Employing Photovoice to Raise Intercultural Sensitivity and Reflective Thinking of Male and Female Iranian EFL Learners

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Abstract

Developing L2 learners' intercultural sensitivity and reflective thinking is essential for second language learning. Thus, this study aimed to investigate the impact of photovoice on intercultural sensitivity and reflective thinking. To this end, a sample of 48 intermediate EFL learners was recruited from an English language institute in Isfahan, Iran and placed into a photovoice group (PG) and a control group (CG) using a quasi-experimental design. An Intercultural Sensitivity Scale (ISS) was employed as a pretest and posttest. The collected data were analyzed by running a two-way MANCOVA. The results indicated a significant improvement of the PG regarding reaching the higher levels of intercultural sensitivity and the PG's female participants outperformed their male counterparts in gaining higher scores in three dimensions of the ISS. The students' writings accompanied the taken photos were also coded by two raters. The results revealed that photovoice resulted in higher levels of reflective thinking. To explore the photovoice participants' attitudes, a semi-structured interview was conducted. The emerging codes indicated that the participants had positive attitudes towards the photovoice project. Thus, the photovoice method could give the EFL learners an opportunity to raise the levels intercultural sensitivity and reflective thinking.

Keywords: Gender, Intercultural Sensitivity, Photovoice, Reflective Thinking, Written Narratives
Introduction

Intercultural sensitivity, the affective component of intercultural communication competence, has been raised to measure individuals' orientations toward cultural differences (Hammer, Bennett, & Wiseman, 2003). It demonstrates an individual's willingness not only to acknowledge but also to respect cultural differences during an intercultural interaction. It is basically defined as being sensitive to one another and to the cultures represented in an interaction (Samovar, Poter, & MacDaniel, 2010).

Besides intercultural sensitivity, having contact with diverse cultures demands to practice systematic reflective thinking because it can solve problems in cross-cultural encounters (Sobkowiak, 2016). Facione (2010) defined reflective thinking as an ability to reflect and withhold judgment before making a decision. It is believed that cognitive skills significant for reflective thinking and intercultural communication overlap (Bennett, 2013). Therefore, utilizing innovative participatory methods such as photovoice might pave the way for enhancing both EFL learners' intercultural sensitivity and reflectivity.

Photovoice is a participatory method (Wang & Burris, 1997) that encourages participants to reflect on their concerns and desires and discuss emergent issues with a critical lens. Through participatory learning, learners take on a participant-observer role, understand the setting as an insider, and describe it precisely for the outsiders through photography (Creswell, 2014).

The dialectical relationship between language and culture has been always addressed by many scholars (Byram, 2008; Kramsch & Whiteside, 2008; Martinson, 2011). However, from a pedagogical point of view, there are numerous cultural barriers hindering intercultural sensitivity of L2 learners (Rahimi & Soltani, 2011). For instance, under the strict influences of L2 cultural stereotypes, Iranians have frequently proved unable to act successfully in their intercultural communications. Moreover, L2 teachers often struggle to give culture prominence in their classrooms and dynamic approaches of culture teaching which actively engage leaners are usually ignored. Furthermore, some researchers maintain that Asian learners are not able to think critically and their L2 writings cannot reach high levels of reflectivity (Atkinson, 1997; Atkinson & Kaplan, 1994).
Therefore, this study was an attempt to shed light on the efficacy of photovoice as an empowering participatory method which might result in a better understanding of the target culture and enhancing reflective thinking manifested in the written narratives. In addition, the variable of gender was investigated as one of the possible predictors affecting the intercultural sensitivity levels of individuals.

**Literature Review**

Intercultural sensitivity is an individuals' active desire which motivates them to understand, appreciate, and accept differences among different cultures. Bennett's (1993, 2013) Developmental Model of Intercultural Sensitivity (DMIS) which is illustrated in Figure 1 demonstrates two main stages of intercultural sensitivity.

<table>
<thead>
<tr>
<th>Ethnocentric Stages</th>
<th>Ethnorelative Stages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denial</td>
<td>Defense</td>
</tr>
</tbody>
</table>

*Figure 1. Developmental model of intercultural sensitivity.*

As it is illustrated in Figure 1, the first three DMIS orientations are conceptualized as more ethnocentric which means that one's own culture is experienced as the main reality. First, the denial stage of cultural differences is the stage in which one's own culture is experienced as the only one. Secondly, in the defense stage, individuals make a dichotomous categorization of us as superiors and them as inferiors. Thirdly, in the minimization stage, cultural differences are minimized in favor of the similarities between self and others.

