

Education paper

The simulation method for learning cultural awareness in nursing

Liisa Koskinen RN PhD
Principal Lecturer

Pirkko Abdelhamid RN LicNSc
Lecturer

Heikki Likitalo LicPhil
Lecturer

Savonia University of Applied Sciences, Kuopio, Finland

What is already known on this subject

- Cultural awareness can best be taught by experiential learning methods.
- Cross-cultural simulation games BaFa BaFa and Barnga are effective methods for learning cultural awareness.
- The purpose of BaFa BaFa and Barnga is to provoke emotional confusion in learners, thus sensitising them to perceive the world from the perspective of a culturally different person.

What this article adds

- BaFa BaFa and Barnga were slightly more important in providing students' reflection on cultural issues in general than on cultural self.
- BaFa BaFa and Barnga were effective in provoking emotions and simultaneously sensitising the students to their own vulnerability and helplessness, thus offering the opportunity to reflect on the attitudes, prejudices, stereotypes and even own racism.
- BaFa BaFa and Barnga trigger students' reflection that should be encouraged during the immediate debriefing session by the facilitating teacher and should be continued e.g. by learning diary writing.
- The effect of BaFa BaFa and Barnga was greater if the student had had previous cultural experiences.

ABSTRACT

The aim of this study was to describe Finnish nursing and dental hygienist students' experiences while playing the culture simulation games Barnga and BaFa BaFa, and thus to obtain knowledge about the usefulness of the simulation method for increasing the students' cultural awareness. The data were collected using a semi-structured questionnaire from undergraduate students ($n = 103$) and analysed with the SPSS software programme. The study found that Barnga and BaFa BaFa increased students' cultural awareness by giving them insights into different cultures, by changing their thinking about new cultures, by enabling them to identify with another culture, by confirming their self-awareness, and by providing them with new personal insights. The games evoked a variety of emotions in the

players, such as suspicion, confusion, success and feeling in control, and enabled debriefing of personal cultural prejudices. The two games were equally preferred by the students and provided them with professional, intercultural and educational benefits. The findings indicate that Barnga and BaFa BaFa are powerful methods to learn cultural awareness in nursing. Most probably those students who have previous cross-cultural experience benefit more from the games than those who have not. However, the long-term effects of the games call for further research.

Keywords: BaFa BaFa, Barnga, cultural awareness, simulation method

Introduction

Finland's development into a multicultural society is a recent but rapidly advancing phenomenon. Several thousand members of cultural minorities, including Swedish-speaking people, Roma, Jews, Tatars and Sámi, have lived in the country for centuries. However, the real increase in the population's cultural diversity started with the arrival of new immigrant and refugee groups in the 1980s, followed by the political transition in Eastern Europe at the turn of the 1990s, and Finland's membership of the European Union (EU) since 1995. In 2006, there were 121 739 foreign citizens permanently resident in the country, and they accounted for 2% of the total population of 5.2 million (Population Register Centre, 2006).

Multicultural society will change the population's health needs, expand the criteria for good nursing care and, simultaneously, increase the ethnic and cultural diversity of healthcare teams. Therefore, cultural competence is an increasingly salient topic throughout the country. Since 2001, it has been agreed that intercultural nursing is one of the 10 core nursing competences that must be attained during the 3.5 year nursing education (Ministry of Education, 2006). O'Connor *et al.* (2002, p. 1102) list the key elements of the definitions of the term cultural competence:

self-awareness; ability to empathise with others; willingness to try to see through others' eyes when differences in values and expectations make interaction challenging and understanding difficult to achieve; willingness to negotiate mutually acceptable solutions; and the capacity to act upon all of these qualities in formulating workable action plans.

Cultural awareness has often been identified as a prerequisite or starting point for the learning process towards cultural competence. Cultural awareness means that learners become more aware of self and of personal attitudes, emotions, reactions and possible biases against cultural diversity. In this study, cultural awareness is defined as the process of identification of culture as a phenomenon, examination of one's own biases and emotions against cultural diversity, and exploration of one's own cultural and professional background. (Bennett, 1993; Campinha-Bacote, 2007; Koskinen and Jokinen, 2007).

