

Needs analysis study on the development of multicultural counseling gamification modules for counselors in training

Necesidad de estudios sobre el desarrollo de módulos de gamificación de consejería multicultural para consejeros en formación

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ABSTRACT

Gamification in higher education is a new way in the learning environment for the 21st century. It has become an effective pedagogical tool to increase students' involvement through immediate feedback on learning activities that allow them to reflect on what they are learning. The use of games as a pedagogical strategy is the basis for student-centered pedagogy as they help promote a flexible teaching and learning environment that is in line with the curriculum stated in counselor education. To date, little research has been carried out that incorporates games in multicultural counseling pedagogy; hence, research needs to be conducted pertaining to this aspect. The article will highlight the development of a multicultural counseling gamification module known as "Immerze" based on the Gamified E-learning Design Process Model proposed by Malas and Hamtini. The Gamified E-learning design process consists of five stages; Planning, Design, Development, Deployment and Review. The article highlights the first stage of the development of a multicultural gamification module which involves the survey on the needs analysis for constructing the criteria and elements of the module. The findings indicated that there was a positive feedback in terms of respondents' needs for gaming platform to enhance their multicultural counseling competencies. Additionally, the implications of the study that help plan and design the multicultural counseling competency module will also be discussed.

Keywords: Gamification, multicultural counseling competency, pedagogy, counselors in training

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RESUMEN

La gamificación en la educación superior es una nueva forma en el entorno de aprendizaje para el siglo XXI. Se ha convertido en una herramienta pedagógica efectiva para aumentar la participación de los estudiantes a través de comentarios inmediatos sobre las actividades de aprendizaje que les permiten reflexionar sobre lo que están aprendiendo. El uso de los juegos como estrategia pedagógica es la base de la pedagogía centrada en el estudiante, ya que ayuda a promover un entorno flexible de enseñanza y aprendizaje que está en línea con el plan de estudios establecido en la educación de los consejeros. Hasta la fecha, se han llevado a cabo pocas investigaciones que incorporan juegos en la pedagogía multicultural de asesoramiento; Por lo tanto, la investigación debe llevarse a cabo en relación con este aspecto. El artículo destacará el desarrollo de un módulo de gamificación de asesoramiento multicultural conocido como "Immerze" basado en el Modelo de proceso de diseño de aprendizaje electrónico gamificado propuesto por Malas y Hamtini. El proceso de diseño de Gamified E-learning consta de cinco etapas; Planificación, Diseño, Desarrollo, Despliegue y Revisión. El artículo destaca la primera etapa del desarrollo de un módulo de gamificación multicultural que involucra la encuesta sobre el análisis de necesidades para construir los criterios y elementos del módulo. Los hallazgos indicaron que hubo una retroalimentación positiva en términos de las necesidades de los encuestados de una plataforma de juegos para mejorar sus competencias de asesoramiento multicultural. Además, también se discutirán las implicaciones del estudio que ayuda a planificar y diseñar el módulo de competencia de asesoramiento multicultural.

Palabras clave: gamificación, competencia multicultural, pedagogía, consejeros en formación.

Introduction

Multicultural counseling has become a basic core curricular requirement set by the Council for Accreditation of Counseling and Related Programs (CACREP) to be introduced in counseling curriculum 2009; Steinfeldt and Steinfeldt, 2012; Sue and Sue, 2013). It has also been regarded as one of the central foci in the development of competency for professional practice in graduate counseling programmes in the USA (Constantine, Hage, Kindaichi, Bryant, 2007; Zalaquett, Foley, Tillotson, Dinsmore, Hof, 2008). As the world is now facing the phenomenon of rapid demographic and diverse societies (Swazo & Celinska, 2014), it is instrumental for those in training to learn, practice, and incorporate multicultural counseling principles in their lives to be more skilled and effective professionals. Most importantly, innovative pedagogical strategies need to be introduced by counselor educators to prepare the practitioners for the complex an

ever-changing societies. This article highlights the first stage of the development of the multicultural gamification module which involves the needs analysis study for developing the multicultural counseling competency module. The needs analysis study concentrates on two aspects: 1) the attitudes of students towards the gamification approach in learning 2) the element of games required and expected by the students in learning multicultural counseling.

Gamification in higher education

One of the cutting-edge pedagogical strategies being introduced in higher education today is gamification. It is defined as the use of gaming elements and mechanics in non-gaming environments. In the context of education, gamification refers to game-based digital learning or digital game-based learning (DGBL) (Seaborn & Fels, 2015). It is utilised as game-based mechanics, aesthetic and game-thinking to promote human involvement, stimulate motivation and excitement to learn and problem-solving (Costello, 2017) that involves certain rules and rewards. According to Gros (2007), the gamification concept covers seven genres as follow:

- 1) Action games.
- 2) Adventure-based game play.
- 3) Play-shaped game play.
- 4) Role-playing games.
- 5) Simulation of simulations.
- 6) Sports-based game play.
- 7) Strategy games.