The other DMIS orientations are defined as more ethnorelative, meaning that one's own culture is experienced in the context of the other cultures. The acceptance stage is the stage at which people are respectful to the other culture and this respectfulness leads to the adaptation. Hence, adaption to cultural differences is a perceptual mechanism of empathy which fosters biculturalism. Finally, the third component of ethnorelative orientation is the integration stage, in which one's own experience of self is expanded to different cultural worldviews (Bennett, 2013).
Some researchers implemented different strategies to raise the intercultural sensitivity of L2 learners. For instance, Jain (2013) used intercultural films and discussions. Tupas (2014) also implemented carefully planned programs to raise the levels of intercultural sensitivity. Rahimi and Soltani (2011) investigated the feasibility of enhancing the Iranian EFL learners' intercultural sensitivity through an actual classroom training. According to the results, the participants had significant improvement after an intercultural training course.

However, Bennett (2004) maintained that intercultural sensitivity cannot be achieved only through the sole teaching of linguistic and cultural knowledge. He further added it can be developed based on one's experience. His study revealed that intercultural sensitivity is associated with more sophisticated interpersonal communication skills. Similarly, Su (2018) conducted a study to assess the intercultural sensitivity of 1191 Taiwanese students who were learning English and found out that learners' engagement is interrelated with intercultural sensitivity.

Studies that examine the effect of gender on ISS have been contradictory. For instance, some researchers (Bayles, 2009; Westrick & Yuen, 2007; Yuen, 2010) claimed there is no relationship between gender and intercultural sensitivity. However, several studies (Helmer, 2007; Holm, Nokelainen, & Tirri, 2009; Ruiz-Bernardo, Ferrandez-Berrueco, & Sales-Ciges, 2012) found that female learners tend to achieve higher levels of ISS.

Besides intercultural sensitivity, reflective thinking is also introduced as the most important skill of the 21st century, which determines the capability of thinking in understanding the logical connections among issues (Demirdag, 2015). The concept of reflectivity in L2 writings is defined as an ability to analyze facts, produce and organize ideas, maintain opinions, make comparisons, and solve problems by the use of existing information, previous knowledge, and world knowledge during writing (Barnawi, 2010). Photovoice is a community and participatory action research method developed by Wang and Burris (1997). It is defined as a communication and learning process focusing on the conception of knowledge in which learners identify their community through photography (Aiello & Woodhouse, 2016). The photovoice process involves participatory research and is a
combination of photography and narratives reflecting individual beliefs, values, and attitudes about the culture and social climate (Harrison, 2002).

Kennerly and Davis' (2014) study revealed how photovoice amplified communication and students' cultural competencies of Latin immigrants practicing English. Photovoice has the potential to develop intercultural competence through valuable insights about lived experiences. Similarly, Bost and Wingenbach's (2018) study showed that the photovoice assignment had immense value to impact students' ethnorelative worldview and intercultural competence.

The impact of photovoice on reflective thinking has been also investigated by some researchers. For instance, Graziano (2011) demonstrated that photovoice enhanced English learners' potential for self-expression and critical reflection. Bower (2017) concluded that using photovoice as a teaching strategy promotes criticality. Karimi, Chalak, and Heidari's (2018) study also demonstrated that narratives of Iranian EFL learners manifested higher levels of reflectivity when photovoice was implemented as a teaching method.

In conclusion, it seems that photovoice goes well beyond narrowly-focused traditional approaches of teaching English. However, reviewing the literature highlighted some gaps in the research. First, this method has been widely applied to education in various areas of expertise, but there is still a need to conduct explicit research in EFL contexts to verify the pedagogical effects. Second, not much effort has been made to foster intercultural sensitivity and awareness of Iranian EFL learners who are deprived of communicating with native speakers. Third, not many studies exist that analyze EFL learners' moving from ethnocentric to ethnorelative stages through experiential language learning or learning by doing. Finally, much uncertainty still exists about the impact of gender on intercultural sensitivity.

