficacy than women (e.g. Kumar, 2011; Milek et al., 2011; Miliszewska & Moore, 2010).

OBJECTIVES OF THE STUDY

This study determined the level of awareness and usage of ICT tools by guidance counselors in maximizing counseling services. The study utilized the technology self-efficacy construct of social cognitive theory that posits that antecedent influence technology self-efficacy. As such, factors like age, gender, participation, experience, encouragement, and resources were examined in the context of Filipino counselors. Figure 1 summarizes the study's framework guided with the following hypothesis: Technology self-efficacy of guidance counselors varies significantly when they are grouped according to their age, gender, type of institution, licensure, and availability of Internet at home and at work.

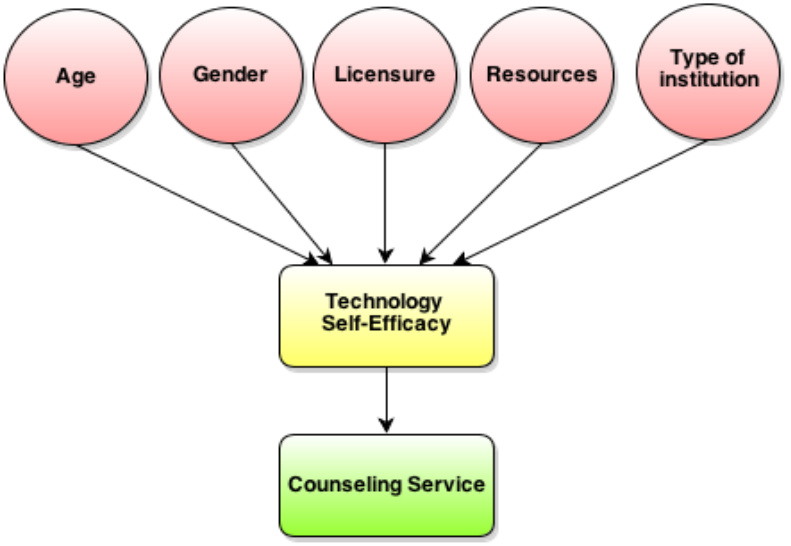

Figure 1. Conceptual Framework

METHODOLOGY

The Research Approach. A sequential mixed method approach was utilized to answer the research questions that guided this study. According to Cohen et al. (2011) and Creswell (2009), the use of mixed method approach is deliberately chosen as it recognizes and works with the fact that the world is not exclusively quantitative or qualitative, but is mixed.

The Research Participants and Instrument. A total of 53 counselors from 17 schools (4 from Luzon, 6 from Visayas, 4 from Mindanao, and 3 from NCR) participated in a survey. The research participants were all attendees of the annual conference of the Philippine Guidance and Counseling Association on May 15-17, 2013. To gain multiple perspectives and deeper understanding on the mechanisms/factors that have bearing on the participants' technology self-efficacy, the researchers fielded two-page questionnaire survey before the start and during break of each session. Demographic, institutional, and habitual data were elicited from the participants through a combination of dichotomous, multiple choice, and open-ended type of questions.

After analyzing the quantitative data, the researchers then proceeded to the qualitative portion of the study. Participants with the highest and lowest TSE scores were identified as the group that could provide a richer understanding of the quantitative data. Counselors who were available online (and connected with one of the researchers) were invited to a discussion using Facebook's group chat and using a predefined set of questions designed to elicit personal views on their use of technology and technology tools. Those who had no Facebook account (and not in the so called 'friends' list) were given the same set of open-ended questions via e-mail and were asked to send their answers via the same method. They were also requested to forward the instrument to other counselors they knew. Their responses were then positioned in the list of themes that surfaced in the group discussion on Facebook.

RESULTS AND DISCUSSION

Quantitative Result

Table 1 shows that male and female counselors did not significantly vary in their technological self-efficacy. As reflected by the P values, the counselors were more or less comparable on how they view their technological self-efficacy. This finding doesn't support the findings of several studies (Kumar, 2011; Milek et al., 2011; Miliszewska& Moore, 2010). It can be noted that age was a source of variance in the technological self-efficacy of the counselors as reflected by P values that are less than .05. The younger counselors were more inclined to using tablets and office tools. In general, the younger individuals tended to have significantly higher level of technology related self-efficacy beliefs than their senior counterparts (Reed et al., 2005; Burkhardt& Brass, 1990).

