

A Comparative Study of the Psychological Traits between Ordinary Korean Adolescents and Ethnic Korean “Goryeoin” Adolescents from Ukraine who came to South Korea after Experiencing the Ukrainian War: Focusing on Depression, Anxiety, Quality of Life, and Ethnic Identity

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ABSTRACT: Goryeoins are ethnic Koreans who settled across Eurasia to move away from persecution and oppression in the Korean peninsula. Approximately 1,200 Goryeoins entered Korea to escape the Ukrainian War. This study aimed to analyze the metrics of psychological health (i.e., depression, anxiety, quality of life, and ethnic identity) of Goryeoin adolescents and to identify factors affecting their mental health. We compiled 120 questions based on six clinically used assessment tools (i.e., KIDSCREEN-52-HRQOL, RSES, PHQ-9, GAD-7, PC-PTSD-5, and MEIM). A total of 150 Korean adolescents and 130 Ukrainian Korean adolescents were included. The score of each subject was calculated in terms of family, friends, school life satisfaction, psychological health, ethnic identity, bullying, and trauma factors between the two groups, Goryeoin and Korean adolescents. Statistical analysis was performed using students' t-tests for continuous variables that satisfied the normality assumption. For variables that did not satisfy the normality assumption, Mann-Whitney U test was performed. A p-value <0.05 was taken to indicate statistical significance. Goryeoin adolescents demonstrated significantly higher overall mental health than Korean adolescents. In metrics related to friendship, Korean adolescents showed significantly higher satisfaction than Goryeoin adolescents. Goryeoin adolescents identified with their country significantly more than Korean adolescents. Finally, Korean adolescents experienced bullying and trauma in significantly higher frequency than Goryeoin adolescents. This research was a first attempt to compare and identify factors for mental health between Korean and Goryeoin adolescents. We expect the results of this study to be used as a guide for policy decision making.

KEYWORDS: Ukrainian Goryeoin, mental health, adolescents, psychological factors, clinical assessment

1. Introduction

It has been a year since the war in Ukraine broke out in February 2022. A significant number of Ukrainian citizens fled abroad, and approximately 1,200 Goryeoins in Ukraine migrated to Korea since August 2022. The mental health of adolescents is a major study area, as adolescents are relatively more emotionally and psychologically more vulnerable compared to adults. Therefore, this study compares the mental health of Ukrainian Goryeoin adolescents who came to South Korea after the war with ordinary Korean adolescents. Furthermore, this study also addresses the Goryeoin adolescents' ethnic identities.

2. Literature Review

1) The KIDSCREEN-52 quality-of-life (KIDSCREEN-52-HRQOL) is a tool developed with the support of the European Commission to evaluate the subjective quality of life that school-age

children feel. It is a self-reported test consisting of 52 questions and 10 sub-areas. Sub-domains are physical health (5 items), psychological health (6 items), mood and emotion (7 items), friendship (6 items), family (6 items), self-awareness (5 items), autonomy (5 items), school life (6 questions), bullying (3 questions), and economic resources (3 questions). The frequency of behavior, emotion, or attitude over the span of a week is evaluated on a 5-point Likert scale ranging from “not at all” (1) to “very much” (5). The higher scores indicate a higher quality of life. This study used physical health, psychological health, friend relationship, family relationship, school life, and social acceptance (Hong et al. 2007).

2) The Rosenberg Self-Esteem Scale (RSES) is a scale developed by Rosenberg (1969) and is a self-reporting test that measures respondents' attitudes toward themselves. The 10 items include 5 items of positive self-esteem and 5 items of negative self-esteem. A higher total score means higher self-esteem. Based on the scores, the levels of self-esteem are classified into very low (1-18 points), low (19-24 points), moderate (25-38 points), high (39-44 points), and very high (45 points or more). The responses to each question are on a 5-point Likert scale ranging from “not at all” (1) to “strongly agree” (5). While the original scale developed by Rosenberg is a 4-point Likert scale that gives scores from 0 to 3, one of either scoring systems is often picked up based on researchers' demand (Lee et al. 2009; Rosenberg, 1965).

3) Patient Health Questionnaire-9 (PHQ-9) is a self-reported test developed by Spitzer et al. (2006) to screen for depression and evaluate its severity. It consists of nine questions with nine items that fall under the DSM-IV's criteria for diagnosing major depressive disorder. The questions are designed to understand how often each participant has gone through various depressive symptoms over the past two weeks. The responses to the questions are assessed on a 4-point Likert scale: “none” (0), “2-6 days” (1), “7-12 days” (2), and “almost every day” (4). The total score ranges from 0 to 27 points. PHQ-9 is known to be a helpful tool for screening and evaluating depressive symptoms in research and at the preliminary clinical evaluation stage because it has fewer items and is more straightforward to score compared to the existing depression assessment tools (Park et al. 2010).

4) The Generalized Anxiety Disorder-7 (GAD-7) was developed by Spitzer et al. (2006) to screen for generalized anxiety disorder, and Kroenke et al. demonstrated its validity as a screening test for panic, social anxiety, and post-traumatic stress, as well as generalized anxiety disorders. It consists of seven items, and the anxiety symptoms in the designated past two weeks are evaluated on a 4-point Likert scale with the following options: “not at all disturbed” (0), “disturbed for a few days” (1), “disturbed more than half of the two weeks” (2), or “disturbed almost every day” (3). A total score of 5 or higher indicates high anxiety (Spitzer et al. 2006).