Therefore, the main objective of this study was to provide some opportunities for the Iranian EFL learners to improve intercultural sensitivity through photovoice. Furthermore, the importance of interaction with English native speakers visiting Iran was highlighted in this study. From a tourism perspective, the strong devaluation of the Iranian currency
(Rial) since 2012 is a positive element for tourism in Iran. Over five million tourists visited Iran in the fiscal year of 2014-2015. In October 2018, the head of Iran's Culture Heritage announced that the number of tourists who visited Iran in the first six months of the Iranian year (started on March 21, 2018) rose by 51 percent compared to the same period in 2017. Therefore, the Iranian L2 learners were encouraged not to miss the chance of authentic interaction in English. Accordingly, this study sought to answer the following questions:

1) Does photovoice have any significant effects on the Iranian EFL learners' intercultural sensitivity?

2) Are males and females' levels of intercultural sensitivity significantly different?

3) To what extent can photovoice improve reflective thinking of the Iranian EFL learners reflected in their written narratives?

4) What are the Iranian EFL learners' attitudes towards the photovoice implementation?

Method

Design and Context of the Study

To assess the impact of photovoice on intercultural sensitivity and critical thinking, a quasi-experimental, pretest-posttest non-equivalent control group design was used. This research design is an appropriate one when true random sampling is not feasible (Cohen, Manion, & Morrison, 2007). After gathering the quantitative data, the second phase of the study focused on obtaining qualitative data through implementing a semi-structured interview which provided a deeper insight into the participants' attitudes.

Because photovoice is a community-based participatory action research method, the context of this study was not limited to the EFL classrooms. The participants voiced their cultural issues through photographs and accompanying narratives which were all based upon the interpersonal relations with the native English speakers visiting Isfahan. According to Abyareh (2009), Isfahan is one of the most spectacular cities from the point of view of tourist attractions. Therefore, the participants used the privilege of living in this city and tried to expand their intercultural sensitivity.
through photovoice and communicating with native English speakers. To do so, Isfahan's main tourist attractions were identified by the researcher and participants. They are listed in Table 1.

Table 1
Main Tourist Attractions of Isfahan

<table>
<thead>
<tr>
<th>Possible Contexts of the Study</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Naghsh-e Jahan Square</td>
<td>UNESCO World Heritage Site</td>
</tr>
<tr>
<td>2. Vank Cathedral</td>
<td>Built in the 17th century</td>
</tr>
<tr>
<td>3. New Jolfa</td>
<td>The Armenian Square</td>
</tr>
</tbody>
</table>

Participants
In this study, the population was the English learners of an institute located in Isfahan, Iran. From the accessible population, a convenient sample of 48 participants, aged from 22 to 34, was chosen. Then, they were assigned into two groups of a PG and a CG. Due to the fact that gender can affect levels of intercultural sensitivity (Chen & Starosta, 2000), an equal number of males and females were assigned to each group. Therefore, each group consisted of 13 females and 11 males. To ensure their homogeneity, the Oxford Quick Placement Test (OQPT) was administered. All the participants were at the upper-intermediate level as their scores fell between 60 to 69. Table 2 shows the demographic information of the participants.

Table 2
Demographic Background of the Participants

<table>
<thead>
<tr>
<th>Number of participants</th>
<th>48</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>26 females and 22 males</td>
</tr>
<tr>
<td>Mother tongue</td>
<td>Persian</td>
</tr>
<tr>
<td>Years of studying English</td>
<td>Average 6 years</td>
</tr>
<tr>
<td>Level of proficiency</td>
<td>Upper-Intermediate</td>
</tr>
</tbody>
</table>

Instruments
First, the Oxford Quick Placement Test (OQPT) was administered to ensure the homogeneity of the participants. OQPT was created in 2003 by the Oxford University Press and ESOL in an attempt to provide teachers
with a reliable method of investigating students' levels of proficiency. Its reliability has been reported .90 for the 60 item tests (Geranpayeh, 2003). He also believed that OQPT is a standardized proficiency test that has been validated by about 6000 students in 60 countries.

Secondly, to solicit the data, the Intercultural Sensitivity Scale (ISS) formulated by Chen and Starosta (2000) was employed as both a pretest and posttest (see Appendix A). This scale is a 24-item questionnaire based on five sub-scales including Interaction Engagement, Respect for Cultural Differences, Interaction Confidence, Interaction Enjoyment, and Interaction Attentiveness. Each item is based on a Likert-Scale as follows: 5=strongly agree, 4=agree, 3=uncertain, 2=disagree, and 1=strongly agree.