Table 1. Results of the test on the Variations in the Respondents' Assessment of their Technological Self-Efficacy Considering Gender and Age

Technological Self-Efficacy	Gender		T-Value	Sig. Level (P-value)	Age		T-Value	Sig. Level (P-value)
	Female (n=45)	Male (n=8)			26 to 44 yrs (n=27)	≤ 45 years (n=26)		
Technology self-description	2.64	2.88	-.89	.377	2.78	2.58	1.088	.282

Proficiency in:								
tablets/ phablets	3.24	3.25	-.02	.987	3.63	2.85	3.738	.000
office tools	3.29	3.13	.508	.614	3.56	2.96	2.745	.008
desktop publishing	2.39	2.13	.68	.497	2.41	2.28	.461	.647
database	1.98	1.63	1.08	.284	1.81	2.04	-.981	.331
fb,myspace	2.49	3.13	-1.48	.145	2.67	2.50	.531	.598
instant messaging	2.29	2.29	.007	.994	2.38	2.19	.654	.516
text messaging	3.42	3.63	-.51	.613	3.37	3.54	-.590	.558
mobile phone	3.47	3.25	.54	.595	3.26	3.62	-1.244	.219

Table 2 reveals that the counselors from both private and public institutions had no significant variations in their technology self-efficacy. While the public sector has lesser resources, than the private sector, this study reveals that the counselors in both private and public institutions had comparable levels of technological self-efficacy. The table also reveals that the counselors still working for their license had higher technology self-efficacy, especially in using desktop publishing, compared with the licensed counselors. Perhaps, the absence of formal training in the use of technology in the graduate counselor curriculum and the emergence of ICT can explain the difference (Vinluan, 2011). Most of the licensed counselors were older than those who were still working for their license. This insight is supported by the higher TSE rating of the younger counselors (Suls& Mullen, 1982). In Table 1, the younger counselors significantly had higher assessment in their TSE than those older counterparts in terms of the use tablets/phablets and office tools.

Table 2. Results of the test on the Variations in the Respondents' Assessment of their Technological Self-Efficacy Considering Type of Institution and Licensure

Technological Self-Efficacy	Type of Institution		T-Value	Sig. Level (P-value)	Licensure		T-Value	Sig. Level (P-value)
	Private (n=32	Public (n=21)			Licensed (n=40)	Still working (n=12)		
Technology self-description	2.66	2.71	-.304	.762	2.63	2.83	-.932	.356
Proficiency in:								
tablets/phablets	3.09	3.48	-1.622	.111	3.15	3.42	-.982	.331
office tools	3.28	3.24	.182	.856	3.18	3.50	-1.184	.242
desktop publishing	2.31	2.40	-.308	.759	2.18	2.83	-2.057	.045
database	1.91	1.95	-.166	.869	1.92	2.00	-.280	.781
fb,myspace	2.66	2.48	.562	.577	2.58	2.58	-.022	.983
instant messaging	2.39	2.14	.817	.418	2.28	2.36	-.242	.809
text messaging	3.53	3.33	.681	.499	3.40	3.58	-.533	.596
mobile phone	3.50	3.33	.563	.576	3.43	3.42	.024	.981

Interestingly, Table 3 shows that counselors who had no Internet connection at home (proficient) had the highest level of technology self-efficacy especially along technology self-description and proficiency in using tablets/phablets and office tools. Their perception on how well they can use the office tools needed is not necessarily dependent on the presence of Internet connection.

Table 3. Results of the test on the Variations in the Respondents' Assessment of their Technological Self-Efficacy Considering Resources at Home

Technological Self-Efficacy	Access of Internet At Home					F-Value	Sig. Level (P-value)
	Dial Up (n=3)	Broad Band (n=25	High Speed Wireless (n=7)	High Speed Wired (n=13)	None (n=5)		
Technology self-description	2.67	2.52	2.86	2.77	3.00	.802	.530
Proficiency in:							
tablets/phablets	3.00	3.24	3.00	3.15	4.00	1.247	.304
office tools	3.33	3.44	2.71	2.92	4.00	2.930	.030
desktop publishing	2.67	2.44	1.83	2.23	2.60	.648	.631
database	3.00	1.84	1.60	2.00	1.80	1.586	.194
fb,myspace	2.67	2.52	2.43	2.92	2.20	.471	.757
instant messaging	2.67	2.00	2.29	2.85	2.00	1.625	.184
text messaging	4.33	3.36	3.71	3.46	3.00	.950	.443
mobile phone	4.33	3.24	3.71	3.62	3.00	1.226	.312

