

Research Article

Exploring Attachment among Iranian University Students with Respect to the Role of Age and Gender: A Mixed-Method Study

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Received 13 February 2022; Revised 24 March 2022; Accepted 26 March 2022; Published 5 April 2022

Academic Editor: Ehsan Rezvani

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The home cultural attachment (HCA) theory deals with long-term relationships among humans and how they react when they leave their beloved family members and friends and their homeland. It is essential to explore the factors influencing it. In this regard, the present study explores the role of age and gender on Iranian university students' HCA quantitatively and qualitatively. To this end, a total of 201 university students, including both genders, were selected from Ayatollah Boroujerdi University through a random sampling method. The required quantitative data were collected using the HCA questionnaire, validated by Shahsavandi et al. (2010) and the qualitative data were gathered through a reflective written statement from 20 university students who completed the questionnaire. The data were analyzed using an independent sample *t*-test, a one-way ANOVA test, and a content analysis approach. Findings evidenced that there was not any statistically significant difference between the two genders concerning HCA. The results indicated that age was not a strong predictor of HCA. Besides, the complementary qualitative findings confirmed that gender and age do not play a role in Iranian university students' HCA. The study ends with offering some implications for stakeholders.

1. Introduction

Over the last decades, home cultural attachment (HCA) has gained noticeable attention. The reason for this is that HCA representations are significant across the board (e.g., different ages, genders, and cultures). HCA is rested upon the attachment theory which originated from the work of John Bowlby and Mary Ainsworth in 1991. According to Bowlby (1984), attachment is considered as an intimate and ongoing relationship originating from the sense of safety and being supported in a family. Bowlby [1] adds that attachment is searching for a close protective attachment that is in higher strength from the point of view of age, intelligence, or power. He continues that attachment is a crucial factor in the lifetime and seems to be a common characteristic of all people from infants to adults.

There are key variables that may influence an individual's HCA, such as gender and age that are the focus of the current study. Some studies have investigated gender difference effects on individuals' HCA [2–4]. For instance, Del

Giudice [3] found that women were more anxiously attached and dependent but both genders attempted to maximize their reproductive fitness to the new setting and cultural changes. Additionally, Behrens et al. [2] showed that HCA was a characteristic of all human beings of different ages but some changes in attachment patterns may occur among them [2]. He also found that forms of HCA for kids may be different from adults. Hence, these changes are quite common across different ages.

Considering the significance of HCA and gaining a comprehensive insight into the variables shaping it, it is worth exploring the role of gender and age in university students' HCA. Despite this, it is interesting to note that the role of gender and age in the university students' HCA is under-researched in the Iranian context. In other words, though the variables affecting HCA have been more or less investigated in other countries, the role of gender and age in shaping Iranian university students' HCA has received scant attention. Hence, to fill up this long-lasting gap, the researchers aimed to reveal the role of gender and age in

shaping Iranian university students' HCA both quantitatively and qualitatively. It is hoped that the findings of this study can be helpful to further the understanding of university stakeholders concerning the effects of gender and age on affecting university students' HCA. In this way, they can be at a better position in making the way for university students to achieve the educational objectives.

2. Literature Review

2.1. Home Cultural Attachment. According to Yap and Grisham [5], all the processes in which culture and its representations create a sense of safety and avert dangers can be called HCA. It is taken from the attachment theory since the acculturation procedure is similar to a baby being born [6]. Once an individual is announced to a different culture, in fact, dissimilar norms, values, convictions, and models are waiting for them. The home culture that is the predominant culture where an individual spends most of their life seems to be a safe base where they can discover and normalize their feelings in the new situation [6, 7]. Actually, it is evidenced that maternal, paternal, and CA affect different aspects of the intercultural changes [5]. The attachment theory deals with the relationship between a child and caregivers. It also explains how this relationship can influence the child's psychocognitive development [8, 9]. In actual fact, the attachment theory is to clarify the relationship between mothers and kids. Afterwards, Keefer et al. [10] extended the scope of this theory to include other important persons, natives, nonhuman animals, and even inactive objects.