The first subscale, Interaction Engagement, includes seven items, which are related to the participants' feeling of participation in intercultural communication. The second factor, Respect for Cultural Differences, includes six items about orienting or tolerating others' cultures and opinions. The third factor, Interaction Confidence, has five items that are concerned with how confident participants are in intercultural settings. The fourth factor is Interaction Enjoyment, including three items and deals with participants' positive or reaction towards communicating with people from different cultures. Finally, the last one is Interaction Attentiveness with three items and concerning with participants' effort to understand what is going on in intercultural communication. The ISS has demonstrated good internal consistency. Cronbach's alpha reliability coefficient was between .97 and .89 (Chen & Storosta, 2000; Graf & Harland, 2005). They also established the construct validity of ISS based on the correlation between ISS and the other scales. In this study, the Cronbach's alpha reliability coefficient for the ISS was 0.86 based on the results of the pilot study.

Thirdly, to assess levels of reflective thinking manifested in the participants' writings, Kember, McKay, Sinclair, & Wong's (2008) Four-category Scheme, including non-reflection, understanding, reflection, and critical reflection was used. The rubric has been validated by various researchers (Kember, et al., 2008; Harland & Wondra, 2011). Table 3 illustrates these four levels.

Table 3
Kember’s Critical Thinking Framework

<table>
<thead>
<tr>
<th>Non-reflection</th>
<th>Understanding</th>
<th>Reflection</th>
<th>Critical Thinking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) No evidence of attempting to reach an understanding of concepts</td>
<td>1) Evidence of understanding a topic or concept</td>
<td>1) A theory is applied to a practical situation</td>
<td>1) Evidence of change in perspective over a fundamental belief or cultural stereotypes</td>
</tr>
<tr>
<td>2) Sentences have been placed into an essay without thinking seriously</td>
<td>2) Sentences and ideas are confined to theories</td>
<td>2) Providing personal insights which go beyond textbooks</td>
<td>2) Recognizing and criticizing a situation</td>
</tr>
<tr>
<td>3) Mostly reproduction without the adaptation of the other’s thoughts</td>
<td>3) Reliance upon what was in the textbooks</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Kember et al. (2008) tested the reliability of the four-category framework and claimed that these schemes are reliable in operation. Moreover, Harland and Wondra (2011) analyzed reflection in the writing of teacher candidates through using this framework. They reached 100% interrater reliability after coding the narratives. The framework has been also validated by many researchers (Foster, Kohn, McGuire, Miller, Miller, 2010; Harland & Wondra, 2011; Kember et al. 2008). In this study, kappa statistics were used to test inter-rater reliability. According to the results, the degree of agreement between two raters was significant (κ=.913).

In order to familiarize the learners with the procedures of photovoice, a manual was prepared with three parts, including the introduction, photovoice method, and data collection procedures. Some glossary terms, examples, and advantages of photovoice were gathered in the introductory part. Furthermore, a researcher-designed semi-structured interview was utilized after the treatment sessions. The interview comprised three questions regarding the research variables and they were modified according to two experts’ opinions to ensure its reliability and validity.
Data Collection Procedure

In EFL contexts, elements of culture have been seen as static and homogeneous because L2 learners rely on stereotypes and overgeneralization. The problem with relying on these stereotypes is that they risk making a decision and hinder intercultural sensitivity which is an important component of intercultural communication.

Therefore, after OQPT administration and selecting 48 homogeneous participants, stereotypes elicitation was done. According to Mantle-Bromley (1992), teachers should help students brainstorm the most common stereotypes which learners have about the target culture. Therefore, 144 different responses were elicited and classified into three broad categories illustrated in Table 4.