Table 4 reveals that the counselors with high speed wireless Internet connection at work were more proficient in the use of tablets/phablets, office tools, desktop publishing, data base, Facebook, MySpace, instant messaging, and mobile phone compared with their other counterparts (those with broad band, and wired connection and those who had no connection). The presence of Internet connection clearly supports higher technological self-efficacy of the counselors (Butler & Sellboom, 2002; Burkhardt & Brass, 1990).

Table 4. Results of the test on the Variations in the Respondents' Assessment of their Technological Self-Efficacy Considering Access to Internet at Work

Technological Self-Efficacy	Access of Internet at Work				F-Value	Sig. Level (P-value)
	Broad Band (n=8)	High Speed Wireless (n=13)	High Speed Wired (n=28)	None (n=4)		
Technology self-description	2.50	3.08	2.57	2.50	2.175	.103
Proficiency in:						
tablets/ phablets	3.13	3.85	2.96	3.50	3.894	.014
office tools	3.38	3.69	3.11	2.75	2.154	.051
desktop publishing	2.13	3.00	2.14	2.00	2.824	.049
database	1.75	2.33	1.86	1.33	1.663	.188
fb,myspace	3.13	3.15	2.14	2.75	3.617	.019
instant messaging	2.50	2.67	2.11	2.00	.998	.402
text messaging	3.75	3.85	3.25	3.00	1.519	.221
mobile phone	3.50	4.08	3.18	3.00	2.661	.050

Qualitative Summary

As found during the discussion, majority of the counselors who brought home their work used portable data storage as backup. The work brought home usually included report writing and data needed for work. Although some of them used FB (Facebook) and instant messaging to connect and observe their clients' online activity, they would only do so for special cases that merit such details. While some counselors would also call students through cell phone or Skype, such was only means the last course of action when all possible means were exhausted during office hours.

Their access to information (shout outs, wall post, tweets, news, blogs, announcements) and on-line transaction (email, private message, video conference, Skype conversations) helped the counselors augment their skills. When asked if their outputs were affected by Internet access at work, the counselors unanimously agreed that the Internet has positively affected their efficiency as counselors. A few remarked that Internet access is also distracting, taking attention to online game. Majority said that their counseling session remains to be in person and in *situ* and a few remarked that counseling online or via phone seems weird. Their use of Internet-based resources and tools has dramatically increased recently as more smart phones and tablets have become more affordable. However, such means are not primarily used in counseling. The availability of high speed and wireless connection at work and of prepaid Internet access gave them reason to be connected to the Internet most of the time.

The counselors used a variety of ICT tools (tablets, office tools, desktop publishing, database, FB, MySpace, instant messaging, text messaging, and mobile phone) to augment their one-on-one encounter with the clients. Generally, age, licensure status, Internet availability at home and work were factors that affected the technology self-efficacy of the counselors. Gender and type of institution did not have significant bearing on the counselors' technology self-efficacy.

CONCLUSIONS

From a theoretical standpoint, findings of this research speak of the counselors' readiness to embrace technology as it permeates their professional and personal lives. They are unwilling participants in an environment that is being redefined by the push of technology and the apparent pull of their environment. The counselors in this study have been responsive to technological advances that have become and are widely used. This study notes that counselors go beyond the usual and traditional one-on-one counseling in a cubicle by using different ICT tools such as phones and online social media. By using these tools, the counselors have opened more options and avenues themselves and for their clients.

Counseling programs are made richer and more accessible to those in need. The counselors' perception of their TSE goes beyond their gender and type of institution they are connected with as evidenced by their personal belief that the use of technology and technology tools can augment and enrich their craft for a more meaningful, purposeful, and relevant counseling services. This study also highlights some ethical concerns regarding the use ICT tools in their profession

such as data integrity and confidentiality. Finally, the contribution of this study is the validation that age, licensure, and availability of resources are factors influencing the technology self-efficiency of counselors in the Philippine context. Similar future study may consider a larger sample for greater generalizability of results.

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