During the past few years, simulation has been increasingly used as an experiential immersion method in cultural awareness training of diverse learner groups. Simulation in nursing education can be defined as a miniaturised version of some sphere of real-life activity that mimics clinical reality (Cioffi *et al.*, 2005). Cross-cultural simulation games were first developed in the US towards the end of the 1970s for the

preparation of military personnel and Peace Corps volunteers for their international tasks, and later for training the cultural communication skills of business organisations (Fowler, 1994). Most of the research has focused on the use of the game BaFa BaFa, developed by Garry Shirts in 1977. Previous studies indicate that learners' experiences of that game are favourable, and also that it is an effective method for enhancing the players' intercultural awareness (Sullivan and Duplaga, 1997; O'Connor *et al.*, 2002). Ingelis *et al.* (2004) found that playing BaFa BaFa was important for various aspects of learning cultural awareness, particularly among students who had reflective skills. Mills and Smith (2004) report that participation in a BaFa BaFa simulation game increased immediate and long-term cultural awareness of Australian civilian employees of the Department of Defence.

In the nursing context, relatively little is known about the cross-cultural simulation method, and the use of simulation games in cultural education has not been studied. In Lockhart and Resick's (1997) article, BaFa BaFa was used as part of the reported intercultural nursing course. The authors conclude that the method can have a long-term influence on the learning strategies of the students and their later ability to provide culturally sensitive nursing care.

It seems that developing a greater understanding of the use of the simulation method in cultural education in nursing would be of value. The aim of this study was to describe Finnish nursing and dental hygienist students' experiences of playing the culture simulation games Barnga and BaFa BaFa, and thus to obtain knowledge of the usefulness of the simulation method in increasing nursing students' cultural awareness.

Barnga and BaFa BaFa

Barnga (Thiagarajan and Steinwachs, 1990) and BaFa BaFa (Shirts, 1977) are two cross-cultural simulation games that target the development of the players' cultural awareness. The purpose of the games is to simulate cultural conflicts among the players and assist them to become aware of their own cultural stereotypes, prejudices and misunderstandings. They are purchased products, and the box of both games includes detailed administration rules. Both games consist of three phases: orientation, game playing, and debriefing. The games have not been published in Finnish, and the administration rules have been translated from English into Finnish by the research university.

The games can be used in cross-cultural training to simulate confusing real-life encounters between people from different cultures. The games are independent entities that can be played and debriefed separately, but in the university in which this research

took place, the games are played during one six-hour session. It is important that the facilitating teachers have been familiarised with the administration of the games and are ready to conduct them. A sufficiently lengthy debriefing that encourages students' reflection is essential. The debriefing phase takes 1–2 hours after each game. First, the immediately expressed experiences and emotions are discussed and summarised on a flip chart, and then the phenomena are transferred into the clinical nursing context.

Barnga is a simple card game (five tricks) for a minimum of nine players; very large number of players can take part. The players are divided into small groups, and after a short orientation verbal communication is not allowed. Players are not warned in advance that each group is playing by different rules. Cultural conflicts begin to occur as participants move from group to group and try to express themselves non-verbally by gestures and drawing symbols. This simulation assists the players to undergo a mini culture shock similar to the actual experience of entering into a different culture (Thiagarajan and Steinwachs, 1990; MacGregor, 2003). The ideal number of participants in BaFa BaFa is between 25 and 30 (Sullivan and Duplaga, 1997).

In the BaFa BaFa game, participants are divided into two cultural groups, Alphas and Betas. Alpha culture is a relationship-oriented, high-context culture, in which hugging, touching and verbally expressed interest in male family members are central modes of communication. Beta culture is a highly competitive trading culture, in which the communication is conducted by the code language, and exchange of play marks and cards. During the orientation, Alphas and Betas, in their own separate rooms, spend about 15 minutes learning the basic values and interaction rules of their home cultures. During the game phase all the players from both groups visit the foreign culture one after the other in pairs and communicate their observations and feelings on re-entry into the home culture, thus preparing those who will go next (Shirts, 1977; Fowler, 1994).