Table 4
Categories and Examples of Stereotypes

<table>
<thead>
<tr>
<th>Categories of stereotypes</th>
<th>Examples of the participants' responses</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mannerism</td>
<td>They have many eating etiquettes.</td>
<td>63.09%</td>
</tr>
<tr>
<td></td>
<td>They all respect the law.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Most of them are ignorant about the world like the Middle East crisis.</td>
<td></td>
</tr>
<tr>
<td>Xenophobic ideologies</td>
<td>Many English speakers have anti-Iranian sentiment.</td>
<td>23.8%</td>
</tr>
<tr>
<td></td>
<td>They usually keep a social distance with us.</td>
<td></td>
</tr>
<tr>
<td>Other issues</td>
<td>They prefer the casual style.</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>Many Americans are obese.</td>
<td></td>
</tr>
</tbody>
</table>

Having been identified the most emergent stereotypes, the participants were assigned randomly into two groups: A PG and a CG. Then, the ISS questionnaire was administered as a pretest to investigate the levels of intercultural sensitivity before any treatment implementation. It should be mentioned that before summing up the 24 items, the following questions were reverse-coded for data analysis: 2, 4, 7, 9, 12, 15, 18, 20, and 22. According to McMurray (2007), this reverse coding is essential because in addition to having positively-keyed statements, ISS also has some highly
Employing Photovoice to Raise …

negatively-keyed items. After the pretest administration, the participants of the PG, including 13 females and 11 males, had to take responsibility for their own learning and develop a sense of ownership towards the project. Not only observing and interviewing tourists but also the photovoice method paved the way to complete their project.

The photovoice project was implemented in two main phases which last for 4 weeks. During the first phase, the participants were asked to collect some evidence about the above-mentioned stereotypes through photography and write a 100-word paragraph accompanied by their photos. Each participant was supposed to capture at least four photos. The second phase of the study was done with the focus on collaboration and displaying the taken photos to their peers. Meanwhile, the researcher as a photovoice facilitator had the responsibility to collect the data and analyze them. On the other hand, the participants of the CG were asked to raise their cultural information through other traditional methods. In other words, the participants were asked to examine the truth of the stereotypes through reading English newspapers, magazines, movies, and web browsing. Similar to the photovoice group, they were required to present their findings through writing a 100-word paragraph.

Once the project had been completed, the ISS questionnaire was administered as a posttest to scrutinize any possible effects of the treatment on the participants' intercultural sensitivity. Furthermore, two members of the researcher team read all 48 narratives written by the participants in two groups. The researchers were concerned about gender bias, so all the identifying information removed including gender and the participants' names. Then, the students' papers were coded for each of the four categories of reflective thinking. To measure the inter-rater agreement Cohen' kappa was calculated to assess the magnitude of agreement between the researchers and the four categories of Kember's rubric. Finally, to explore the photovoice participants' attitudes, a researcher-designed semi-structured interview was conducted and audio-recorded. Three questions were asked and some categories emerged from the cycles of coding.
Data Analysis Procedure
The researchers used Statistical Package for Social Sciences Software (SPSS) version 22.0 to run all statistical analysis. Multivariate analysis of covariance (MANCOVA) was conducted to test the impact of photovoice and gender on intercultural sensitivity and its subcategories. Before starting this analysis, the assumptions of MANCOVA, including screening the data for normality, homogeneity of variances of two groups (PG and CG), and homogeneity of regression slopes were all tested. Moreover, an ANCOVA was run to test the impact of treatment and gender on each subcategory of ISS. Finally, because reflective thinking manifested in the participants' narratives were evaluated by two raters, Cohen's kappa coefficient was used to measure the interrater reliability.

Results
To capture the main difference between the PG and CG's intercultural sensitivity, a two-way MANCOVA was used. Table 5 summarizes the results.

Table 5
Results of Multivariate Analysis of Covariance

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
<th>F</th>
<th>Hypothesis df</th>
<th>Error df</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai's Trace</td>
<td>.873</td>
<td>48.239</td>
<td>5.000</td>
<td>35.000</td>
<td>&lt;.001</td>
<td>.873</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.127</td>
<td>48.239</td>
<td>5.000</td>
<td>35.000</td>
<td>&lt;.001</td>
<td>.873</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>6.891</td>
<td>48.239</td>
<td>5.000</td>
<td>35.000</td>
<td>&lt;.001</td>
<td>.873</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>6.891</td>
<td>48.239</td>
<td>5.000</td>
<td>35.000</td>
<td>&lt;.001</td>
<td>.873</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pillai's Trace</td>
<td>.424</td>
<td>5.161</td>
<td>5.000</td>
<td>35.000</td>
<td>.001</td>
<td>.424</td>
</tr>
<tr>
<td>Wilks' Lambda</td>
<td>.576</td>
<td>5.161</td>
<td>5.000</td>
<td>35.000</td>
<td>.001</td>
<td>.424</td>
</tr>
<tr>
<td>Hotelling's Trace</td>
<td>.737</td>
<td>5.161</td>
<td>5.000</td>
<td>35.000</td>
<td>.001</td>
<td>.424</td>
</tr>
<tr>
<td>Roy's Largest Root</td>
<td>.737</td>
<td>5.161</td>
<td>5.000</td>
<td>35.000</td>
<td>.001</td>
<td>.424</td>
</tr>
</tbody>
</table>
Employing Photovoice to Raise...