Multicultural counseling competency pedagogy

Numerous researchers have identified several pedagogical approaches under the umbrella of critical pedagogical approach (Manis, 2012), notably experiential learning and fieldwork, as ways to enhance multicultural counseling competencies. The study of Nurul Ain, Fauziah Hanim, Nazariah and Norazani (2015) revealed that experiential learning activities such as interaction with diverse ethnicities help reduce prejudice and attitudes towards different

ances. It is also in line with the studies conducted by Alexander, Kruczek & Ponterotto (2005) and Kim and Lyons (2003; 2011), which emphasizes the importance of experiential learning in all counseling and education curricula to expose the counselors in training to the cultural reality of the school environment. Similarly, Cook, Krell, Hayden, Gracia & Denitzio (2016) and Swazo and Celinska (2014) highlighted the importance of fieldwork and international study abroad as pedagogical strategies for graduate students. This notion is supported by Hays, Dean and Chang (2007), and Collins, Arthur, Brown and Kennedy (2013), who mentioned the importance of applied experiences in multicultural counseling pedagogy; for example, exposure to diverse peers and individuals as well as campus and community outreach and advocacy as they enable to translate the theory into practice and look into a broader and systemic conceptualization of clients' experiences and professional practice of the counselor. Hence, the cultivation of multicultural counseling competencies requires something beyond didactic teaching. The use of gamification as a tool in the field of counseling has long been recognized by several researchers as it provides a positive influence on the counseling process (Varenhorst, 1973; Crocker and Wroblewski, 1975; Westwood, 1994). According to Crocker and Wroblewski (1975), the use of gamification in counseling offers six functions in helping a relationship: a) to increase the individual's sensitivity to unobserved behavior; b) to enable individuals deal with the inability to feel; c) to offer opportunities to confront the laws of the game as an analogy to life and norms in different societies; d) to enable play and risk-taking behavior to be highlighted; e) to create a safe environment for experimenting with new behavior; and (f) to help individuals learn strategies of mobility. Kim & Lyons (2003) also suggested that gamification and simulations can be used in conjunction with didactic teaching to nurture and enhance multicultural competencies among counseling students based on three-dimensional competencies, namely awareness, knowledge and skills.

However, empirical studies related to training strategies and activities in multicultural competence training are still lacking in teaching and learning. According to Dickson and Shumway (2011, p. 2) and Barrio-Minton et al. (2014), a unified source of empirically supported training strategies and appropriate activities is lacking in the field of counselor education. Kim (2003) emphasizes that multi-cultural competence training which encompasses the affective, cognitive and behavioral aspects of the subject is relatively low. To date, only one study by Anderton and King (2016) has been conducted that incorporates game-based learning, namely "Oblivion". This narrative study consisting of 5 participants (4 females and one male) aimed to broaden cultural empathy and explore the personal bias among participants. The findings indicated that the most prominent learning experiences of the course were playing the game. The participants linked this gaming experience to their personal real-life reaction combined with emotions and thoughts. Three themes were identified from the data, namely, increase of self-awareness, navigating unusual cultural systems and increased understanding and cognitive empathy for others. In addition, a fourth additional theme of embodiment and the value of embodiment were identified. "Oblivion" provided participants the opportunity to gain entry into a uniquely designed world, a realistic but pseudo-cultural world both familiar and foreign to their real life. Hence, the use of gaming elements can provide students with simulations and thus enable them to position the reality of counseling processes in a 'safe-space' way. Studies related to gamification in multicultural counseling have the potential to become a driving force in enhancing training among counselors. This is important as counselors in training are often involved in dealing with and exploring matters that challenge their competencies as counselors.

Table 1. Demographic information of participants and their experiences in playing game (s)

	Description	Frequency	Percentage
Semester of study	4	30	54.5
	5	2	5.5
	6	12	21.8
	7	8	14.5
	8	3	3.6
Gender	Male	12	21.8
	Female	43	78.2
Level of study	Undergraduate	40	72.7
	Postgraduate	15	27.3
Experience of playing any games	Yes	53	96.4
	No	2	3.6

Type of (a) game played	Digital game	33	63.4
	Board game	16	30.7
	Educational game (traditional)	3	5.7
Platform used to play game	Hand phone	27	50
	Computer	13	24
	Board game	13	24
	Console	0	0
	Video game	1	1.9

N= 55

Based on Table I above, the participants consisted of counseling students from various semesters who had enrolled in a multicultural counseling class. The majority of them (30) were from semester 4 (54.5 percent), followed by semester 6 (21.8 percent). The majority of the participants were female (43) or 78.3 percent while a total of 12 participants were male (21.8 percent). A total of 40 participants (72.7 percent) were undergraduate students while 15 students (27.3 percent) were postgraduate students. About 96 percent of participants had experience playing various games. Only 3.6 percent did not have any experience playing games. About 63.5 percent played digital games, with the highest percentage (30 percent) playing Candy Crush and other entertainment or leisure games, for example FIFA World cup, Super Mario, Temple Run, Fruit Ninja, Sniper, etc. About 30.7 percent of the participants played board games (Sahibba, Saidina, Sudoku), with the highest percentage (25percent) of them playing "Saidina". Only 5.7 percent of them played educational games, namely Kahoot. When asked about the platform used to play the games, 50 percent (27 participants) stated that they used mobile phones as their platform to play games. This was followed by computer and board games that carried the same percentage (24 percent). Only 1.9 percent of participants used video games.