Barnga and BaFa BaFa in cultural education

Barnga and BaFa BaFa were included in the intercultural education at the university in which this study took place, as part of a transatlantic nurse education project carried out in 2001–2004. During the project, an educational model for advancing students' intercultural competence was developed and tested in multicultural collaboration. The model included four learning stages and parallel educational activities. The games were carried out in the first stage of the model (Koskinen *et al*, 2004; Koskinen and Jokinen,

2007). Currently the Intercultural Nursing 1.5 European credit transfer system (ECTS) course consists of three different components: teaching (16 hours), game playing (6 hours) and learning diary writing (18 hours). The course is obligatory for all undergraduate students in nursing, midwifery, public health nursing and dental hygiene. Approximately 110 students from these programs play Barnga and BaFa BaFa annually as part of their intercultural training.

The study

Aim

The aim of the study was to describe Finnish nursing and dental hygienist students' experiences of playing the culture simulation games Barnga and BaFa BaFa, and thus to obtain knowledge about the usefulness of the simulation method in increasing nursing students' cultural awareness.

Data collection

The data were collected using a semi-structured questionnaire during the academic year 2005–2006. The informants consisted of 103 undergraduate students from three programmes: 23 nursing, 40 public health nursing, and 40 dental hygienist students. The students were in their groups when the games were played and data collected. They all shared a Finnish cultural background. The questionnaires were given to the students at the end of the culture game session, and about 15 minutes were reserved for the responses. All the students who had taken part in the game responded.

The questionnaire was designed in 2004 and focused on the students' experiences of the cross-cultural simulation method. As a result of the pre-test by three student groups, the questionnaire was improved by adding a few questions, and each question was asked about both games.

The design of the questionnaire was based on the guiding principle that the games are intended to increase players' self-awareness by providing them with cultural confusion in a safe classroom environment. The questionnaire consisted of 23 questions (see Table 1) of three types: Likert scale multiple choice questions that included four choices, with 1 corresponding to 'strongly agree' and 4 to 'strongly disagree'; yes/no choice questions; and open-ended questions. The four open-ended questions encouraged the respondents to specify and state reasons for their choices. The questionnaire included four sections: respondent information, personal and cultural insights, emotions, and benefits.

Table 1 Sections and questions of the questionnaire

Sections	Questions
Background 1–4	Gender? I am planning to study abroad? I am planning to work abroad after the registration? I have experience with another culture(s)? If yes, specify
Personal and cultural insights 5–12, 17–18, 23	Playing Barnnga/BaFa BaFa Gave me new insights into different cultures? Changed my thinking about cultures? Enabled me to become a member of another culture? Confirmed my own self-awareness? Provided me with new personal insights? Which game did you prefer playing? Why?
Emotions 15–16	Playing Barnnga/BaFa BaFa evoked Suspicion? Confusion? Frustration? Anger? A desire to give up? A desire to close my mind? A need to impose the correct rules? Elation? Success? Pride? Feeling in control?
Benefits 13–14, 19–22	Playing Barnnga/BaFa BaFa Will enhance my future intercultural relations? Has relevance for my professional practice? If yes, in what ways? Was educational?

The respondent information section was generated by the need to know the students' previous experiences with another culture and upcoming plans to study or work abroad. The personal and cultural insights section was included because of the need to understand the respondents' conception of culture as a phenomenon and conception of self. The emotion section was included because the games are supposed to arouse them. The classroom experiences from the games and the pre-test brought up the chosen emotions. The benefits section was included from the need to understand the professional usefulness of the games for the students.

Data analysis

Quantitative data were analysed using the software package SPSS version 12.0 (SPSS, Inc). Descriptive statistics were used to summarise the results. When comparing the games and the groups of respondents, the non-parametric Mann–Whitney *U* test and the

Wilcoxon signed-rank test were used. A value of $P \leq 0.05$ was considered to be statistically significant. Qualitative data were first entered into the SPSS software by item. Qualitative content analysis was then used in grouping and classifying the data into main and sub-categories.

Findings

Respondents

A total of 103 students participated in the research, of whom 100 were female and three were male; 18% of the students were planning to study abroad during their training, and 24% were planning to work abroad after graduation; 75% had had previous experiences with another culture. Students' quotations showed a positive attitude toward other cultures. This excerpt from one student's response represents the affirmative attitude of the respondents: 'foreigners are more open,

joyful, friendly and kind than Finnish people'. There were no differences between the three student groups in relation to the previous experiences with another culture and upcoming plans to study or work abroad.