Root group * gender P<.001, η²=.873, gender (F (5,35) =5.161, p=.001, η²=.424), and the interactional effect of group and gender (F (5,35) =3.195, p=.078, η²=.313) on the subcategories of intercultural sensitivity were significant. In order to investigate these effects on each subcategory, an ANCOVA was conducted.

Table 6 illustrates the results.

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>Group</th>
<th>Gender</th>
<th>pretest</th>
<th>posttest</th>
<th>Results of ANCOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engagement</td>
<td>Experiment</td>
<td>male</td>
<td>3.56</td>
<td>3.96</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>female</td>
<td>3.64</td>
<td>4.13</td>
<td>.047</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>male</td>
<td>3.48</td>
<td>3.47</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>female</td>
<td>3.74</td>
<td>3.71</td>
<td>.313</td>
</tr>
<tr>
<td>Respect for cultural difference</td>
<td>Experiment</td>
<td>male</td>
<td>3.65</td>
<td>3.53</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>female</td>
<td>3.91</td>
<td>4.25</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>male</td>
<td>3.56</td>
<td>3.85</td>
<td>.41</td>
</tr>
<tr>
<td></td>
<td></td>
<td>female</td>
<td>3.86</td>
<td>3.90</td>
<td>.44</td>
</tr>
<tr>
<td>Confidence</td>
<td>Experiment</td>
<td>male</td>
<td>3.69</td>
<td>3.87</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>female</td>
<td>3.74</td>
<td>4.06</td>
<td>.202</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>male</td>
<td>3.67</td>
<td>3.65</td>
<td>.34</td>
</tr>
<tr>
<td></td>
<td></td>
<td>female</td>
<td>3.68</td>
<td>3.69</td>
<td>.35</td>
</tr>
<tr>
<td>Interaction enjoyment</td>
<td>Experiment</td>
<td>male</td>
<td>3.03</td>
<td>3.36</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>female</td>
<td>3.10</td>
<td>3.90</td>
<td>.039</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>male</td>
<td>3.09</td>
<td>3.06</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>female</td>
<td>3.31</td>
<td>3.36</td>
<td>.35</td>
</tr>
<tr>
<td>Attention</td>
<td>Experiment</td>
<td>male</td>
<td>3.15</td>
<td>3.70</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>female</td>
<td>3.21</td>
<td>4.18</td>
<td>.013</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>male</td>
<td>3.12</td>
<td>3.18</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>female</td>
<td>3.15</td>
<td>3.24</td>
<td>.11</td>
</tr>
<tr>
<td>Total (Intercultural Sensitivity)</td>
<td>Experiment</td>
<td>male</td>
<td>3.42</td>
<td>3.78</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>female</td>
<td>3.52</td>
<td>4.11</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>male</td>
<td>3.38</td>
<td>3.38</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>female</td>
<td>3.55</td>
<td>3.57</td>
<td>.16</td>
</tr>
</tbody>
</table>
As it is shown in the above table, the PG participants gained higher scores in all five dimensions of intercultural sensitivity comparing to their peers in the CG \((p<.001)\). Furthermore, the results of ANCOVA indicated that there was a significant difference between the male and female participants of PG regarding three dimensions of ISS \((p<.001)\). Interestingly, the female participants gained higher mean scores on *Engagement*, *Interaction Enjoyment*, and *Attention*. As can be seen from Table 5, in the PG, gender had no significant impact on the other two dimensions of ISS including *Respect for Cultural Differences* and *Confidence* \((p>.001)\). Moreover, gender did not have any significant impacts on achieving the higher scores of ISS in the CG \((p>.001)\).