Bowlby [9] assumed that there are two different internal working models shaping schema and driving expectations and behaviors. The first one is a kind of child-parent attachment in which the child feels security and parents are a symbol of reliable support. The second one is a kind of relationship in which there are insecure attachment and unreliable support from the side of parents toward the child. Accordingly, close attachment and consistent support are supposed to create close relationships in the future (Bretherton & Munholland, 2008 [11]). Moreover, some researchers illustrated the effect of the quality of child-parent attachment on peer relationships in adulthood. For instance, university students who have experienced closer attachment with their parents would have more ability to create better and more positive relationships with other peers [12, 13].

Yap and Grisham [5] note that after a long time, attachment influences different aspects of human life, such as social and emotional development. They continue that attachment includes different areas like developmental psychology, evolutionary psychology, social psychology, neuroscience, psychophysics, and ethology. Many researchers reviewed the cultural attachment and reached different views about the improvement of attachment ([14]; Bretherton & Munholland, 2008; Bakermans-Kranenburg et al., 2016 [15]). The key point is that constant attachment bonds create strong and safe attachment relationships that cannot easily be changed [16]. Accordingly, it seems that individuals would like to continue old relation-

ships because they are reluctant to have cognitive effort to create new social interactions [17].

Some researchers have come up with the conclusion that attachment is a higher-order result of various existing networks in the brain [18]. This is in accordance with Bowlby's [9] explanation of attachment. Attachment is a "biobehavioral state in which several physiological and behavioral systems are organized to provide an individual with a certain sense of security and intimacy with significant others" ([19], p. 1). According to the attachment theory, the theory of cultural attachment provides psychological security to protect from threats (Hong, 2017). Cultural attachment has two processes in which people have relationships with others of the cultural group and with the abstract demonstrations of the culture. Depending on the intended cultural settings, individuals attach, such as other family members [20], romantic partners [21], organizational members [22], fictional characters and pets [23], deities [24], and even places [25]. Individuals from the same cultural group can also have different bonds as an extended group of caregivers and attachment targets.

However, culture is a compound structure that cannot be simply characterized like the child-mother attachment (Hong, 2009). Also, there are different features in cultural attachment that are unapparent [26] such as the attachment to "motherland" [27]. In fact, a dynamic constructivist approach to culture is needed to activate this cognitive network ([28]; Briley & Wyer, 2001; Wyer, 2014). The processes of cultural preparing exemplify the dynamic constructivist approach that includes some activities to stimulate mental representations for future activities [29]. There are different kinds of preparing via media like using words, images, or additional sensory information. As a whole, the perceptions of certain stimuli activate networks related to those stimuli [30]. For example, in a restaurant serving French food, French music is played as well [31].

According to Keller [32], in Bowlby's framework, apart from the definition of attachment, its qualities, appearance, and consequences are also reflected to be universal. Universality is similarly demanded by the other essential assumptions of attachment theory: normativity, sensitivity, and competence [33]. Normativity outlines the protected attachment bond as the universal norm. Sensitivity underlines child-centered responsiveness such as the universally best situation for children's improvement and the forerunner of protected attachment associations. The competence assumption refers to the children's development of competence in various developmental fields as dependent on the development of attachment safety. Nevertheless, the fundamental assumption of universality as well-defined by Bowlby is both changeable and unadoptable but cultural variability challenges the universality assumption of this theory [34].

2.2. Related Studies in the Literature. In the literature, some studies have been carried out to disclose the role of age and gender in HCA. Pierrehumbert et al. [4] investigated the attachment behavior of people by establishing observation based on their verbal and nonverbal reactions to different settings. Their findings revealed no

cultural attachment difference among different ages and genders. Additionally, Ainsworth and Bowlby Ainsworth and Bowlby [8] explored the cultural attachment among middle-class families. They found no gender differences concerning attachment patterns among infants and adults. Besides, Carlson et al. Carlson et al. [35] found gender as a nonrelevant contributor to attachment behaviors in infancy. Likewise, Chopik and Edelstein Chopik and Edelstein [36] examined the attachment processes among a wide range of participants from infants to young adults. Their results revealed very little age differences in their attachment orientation in geographical settings outside. Moreover, Van IJzendoorn and Bakermans-Kranenburg (2010) investigated if attachment in adulthood is related to their age and gender. Their results demonstrated no gender or age differences in the use of attachment strategies. Besides, Van IJzendoorn and Bakermans-Kranenburg (2010) explored the relationship between adults' attachment and gender, age, culture, and socioeconomic status in the United States of America. Their findings revealed that there was not any significant relationship between the participants' attachment and gender, age, culture, and socioeconomic status. Finally, Karababa Karababa [7] investigated the relationship between parental attachment and loneliness among adolescents with regard to the mediating role of self-esteem. Their results evidenced that there was a negative correlation between the participants' parental attachment and loneliness. Moreover, their findings documented that self-esteem played a positive mediating role in shaping the relationship between the participants' parental attachment and loneliness.