Table 2. Attitudes of participants toward gaming application in learning

1-5 scale (Strongly not agree, Not agree, less agree, Agree, Strongly agree)			
Item	1 & 2	3	4&5
1. The use of gaming platforms is one of the ways for me to identify my cultural values	0	1.8	98.1
2. I need a gaming platform to enhance my knowledge on cultural diversity.	0	0	100
3. I need a gaming platform to enhance my skills from a multicultural aspect.	0	0	100
4. I need a gaming platform to enhance my skills in conducting counseling intervention.	1.8	9.1	96.4
5. I need a gaming application to stimulate effort in understanding clients.	1.8	9.1	89.1
6. I need a gaming platform or creative application to enhance my sensitivity towards clients of different cultural backgrounds.	1.8	0	98.2
7. I need a gaming platform or creative application to enhance my empathy towards clients of different cultural backgrounds.	1.8	18.2	80

8. I need a gaming platform or creative application to enhance my skills in understanding clients' worldviews.	1.8	1.8	96.4
9. I believe that creative applications enable me to enhance my relationship with clients	1.8	5.5	92.7
10. I believe that gaming platforms based on multicultural education will give me fun and excitement,	0	1.8	98.2
11. I am motivated to enhance my skills with clients if I were given stimulation through creative applications.	1.8	3.6	94.5
12. I am more confident to conduct multicultural counseling processes through gaming applications or creative applications.	1.8	7.3	90.9
13. I believe I can demonstrate appropriate multicultural counseling intervention through gaming applications or creative ones.	1.8	1.8	96.3
14. I need gaming applications to help me explore client's issues in a safe way.	0	23.6	76.4
15. I need gaming platforms to learn coping strategies to help client.	1.8	12.7	85.5
16. I am motivated to conduct simulations on advocacy with clients or the community, institutions or society through gaming platforms.	0	0	100

N=55

Based on the items analysis, the majority of participants showed positive attitudes towards gaming platforms in enhancing their multicultural counseling competence. 15 out of 16 items recorded positive attitudes of above 80 percent (based on the total calculation of items "agree" (4) and "strongly agree" (5)). The highest needs (100 percent) were displayed in items number 2, 3 and 16 in which the participants indicated that they needed gaming platforms to enhance their knowledge and skills in cultural diversity as well as were motivated to conduct simulations on advocacy with clients, the community, institutions or society using that platform. However, there was also noticeable disagreement in items number 14 and 7, in which 23.6 percent of participants did not agree that gaming applications would help them explore client's issues in a safe way. 20 percent of participants also did not agree that gaming platforms enhance their empathy towards clients from different cultural backgrounds.

Discussion

The findings proved that the participants are ready to accept games in their learning processes. It also indicates that Generation Y individuals are very much attracted to creative and challenging pedagogies. Hence, the approach of creative pedagogies needs to be incorporated in teaching and learning along with didactic strategy to stimulate fun and excitement for the students. It is in line with Johnson, Smith, Willis, Levine and Haywood (2011), who mentioned that the use of games is considered vital as it fosters 21st century skills such as collaboration, problem-solving, innovation and procedural thinking. Additionally, understanding of gamers and gaming culture through the use of game platforms in counseling is necessary as a way to increase counselors' understanding of the needs of the clients (Cade & Gates, 2016). However, there was also noticeable disagreement among the participants, in which 23.6 percent of them did not agree that gaming applications could help them explore client's issues in a safe way. 20 percent of the participants also did not agree that gaming platforms enhanced their empathy

towards clients of different cultural backgrounds. It is undeniable that gaming applications are a new approach in counseling pedagogy. Most of the participants normally practice their counseling simulation using face-to-face or traditional approach, with little exposure to technology or game-based learning approach. Perhaps they could not figure out how games can be used to explore a client's issues and enhance their empathy towards clients of different cultural backgrounds. The findings are in line with a study by Dickson and Shumway (2011) that indicated empirical studies on game-based learning in multicultural counseling are still relatively low, and hence contribute to the participants' lack of exposure towards this pedagogical approach.

Conclusion

This study indicates the need to establish gaming platforms to enhance multicultural counseling competency. This is in line with the needs of 21st century teaching and learning that emphasize on technology in meeting the needs of a diverse society, especially the younger generation. The needs analysis study provides a basis for the researcher to develop a module considered appropriate for students to experience the pseudo-cultural world in a safe space. This is vital to keep their interests alive as well as stimulate their fun and excitement in multicultural counseling. However, much effort needs to be done to promote and embed technology in multicultural counseling pedagogy as there is lacking evidence in literature pertaining to this approach.

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