Students' previous cultural experiences were grouped into two main categories: experiences gained as part of daily life in the home country, and those gained during shorter or longer visits to foreign countries. The experiences gained as part of daily life in the home country consisted of a multicultural school background, cultural minority group neighbours such as Roma, occasional intercultural encounters with persons from different cultures, for example patients, and visiting family members who either represented another culture or who lived abroad. The experiences gained during shorter or longer visits to foreign countries consisted of travelling abroad and spending time abroad. Students had spent time abroad because of work or education, for instance international language course, student camp, exchange programme.

Personal and cultural insights

Personal insight refers to students' identification of their current conception of self (self-awareness) and recognition of former unidentified features of self (new personal insights). *Cultural insight* refers to students' realisation of cultures as comprehensive and complex systems, membership of which might be difficult for outsiders to achieve.

The students felt that both games confirmed their *personal* and *cultural insights*. Almost all responded

that they gained new insights into different cultures (BaFa BaFa 93%; Barnga 91%). BaFa BaFa (79%) changed more respondents' thinking about cultures than Barnga (67%). More than half felt that the games confirmed their personal insight (BaFa BaFa 63%; Barnga 66%). Half the students responded that playing the games provided them with new personal insights (BaFa BaFa 51%; Barnga 48%).

When comparing the differences in the effect of the two games on personal and cultural insights, it was found that playing BaFa BaFa was more powerful than Barnga in giving new insights into different cultures ($P = 0.000$) and in changing thinking about cultures ($P = 0.002$). However, it was easier to become a member of another culture by playing Barnga than BaFa BaFa ($P = 0.000$). There was no statistical significance when the games were compared in relation to their impact in current conception of self and new *personal insight* in terms of recognition of former unidentified features of self (see Table 2). Both games confirmed the personal and cultural insights of those students who had had previous experiences with another culture more than the insights of those who had not had such experiences (Barnga $P = 0.009$ and BaFa BaFa $P = 0.051$, Table 3).

Barnga was preferred by 45% of the respondents, BaFa BaFa by 43%. The reasons stated for preferring Barnga were that it was an easy and delightful game to play. Barnga was characterised as friendly and non-aggressive. The reasons stated for preferring BaFa BaFa were that it was a challenging and complex game. The opportunity for verbal communication made the

Table 2 Differences in the effect of Barnga and BaFa BaFa on personal and cultural insights on a four-point Likert scale, with 1 corresponding to 'strongly agree' and 4 to 'strongly disagree'

	Barnga		BaFa BaFa		P^a
	Mean Likert score	Standard deviation	Mean Likert score	Standard deviation	
Playing					
Gave me new insights into different cultures	1.83	0.69	1.57	0.71	0.000
Changed my thinking about cultures	2.28	0.82	2.07	0.79	0.002
Enabled me to become a member of another culture	1.89	0.81	2.93	0.86	0.000
Confirmed my own self-awareness	2.26	0.80	2.35	0.69	0.097
Provided me with new personal insights	2.56	0.87	2.54	0.89	0.747

^aSignificance using the Wilcoxon signed-rank test.

Table 3 Difference in the effect of Barnnga and BaFa BaFa on personal and cultural insights in groups based on previous experiences with another culture(s) on a four-point Likert scale with 1 corresponding to 'strongly agree' and 4 to 'strongly disagree'

	Experience		No experience		<i>P</i> ^a
	Mean Likert score	Standard deviation	Mean Likert score	Standard deviation	
Playing Barnnga					
Confirmed my own self-awareness	2.12	0.76	2.60	0.76	0.009
Provided me with new personal insights	2.49	0.87	2.76	0.88	0.165
Playing BaFa BaFa					
Confirmed my own self-awareness	2.26	0.67	2.56	0.71	0.051
Provided me with new personal insights	2.49	0.92	2.68	0.85	0.318

^a Significance using the Wilcoxon signed-rank test.

game more practical than Barnnga. The defenders of BaFa BaFa appreciated the esprit de corps in the Alpha and Beta cultures and the competition between them. There were no differences between the three student groups in relation to the preference of the two games.