As can be inferred from the above-reviewed studies, they suffered from two notable limitations. First, all the studies were quantitative and the howness aspects is not clear. Second, the role of gender and age in university students' HCA is under-researched in the Iranian context. To bridge these gaps, the current study explores the role of gender and age in Iranian university students' HCA. The following research questions are put forward:

- (1) Is there any statistically significant difference between male and female university students concerning HCA
- (2) Is there any statistically significant difference among university students' HCA with different ages
- (3) What are Iranian university students' perceptions of the role of age and gender on their HCA

3. Methodology

3.1. Research Design. The design of the present study was an exploratory mixed method where qualitative data were used to support the quantitative data. The primary purpose of using a mixed-method design was to reach triangulation. According to Riazi [37], triangulation is a strategy to get a comprehensive understanding of the topic under research by using different approaches and techniques. Thus, to provide a more comprehensive understanding of the role of age

and gender in university students' HCA, a mixed-method design was used.

3.2. Setting and Participants. The present study was run at Ayatollah Boroujerdi University, Iran. It is a Doolati (state-run) university which is under the control of the Ministry of Science, Research, and Technology (MSRT). Its students had to gain a good rank at a centralized, competitive, national entrance examination (the Konkûr), and studying at it was free of charge. A total of 201 university students including male ($n = 66$) and female ($n = 135$) were selected using a random sampling method. According to Riazi [37], a random sampling method gives equal chance to the individuals in a population to be selected for a study. The reason to choose the participants was their availability to the researchers. They were aged 22 to 40 and they all were undergraduate students studying applied linguistics. To achieve the participants, the first researchers referred to the deputy of education of Ayatollah Boroujerdi University and detailed the present study's objectives. The deputy of education agreed with running the present study at their university setting and gave university students' phone numbers to the first researcher. The researchers contacted the university students and asked if they were willing to participate in this study. The university students who were willing to participate signed a digital consent and sent it back to the researchers. It should be underlined that the researchers informed that the participation in this study was voluntary and the participants could withdraw from the study as they wished. Additionally, the researchers ensured that the participants' responses would remain confidential and they would be informed about the final results.

3.3. Instruments. The researchers used two instruments to gather the required data. The first instrument included the HCA scale (HCAS), validated by Shahsavandi et al. [38]. It measures HCA in terms of religious attachment (e.g., I believe that participating in the religious ceremonies is essential), Western attachment (e.g., I prefer Western foods over Iranian foods), Iranian attachment (e.g., I like Iranian get togethers), cultural attachment (e.g., I like Iranian local dresses), and artistic attachment (e.g., Iranian movies are boring for me). It contains 36 items measuring the participants' responses in a four-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree). HCAS assesses four factors of students' HCA, such as religious attachment, Western attachment, Iranian attachment, cultural attachment, and artistic attachment.

The second instrument entailed a reflective written statement. To prepare the reflective written statement, based on HCAS, the participants were invited to write down a report according to the following prompt:

Dear students,

You are kindly invited to write about your perceptions of the role of your gender and age in home cultural attachment. Therefore, your report is supposed to revolve around your views on how your gender and age may affect your home cultural attachment. A report with 300-500 words in length would be enough.

The researcher recruited two well-experienced translators to translate the questionnaire and the written reflective statement into Persian. After that, to measure the reliability and validity of HCAS, it was piloted on 40 university students. The results of the internal consistency yielded 0.96. And to measure the validity of the questionnaire, an expert's judgment strategy was used. For this purpose, the researcher invited two associate professors in applied linguistics at Lorestan University to comment on the face and content validity of the HCAS. According to their comments and observations, some minor revisions were made. In the end, to avoid any probable misunderstanding on the part of the participants, 15 students were asked to complete the form and report any kind of ambiguity with its items.