As it was mentioned before, reflective thinking manifested in the participants’ writings were analyzed by using the Kember’s et al. (2008) Framework. Two raters were responsible for categorizing the writings based on four schemes of the framework, including non-reflection, understanding, reflection, and critical thinking. Figures 2 and 3 illustrate the results of coding the participants’ written narratives.

![Figure 2. Levels of reflective thinking manifested in the writings of PG's participants.](image)

As is displayed in Figure 2, 21.16% and 37.5% of the PG's writings could reach the levels of reflection and critical thinking respectively. However, 33.3% of the writings remained at the levels of non-reflection and understanding.
According to the above figure, 20.83% and 16.66% of the CG’s participants met the criteria of criticality and were placed in the reflection and critical thinking categories. Yet, the majority of writings (67.53%) did not manifest any signs of critical thinking. Afterward, kappa statistics were used to test inter-rater reliability.

According to Table 6, the degree of agreement between two raters was significant ($\kappa=.913$, $p<.001$). In other words, the consensus or homogeneity existed in the ratings given by two raters was significant.

**Discussion**
In order to answer the first question which sought to investigate the impact of photovoice on intercultural sensitivity, a two-way MANCOVA was run. According to the results, the PG participants showed a significant improvement and also outperformed their peers in the CG regaining all five dimensions of ISS (p<.001). Therefore, using the photographs during the interviewing process helped the participants establish a rapport with the English native speakers who were tourists. In fact, through the photovoice assignment, the participants' intercultural sensitivity shifted from ethnocentric to ethnorelative worldviews.

These findings are in agreement with Kennerly and Davis' (2014) study which revealed that photovoice amplified students' intercultural sensitivity of L2 learners practicing English. Similarly, Bost and Wingenbach's (2018) study showed that photovoice assignment had immense value to impact students' ethnorelative worldview and intercultural sensitivity. So, photovoice had the potential to develop intercultural sensitivity through gaining valuable insights about the target culture.

Furthermore, this study set out to assess the impact of gender on intercultural sensitivity. To do so, an equal number of male and female participants were assigned to both PG and CG. The ANCOVA results proved that the female PG's participants outperformed their male counterparts regarding three aspects of ISS, including Engagement, Interaction Enjoyment, and Attention. Meanwhile, the intercultural sensitivity of the CG's participants was not affected by their gender.

This finding corroborates many scholars' (Helmer, 2007; Holm, Nokelaialen, & Tirri, 2009; Ruiz-Bernardo, Ferrandez-Berrueco, & Sales-Ciges, 2012) research which proved that female learners tend to achieve higher levels of ISS. However, contrary to the present study, some researchers (Bayles, 2009; Westrick & Yuen, 2007; Yuen, 2010) claimed that there is no relationship between gender and intercultural sensitivity.

The third research question addressed by this study was about the effect of photovoice on reflective thinking manifested in the writings of PG's participants. To answer this question, 24 writings accompanied by the taken photos were scored and analyzed by two raters. The Kember's et al. (2008) Framework provided a comprehensive rubric for scoring the writings.

According to the obtained results, 66.66% of the PG's writings met the criteria of reflection and critical reflection. For instance, the participants try to challenge the stereotypes and change their perspectives over a fundamental belief. For instance, one of the participants who believed in xenophobic sentiment in western culture wrote,
He is Richardo on his second trip to Iran. I did not see any signs of hostility, hatred, and prejudice towards Iran in his behavior. Talking to him revealed that the hospitality of Iranian goes beyond its tourist attractions. So, he did not have any anti-Persian sentiment. Looking back at the photo taken by me, his eagerness to learn more about my culture is evident. Now, I come to the conclusion that anti-Iranian sentiment does not exist in reality. This is just the power of media and politics.

This finding is in agreement with Graziano (2011) who demonstrated that photovoice enhanced English learners' potential for self-expression and critical reflection. Bower (2017) also concluded that using photovoice as a teaching strategy promotes criticality. In the same vein, Karimi, Chalak, and Heidari's (2018) study demonstrated that narratives of Iranian EFL learners manifested higher levels of criticality when photovoice was implemented as a teaching method.