Emotions

The four commonest emotions evoked by the games were confusion (BaFa BaFa 85%; Barnnga 83%), feeling of success in relation to getting through an awkward situation (BaFa BaFa 70%; Barnnga 84%), feeling in control of self (BaFa BaFa 76%; Barnnga 73%) and suspicion of acting against a piece of advice (BaFa BaFa 65%; Barnnga 74%). The least common emotion evoked by the games was anger about unforeseen events (BaFa BaFa 12%; Barnnga 13%). Barnnga evoked more than BaFa BaFa the need to impose correct rules on other players ($P = 0.000$) and the feeling of success ($P = 0.008$). There was no statistical significance when comparing the games in relation to other emotions. When comparing the students' emotions to their previous cultural experiences, it was found that playing Barnnga evoked more suspicion of acting against a piece of advice ($P = 0.020$) and feeling in control of self ($P = 0.036$) among the experienced than the inexperienced students. Similarly, playing BaFa BaFa also evoked more feeling in control among the experienced than the inexperienced students ($P = 0.042$). As for the rest of the emotions experienced, the comparison of culturally experienced with inexperienced students produced no statistically significant results (see Table 4). There were no differences between the three student groups in relation to the emotions evoked by the games.

Benefits

Seventy per cent of the respondents considered that playing BaFa BaFa, and 77% that playing Barnnga, had relevance for their professional practice; 82% that playing BaFa BaFa, and 85% that playing Barnnga, would enhance their future intercultural relationships; and 87% that playing BaFa BaFa, and 88% that playing Barnnga, was educational. There were no differences between the three student groups in relation to the experienced benefit of the games. The relevance of the games for students' professional practice was divided into four main categories: insight into self and the other; insight into culture as a phenomenon; insight into cultural interaction; and insight into the cultural meaning of language.

The games assisted the students to gain insight into self and the other. The feelings of their own otherness and of alienation helped them to shape the world from the perspective of the culturally other person. This in turn helped them to understand the emotions of confusion and isolation of a person who deviates from the mainstream culture. By playing the games, the students gained insight into culture as a phenomenon. They came to understand that cultures are different and have their own invisible cultural codes, rules, agreements and habits that direct and control the behaviour of each individual. The games also helped the students to gain insight into cultural interaction. They experienced how playing the games developed their intercultural verbal and non-verbal communication skills, reduced prejudices, and increased open-mindedness, sensitivity and social flexibility. Through these games the students gained insight into the cultural meaning of language. They realised that language is the way to express and understand any

Table 4 Differences in the emotions evoked by Barnga and BaFa BaFa in groups based on previous experiences with another culture(s) on a four-point Likert scale, with 1 corresponding to 'strongly agree' and 4 to 'strongly disagree'

	Mean Likert score	Standard deviation	Mean Likert score	Standard deviation	<i>P</i> ^a
Playing Barnga evoked					
Suspicion	1.86	0.93	2.36	0.95	0.020
Confusion	1.70	0.95	1.84	0.99	0.436
Frustration	2.41	1.12	2.40	1.12	0.990
Anger	3.38	0.72	3.48	0.71	0.496
A desire to give up	3.18	0.93	3.24	0.97	0.711
A desire to close my mind	2.35	0.93	2.40	0.96	0.875
A need to impose the correct rules	1.97	0.90	2.13	0.99	0.526
Elation	2.32	0.97	2.67	0.96	0.116
Success	1.90	0.75	2.29	0.95	0.067
Pride	2.59	0.89	2.92	0.78	0.095
Feeling in control	2.14	0.75	2.50	0.83	0.036
Playing BaFa BaFa evoked					
Suspicion	2.07	1.08	2.32	0.99	0.230
Confusion	1.73	0.89	1.80	0.91	0.679
Frustration	2.30	1.13	2.44	1.08	0.580
Anger	3.36	0.95	3.60	0.65	0.347
A desire to give up	3.10	0.96	2.96	1.10	0.659
A desire to close my mind	2.42	0.90	2.52	1.00	0.668
A need to impose the correct rules	2.67	0.96	2.52	0.82	0.411
Elation	2.53	1.00	2.68	0.85	0.434
Success	2.18	0.90	2.48	0.77	0.079
Pride	2.71	0.90	2.76	0.78	0.720
Feeling in control	2.15	0.82	2.44	0.71	0.042

^a Significance using the Wilcoxon signed-rank test.

culture, and the tool for bridging the gap in intercultural communication.