3.4. Data Collection Procedures. The researchers took some steps to run the present study. At the first step, the questionnaire was translated into Persian by two experts in translation. At the second step, the reliability and validity of the questionnaire were measured using a pilot study and expert's judgment strategy. At the third step, the readability of the items of the questionnaire and the written reflective statement was assessed by inviting 15 university students to read and report on any ambiguity with their contents. At the fourth step, the digital format of the questionnaire and the written reflective statement were sent to the participants via email, Telegram, and WhatsApp. It should be noted that the questionnaire and the written reflective statement started with consent. If the participants agreed with its content, they were directed to the items of the questionnaire and the written reflective statement. The participants' responses were gathered in a dataset to be analyzed later.

3.5. Data Analysis Procedures. As the collected data included quantitative and qualitative data, the data analyses were in line with them. Concerning the quantitative data, the researchers used SPSS version 22. In addition to calculating descriptive statistics including mean and standard deviations, the researcher used an independent sample *t*-test to see if there was a statistically significant difference between the male and female students concerning HCA. And, they used a one-way ANOVA to see if there was a statistically significant difference among the university students of different ages.

Concerning the qualitative data analysis, the researchers used thematic coding analysis. In line with Braun and Clarke [39], the repeated themes and excerpts were recognized and classified. In doing so, after reading and reviewing the participants' responses over and over, the first researcher identified the recurring excerpts of specific items. After extracting the most recurring excerpts, she ordered them in terms of importance and frequency. Afterward, she measured the credibility of the findings through a member checking strategy. For this purpose, they gave a copy of the final findings to one-third of the participants to check out if they mashed the intended meaning. In general, they confirmed that the findings represented their meanings. Additionally, the researchers recruited two coding analysts to code the data independently to measure the consistency

TABLE 1: The results of descriptive statistics of male and female genders.

Gender	<i>n</i>	<i>M</i>	SD	Std. error mean
Female	135	109.850	13.605	1.171
Male	66	108.631	12.869	1.584

and reliability of the coding procedure. The internal reliability of the coding was 0.88 which was considered acceptable for the present study's objectives.

4. Results

4.1. Quantitative Results. The first research question explored if there was any statistically significant difference between male and female university students concerning HCA. To answer this research question, an independent sample *t*-test was run. However, prior to running it, the researchers examined if the data were normally distributed using a Kolmogorov-Smirnov test. Data are considered normal if the calculated Sig is equal to or more than 0.05, called the significance level. As the calculated *p* (0.68) was larger than the significance level (0.05), the researchers concluded that the data were distributed normally. The basic descriptive statistics of the male university students, *M* (109.85), SD (13.60), and the female university students, *M* (108.63), SD (12.86), are reported in Table 1.

As reported, there was not a significant difference between the two genders' means regarding HCA. However, to reveal whether this difference was statistically different, an independent sample *t*-test was run.

As reported in Table 2, since the value of sig (0.44) is larger than the significance level (0.05), it can be concluded that the two genders were not statistically different concerning HCA. It means that both the male and female university students' HCA were not very different from one other.

The second research question explored if there was any statistically significant difference among university students' HCA with different ages. As noted, the participants' age was classified into three groups of 16–23, 24–31, and 32 and higher. To answer this research question, a one-way ANOVA was used. Prior to running it, the researchers checked the required assumptions to run this statistical procedure, namely, normality, linearity, and homogeneity. For checking the normality assumption, the researchers used a Kolmogorov-Smirnov test and results indicated that the collected data were normally distributed because the sig. values (0.25) were larger than the critical value (0.05). Concerning the linearity assumption, as the researchers did not find any curvilinear relationship in the distribution of scores for each group on the scatterplot, they concluded that the linearity assumption was met. Regarding the homogeneity assumption, the researchers run Levene's test of the equality of the variances and the findings evidenced that the sig. level (0.07) was larger than the alpha level (0.05). Thus, they concluded that this assumption was met as well. Having assured that the required assumptions were met, they used a one-

TABLE 2: Results of the independent samples test of male and female university students concerning HCA.