The fourth research question aimed at exploring the attitudes of the Iranian EFL learners towards photovoice methodology. As it was mentioned earlier, a semi-structured interview was carried out, recorded, and transcribed. Then, the data were analyzed to look for patterns and themes within the text. The most recurring patterns revealed the positive attitudes of the participants towards photovoice. For instance, one of them mentioned that

“I enjoy doing a real project... much better than searching about cultural issues on the internet... it gave me the confidence to talk with native English speakers... sharing photos with my classmates was also really interesting.”

Therefore, some recurrent themes are as follows: it was interesting, it gave me self-confidence, and it made me think more about cultural differences. These findings support the belief of Strack, Lovelace, Jordan, and Holmes (2010) who believed that photovoice encourages community members to engage in a participatory process in which they can critically examine their surroundings which ultimately could enhance their interest.
Conclusion

Taken together, providing L2 learners opportunities to have intercultural communication was a worthwhile endeavor. For instance, through photovoice, L2 learners' stereotypes and prejudice about the target culture were challenged. This method privileged the participants' voices and empower them to develop the components of intercultural sensitivity.

Furthermore, photovoice promoted reflective thinking manifested in the participants' written narratives. It involved the learners as community members in photographing what they identified to be salient intercultural issues and then analyzing these photographs in the community-based discussion. Through collaboration with other participants, they conducted post analysis and discussions and this process improved their reflective thinking.

The third major finding was that females tended to exhibit higher ISS than their male counterparts. It is evident that the role of gender is embodied in some aspects of intercultural sensitivity. To be more precise, females had superiority in the participation in intercultural communication (Interaction Engagement), positive reactions towards communicating with people (Interaction Enjoyment), and effort to understand what is going on in an intercultural interaction (Interaction Attentiveness).

An application of these findings is that incorporating innovative methods such as photovoice can expand teaching L2 culture and offers new venues for EFL learners through which they can express their understandings about the target culture. In other words, photovoice provides teachers who focus on developing autonomous learners with a lot of opportunities. The other implication of this study deals with the curriculum developers who aspire to employ an experiential learning method like photovoice for enhancing intercultural sensitivity and critical thinking.

Finally, several limitations need to be considered. Implementing a photovoice project needs some considerations, such as equipping students with cameras and teaching them a wide range of photographing skills. It is also essential to hold a public exhibit at the end of the project and encourage the participants to communicate with the community members. However, none of these considerations were achievable in the limited context of the study.

According to the above-mentioned limitations, further research is needed to be done with considering the prerequisites for implementing a photovoice project. Moreover, other factors rather than gender should be taken into account. For instance, age and social status are important variables for
investigating the effects of photovoice on intercultural sensitivity. A longitudinal study will also reveal a better understanding of the various dimensions of photovoice.

References


**Appendix A**

**Intercultural Sensitivity Scale**

Below is a series of statements concerning intercultural communication. There are no right or wrong answers. Please record your first impression by indicating the degree to which you agree or disagree with the statement. Thank you for your corporation. (strongly agree=5, agree=4, uncertain=3, disagree=2, strongly disagree=1)

1. I enjoy interacting with people from different cultures.
2. I think people from other culture are narrow-minded.
3. I am pretty sure of myself in interacting with people from different cultures.
4. I find it very hard to talk in front of people from different cultures.
5. I always know what to say when interacting with people from different cultures.
6. I can be as sociable as I want to be when interacting with people from different cultures.
7. I don’t like to be with people from different cultures.
8. I respect the value of people from different cultures.
9. I get upset easily when interacting with people from different cultures.
10. I feel confident when interacting with people from different cultures.
11. I tend to wait before forming an impression of culturally-distinct counterparts.
12. I often get discouraged when I am with people from different cultures.
13. I am open-minded to people from different cultures.
14. I am very observant when interacting with people from other cultures.
15. I often feel useless when interacting with people from different cultures.
16. I respect the ways people from different cultures behave.
17. I try to obtain as much as information as I can when interacting with people from other cultures.
18. I would not accept the opinions of people from different cultures.
19. I am sensitive to my culturally-distinct counterparts’ subtle meanings during our interaction.
20. I think my culture is better than other cultures.
21. I often give positive responses to my culturally different counterparts during our interaction.
22. I avoid those situations where I have to deal with culturally-distinct person.
23. I often show my culturally-distinct counterpart my understanding through verbal or non-verbal cues.
24. I have a feeling of enjoyment towards differences between my culturally-distinct counterpart and me.

**Biodata**

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