Discussion

Implications for nursing practice and nursing education

This study provided evidence concerning the usefulness of the simulation method in increasing the cultural awareness of Finnish nursing and dental hygienist students. A total of 103 students participated in the study, of whom 75% had had previous experiences with another culture, gained either in their home country or by travelling or spending time abroad. Although the range of previous cultural experience was wide, it was also superficial, possibly because of the shortness of previous intercultural visits and the

infrequency of intercultural encounters in daily life in Finland. The respondent group was culturally homogenous and represented well the Finnish nursing education, in which a student from a different ethnic group is an exception. For this reason, the cross-cultural simulation brings a welcome breath of experiential diversity into the classroom and allows the students to gain insight into the dynamics of cross-cultural relationships.

The students tended to see other cultures in a more positive light than their own. This can be seen as consistent with the phenomenon of reversal in Bennett's (1993) study of intercultural sensitivity, where reversal is considered as an ethnocentric defence, but also as an inevitable stage of development. It would be valuable for the nurse educators to recognise this phenomenon, in order to encourage the students' further cultural self-examination.

The study was based on the framework that the cross-cultural simulation method is meant to enhance

students' cultural awareness as the first step of the continuous process towards cultural competence in nursing (Koskinen and Jokinen, 2007). The results indicate the effectiveness of Barnga and BaFa BaFa in providing the students with new personal and cultural insights. The game session was slightly more important in providing material to learn about other cultures and cultural diversity in general than material to learn about self. The effect of the games was greater if the student had had previous cultural experiences. The results support earlier findings (Sullivan and Duplaga, 1997; O'Connor *et al.*, 2002; Mills and Smith, 2004) about the power of BaFa BaFa in cultural awareness education. According to our results, it seems that Barnga is as good a method as BaFa BaFa.

Both games were equally preferred and considered by a majority of the students to be good methods to learn cultural awareness. Only a few participants failed to take the game session 'seriously', which was expressed in statements that reflected indifference or dismissiveness. Students felt that Barnga gave them the chance to learn the diversity of cultural rules by means of non-verbal communication. BaFa BaFa was described as a challenging and complex game despite the opportunity for verbal interaction. Both Alphas and Betas were experienced as introverted and even hostile by outsiders who visited them. The particular character of BaFa BaFa to provoke cultural conflict between the two groups is possibly the most vital element, and should be taken into account in the debriefing by the facilitating teacher following the game. Through their own feelings of alienation and otherness, the students may learn empathy towards culturally different patients.

The games evoked a variety of emotions in the players such as suspicion, confusion, success and feelings of control. Campinha-Bacote (2007) considers in-depth exploration of one's own cultural and professional background, as well as the exploration of racism and other 'isms' in healthcare, to be aspects of cultural awareness. It seems that the games are very effective in provoking emotions and simultaneously sensitising the player to their own vulnerability and helplessness. This should be exploited by the facilitating teacher during the debriefing sessions following the games. The debriefing might assist the students to reflect with each other on their attitudes, prejudices, stereotypes and even their own racism, and thus increase personal self-awareness.

In the experience of the students, the games were educational, had relevance for their professional practice and would enhance their future intercultural relationships. In their open-ended responses, the students detailed the benefits of the game session for their future nursing practice. It was evident that the games

enabled the processing of students' own cultural confusion, thus helping them to perceive the world from the perspective of a culturally other patient. This seems to be an essential value of the games because identification of self is the prerequisite for holistic nursing care. Thanks to the game session, the students understood much about the disparity in behaviours, rules and values of different cultural groups, and recognised the importance of adjusting their own behaviour in intercultural relationships. Thus the benefit of the games might be that they can even trigger students' ethnocentric thinking. The game session also seemed to increase students' awareness of the value of communication skills in nursing. As atypical communication skills, such as using signs, symbols, interpreter and foreign languages, will be increasingly important in Finnish nursing practice, the cross-cultural simulation method may offer a tool to approach this phenomenon in nursing education. There were no differences in the open-ended responses between the nursing, public health and dental hygienist students.