		Levene's test for equality of variances		t-Test for equality of means			
		F	Sig.	t	df	Sig. (2 tailed)	Mean difference
HCA	Equal variances assumed	0.590	0.443	0.607	199	0.545	1.218
	Equal variances not assumed			0.619	135.784	0.537	1.218

TABLE 3: The results of the descriptive statistics of the three age groups.

	n	Mean	Std. deviation	Std. error	95% confidence interval for mean		Minimum	Maximum
					Lower bound	Upper bound		
16-23	63	107.94	13.898	1.751	104.44	111.44	82.00	139.00
24-31	78	109.03	13.890	1.572	105.89	112.16	82.00	146.00
32 and higher	60	111.57	11.915	1.538	108.49	114.65	89.00	138.00
Total	201	109.45	13.348	.941	107.59	111.30	82.00	146.00

TABLE 4: One-way ANOVA for the role of age in university students' HCA.

	Sum of squares	df	Mean square	F	Sig.
Between groups	427.38	2	213.69	1.202	0.303
Within groups	35209.69	198	177.82		
Total	35637.08	200			

way ANOVA. The basic descriptive statistics along with the mean plot for the three groups are reported in Table 3.

In order to see if the differences among the groups' means were statistically significant, the researcher runs a one-way ANOVA.

As can be observed in Table 4, there was not a statistically significant difference among the participants' HCA with different ages (sig. = 0.001 and $F = 1.202$). That is to say, the university students with different ages had the same amount of HCA.

4.2. Qualitative Results. The third research question explored what Iranian university students' perceptions are of the role of age and gender on their HCA. In general, the results confirmed the quantitative findings revealing that the participants' HCA was not affected by their age and gender. In this regard, one of the female students stated that

I really feel attached to my homeland, house, and family. I experienced this robust feeling when my brother and I had to be away far from our parents and hometown for seven years. I understood that neither age nor gender affected this feeling. Even after some years, we do not like to repeat that bitter experience again because now we feel more relaxed beside my family (Maryam).

In support of the previous statement, another female student who was really satisfied with her life quoted that

I am 22 years old and I am studying at Ayatollah Boroujerdi University in my city. At night, I live with my family and this is pleasing because I can have their support all the time. However, last week, I was talking with one of my classmates coming from another city. He was not contented with his current situation due to being away from his family. After that, I found that age and gender are not influencing factors on individuals' HCA (Zahra).

Additionally, one of the male university students who was obliged to live far from his family and city because of studying at Ayatollah Boroujerdi University confirmed the previous statement and added that

My biggest problem is that I am not very familiar with this new culture and lifestyle. Sometimes, I cannot understand some specific behaviors of my classmates. After speaking with my other classmates coming from other parts of the country, I found that they suffer from the same problem regardless of their age and gender (Reza).

Incongruent with the previous remarks, a thirty-four-year-old male university student reported that HCA is not influenced by age or gender. He quoted that

I have a huge emotional attachment to my city and family. I have lived here for more than half of my life and, fortunately, I was accepted to a university located in my own city. I have many memories here and I wish to grow up with my children in this cultural setting. My wife, who is a native citizen like me here, does not like to leave this city either. So, we are going to work hard to improve our life near our families in our city. The reason for that is associated with this fact we are culturally and emotionally attached to this homeland (Mohsen).

Inconsistent with the previous account, one of the participants stated that

I love my house and I've lived there for 28 years. Unfortunately, I recently had to live alone away from my parents. Always I missed them and my city. I am unfamiliar with the accent and some cultural traits of people and this makes me upset and anxious. I understand that in all stages of our life

we are attached to our homeland and our parents and this feeling does not have any work with age and gender (Shirin).

To sum up, as can be implied from the abovementioned quotations, all the participants were attached to their families and homeland regardless to their gender and age.

5. Discussion

As mentioned, the first research question investigated if there was any statistically significant difference between the male and female university students concerning HCA. The findings revealed that gender is not a determining factor to shape the participants' HCA. The results indicated that regardless of their genders, the participants were affected by HCA. This means that HCA is such a strong emotion that affects all university students. Based on the findings, it can be argued that all the university students required their family and homeland to be available, responsive, and sensitive to their physical and emotional needs, creating a pattern of secure HCA [40]. In contrast, the participants who were away from their family and homeland may have been faced with unpredictable, chaotic, rejecting, or neglectful care, promoting the development of an insecure pattern of HCA.

The second research question explored whether there was any statistically significant difference among university students' HCA of different ages. The findings documented that there was not any statistically significant difference among the university students with different ages. The results indicated that the age factor was not a strong predictor of the participants' HCA. According to the results, it was documented that from the youngest participant to the oldest, one regarded HCA as a strong emotional factor affecting their studies. In line with the study's findings, it may be argued that HCA can be considered as an emotion including avoidance and anxiety for all ages. The attachment of anxiety referred to the amount of the participants' fear of losing the physical and emotional support from their family and homeland [41]. However, the participants' attachment avoidance was concerned with distrust of intimacy and preference for autonomy [42]. In this regard, it can be argued that the attachment of anxiety and the attachment of avoidance were both active for the university students regardless of their ages [40].

The third research question explored what the Iranian university students' perceptions were of the role of age and gender on their HCA. Complementary with the quantitative findings, the qualitative results evidenced that HCA is a very strong emotion and its effects on the university students of different genders and ages. The participants who were not away from their families and homelands to study at the university enjoyed a high level of emotional attachment. In contrast, the participants who had to leave their families and homelands who study at the university suffer from some problems. In accordance with the findings, the participants who lacked an acceptable emotional attachment might have been deprived of the physical and emotional support available when they were beside their families and their homelands.

The study's results are in line with previous studies [5, 40, 43, 44], indicating that HCA is not affected by gender and age of the students. In other words, they have come to the conclusion that HCA is both gender and age neutral. Such studies revealed that HCA factors, including religious attachment, Western attachment, Iranian attachment, cultural attachment, and artistic attachment, have effect on individuals regardless of gender and age. However, the study's findings are in contrast with those of [4, 36, 45] indicating that there is a significant difference between men and women of different ages regarding HCA. One possible reason for the contrast between the present study's findings with these studies may be attributed to the different lifestyles prevalent in the Iranian settings and other countries that is because family plays a key role in supporting individuals in terms of emotional and physical dimensions. In Iran, all the university students were affected by HCA. However, this may be different in other countries.

One possible explanation may be attributed to this view that the university students who were beside their families and in their homelands received sufficient emotional and physical support to feel safety and protection [46]. This may have contributed to their internal working cognitive and emotional schemata influencing how they viewed themselves and the surrounding environments. In other words, their families which were supportive and reliable assisted the university students to develop a secure HCA. In turn, this may have caused the university students to view themselves as competent and appreciated individuals. In contrast, the university students who were deprived of their families' emotional and physical support may have constructed cognitive and emotional schemata presenting them as incompetent and unappreciated [47]. Thus, they may not have trusted their new educational setting and suffered from some emotional and psychological problems.

6. Conclusion

The present mixed-method study purported to explore the role of gender and age in the Iranian university students' HCA. The quantitative findings indicated that the university students' HCA was not affected by their gender and age. Additionally, the complementary results revealed that HCA is a strong emotion affecting all the participants regardless of their gender and age. Based on the study's findings, it can be concluded that all university students need physical and emotional support provided by their families and homeland.

The results of the study have some implications for different stakeholders. First, the officials of higher education centers in Iran should consider HCA as a strong emotion affecting university students' academic performance. In this regard, they should offer the required emotional and physical support for the university students who are away from their families. Second, the officials of the higher education centers need to hold training courses for university teachers and staff to make them familiar with HCA such that they know how to deal with the university students suffering from HCA problems. Third, the university students should be

aware that HCA is not related to university students' age or gender, and accordingly, they should deal with their students regardless of their ages and genders. Besides, the university students who aim to reach the educational objectives that they follow have to adapt themselves to the new cultural settings. Last but not least, the parents of university students should give particular attention to their children who are studying away from their families. They need to be in touch with them via modern technologies.

In light of the study's limitations, some suggestions for further research are recommended. As the present study focused on the role of gender and age in the university students' HCA, further studies are required to explore the role of ethnicity, race, and socioeconomic status in university students' HCA. Moreover, as the sample of the present study was limited to one state university, future studies can include larger samples across the country to increase the generalizability of the findings. Additionally, since the participants of the present study were restricted to undergraduate students, interested researchers can examine the role of gender and age in M.A., Ph.D. students' HCA. Finally, as the instruments to collect the required data included just a questionnaire and reflective written statement, to gain more accurate insights into the role of gender and age in university students' HCA, future research can use other data collection instruments such as observation.

Data Availability

The data are available in the case of reasonable request from the authors.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

Acknowledgments

The authors disclosed receipt of the following financial support for the research, authorship, and publication of this article. This work was supported by Ayatollah Boroujerdi University, Iran (grant number 15664-215497).

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