Ethical concerns

The ethical principles of maintaining autonomy, promoting beneficence, promoting non-maleficence and advancing social justice (Beauchamp and Childress, 2001) were considered in promoting the ethical soundness of the study. Respect for autonomy implied that the students were able to make an informed decision about their participation. The teacher who was responsible for conducting the games told the students about the research at the end of each game session. The university's official research protocol was followed, and the confidentiality of the responses and anonymity of the students were respected. In pondering the benefits, risks and costs of the study, it was agreed that this research can possibly advance social justice by triggering discussion on the importance of teaching cultural awareness and competence in nursing education, which is an infrequently occurring topic in the European nursing literature.

Conclusions

The findings indicate that Barnga and BaFa BaFa are powerful methods of learning cultural awareness in nursing. Most probably, those students who have had previous cultural experiences benefit more from the games. The immediate effect of the games on players' cultural awareness is indisputable, but the long-term effect of the simulation method calls for further research.

REFERENCES

- Bennett MJ (1993) Towards ethnorelativism: a developmental model of intercultural sensitivity. In: Paige RM (ed) *Education for the Intercultural Experience*. Yarmouth: Intercultural Press, pp. 21–71.
- Beauchamp TL and Childress JF (2001) *Principles of Biomedical Ethics* (5e). New York: Oxford University Press.
- Campinha-Bacote J (2007) *The Process of Cultural Competence in the Delivery of Health Care Services*. Transcultural CARE Associates. www.transculturalcare.net (accessed 11 September 2007).
- Cioffi J, Purcal N and Arundell F (2005) A pilot study to investigate the effect of a simulation strategy on the clinical decision making of midwifery students. *Journal of Nursing Education* 44:131–4.
- Fowler SM (1994) Two decades of using simulation games for cross-cultural training. *Simulation and Gaming* 25: 464–76.
- Ingelis S, Sammon S, Justice C *et al* (2004) Cross-cultural simulation to advance student inquiry. *Simulation and Gaming* 35:476–8.
- Koskinen L and Jokinen P (2007) Multicultural healthcare. A transatlantic project. *Nurse Educator* 32:89–93.
- Koskinen L, Jokinen P, Blackburn D *et al* (2004) Learning intercultural competence in a transatlantic nurse education project. *Diversity in Health and Social Care* 1:99–106.
- Lockhart JS and Resick LK (1997) Teaching cultural competence. The value of experiential learning and community resources. *Nurse Educator* 22:27–31.
- MacGregor A (2003) Barnga. A game about inter-cultural awareness. http://plato.acadiau.ca/courses/educ/reid/games/Game_descriptions/Barnga1.htm (accessed 11 September 2007).
- Mills V and Smith R (2004) *Short- and Long-term Effects of Participation in a Cross-cultural Simulation Game on International Awareness*. Australian Government Department of Defence. Defence Science and Technology Organization. Land Operations Division Systems Sciences Laboratory DSTO-TR-1636.
- Ministry of Education (2006) From polytechnic to health care. Graduates' qualifications, central program content and minimal credits. *Reports of the Ministry of Education* 24 [In Finnish].
- O'Connor BB, Rockney R and Alario A (2002) BaFá BaFá™: a cross-cultural simulation experience for medical educators and trainees. *Medical Education* 36:1102.
- Population Register Centre (2006) *Foreign Citizens Living Permanently in Finland, 31 Dec 2006*. www.uvi.fi/netcomm/content.asp?article=1987 (accessed 11 September 2007).
- Shirts RG (1977) *BaFa BaFa: a cross cultural simulation*. Delmar, CA: Smile II.
- Sullivan SE and Duplaga EA (1997) The BaFa BaFa simulation: faculty experiences and student reactions. *Journal of Management Education* 21:265–72.
- Thiagarajan S and Steinwachs B (1990) *Barnga: a simulation game on cultural clashes*. Yarmouth: Intercultural Press.

CONFLICTS OF INTEREST

None.

ADDRESS FOR CORRESPONDENCE

Dr Liisa Koskinen, Savonia University of Applied Sciences, PO Box 1028, 70111 Kuopio, Finland. Email: liisa.koskinen@savonia-amk.fi

Received 8 May 2007

Accepted 3 September 2007