5) The Primary Care PTSD Screen for DSM-5 (PC-PTSD-5) is a test tool developed by Prins et al. (2003) for primary screening of PTSD risk groups. It consists of questions about whether respondents have experienced post-traumatic stress symptoms in the past month, reflecting the DSM-5 diagnostic criteria. There are five questions in total, and respondents are asked to answer “yes” or “no.” PC-PTSD-5 is selected only if the person experienced a traumatic event and will not be used if the person has not experienced a traumatic event. A score of 3 to 5 is classified as severe and interpreted as experiencing discomfort due to symptoms related to the traumatic event and experiencing difficulty in adjusting to daily life than usual (Prins et al. 2003; Jung et al. 2018).

6) The Multigroup Ethnic Identity Measure (MEIM) was developed by Phinney (1992), modified and secured by Roberts et al. (1999), and consists of 12 questions and three factors. The three sub-factors of ethnic identity consist of behaviors of ethnic identity, emotional evaluation of ethnic identity, and sense of ethnic belonging. The scale is a 4-point Likert scale ranging from “not at all” (1) to “very much” (4) to rate the sense of ethnic identity. Higher scores indicate a more positive sense of ethnic identity (Phinney 1992; Roberts et al. 1999).

3. Methods

The test was conducted on 150 Korean adolescents and 130 Goryeoin adolescents from Ukraine from August 15th to 29th, 2022. For Ukrainian Goryeoin youth, teenagers from the Gwangju metropolitan city where Goryeoins densely reside were sampled for the test, whereas Korean adolescents across the country took part online through a survey agency. The survey questions were translated into Russian for Ukrainian Goryeoins. Among the collected questionnaires from Goryeoins, 120 were used for analysis, excluding 10 questionnaires that were not completed completely. A descriptive statistical analysis was conducted to identify the differences between these groups by factor. For this purpose, the normality test was performed to classify the factors for the t-test and the non-parametric test. When the t-test was performed, Welch-t values were obtained for factors that did not satisfy the assumption of equal variance. The R program was used for statistical analysis.

4. Results

1) Descriptive Statistics

Table 1: Goryeoin Adolescent Demographic Information

Factors	Response	Number of People
Gender	Male	53
	Female	66
	Nonresponse	1
Year of Birth	Before 2000	4
	2001-2005	37
	2006-2010	71
	After 2011	8
School	Grade 6	2
	Grade 7	5
	Grade 8	6
	Grade 9	3
	Grade 10	5
	Grade 11	2
	Grade 12	0
	Nonresponse	7
	Korean Language School	74
	Not Going to School	17
Residence	Gyeonggi-do Province	17
	Jeolla-do Province	98
	Others	4
	Nonresponse	1
Period of stay in South Korea	More than 0 months and less than 2 months 2 months <	77
	More than 2 months and less than 4 months 2 months <	34
	More than 4 months and less than 6 months 4 months <	42
	Nonresponse	4
	Who decided to come to South Korea?	Self
	Father	68
	Mother	70

Did you want to come to South Korea?	Yes	83
	No	37
Do you want to go back after the war is over?	Yes	72
	No	47
	Nonresponse	1

Table 2: South Korean Adolescent Demographic Information

Factors	Response	Number of People
Gender	Male	75
	Female	75
Year of Birth	2004	34
	2005	23
	2006	19
	2007	46
	2008	28
School	7th grade	1
	8th grade	26
	9th grade	48
	10th grade	18
	11th grade	22
	12th grade	35
	Korean Language School	
	Not going to School	
Non-respondents		
Residence	Seoul City	25
	Gyeonggi-do Province/Incheon City	59
	City of Busan/Daegu/Ulsan Gyeongsang-do Province	27
	City of Daejeon/Sejong Chungcheong-do Province	14
	City of Gwangju/ Jeolla-do Province	18
	Gangwon-do Province	3
	Jeju-do Province	4

2) Test Results

To confirm whether the t-test is applicable, normality verification was performed on all variables, and the results were as follows.

Table 3: Tests of Normality

Tests of Normality(Kolmogorov-Smirnov test)		
	statistic	p
Quality of Life	0.0433	.691
↳Physical Health	0.0538	.415
↳Mental Health	0.0779	.076
↳Friends	0.0731	.112
↳Family	0.1037	.006*
↳School	0.0700	.142
↳Bullying	0.2155	.000***
Self-esteem	0.0657	.195
Depression	0.1403	.000***
Anxiety	0.1331	.000***
Trauma	0.1987	.000***
Ethnic identity	0.0422	.000***

*:p<.05, **:p<.005, ***:p<.001

The test results show that family, bullying, depression, anxiety, and trauma under the sub-scales of quality of life did not meet the assumption of normality. Therefore, a non-parametric test was used for these factors.

Table 4: Independent Samples t-test Results

Independent Samples <i>t</i> -test result					
	<i>t</i>	<i>df</i>	<i>p</i>	Mean difference	SE difference
Physical Health	0.810	268	.418	0.431	0.533
Mental Health	3.524	268	.000***	2.066	0.586
Friends	-2.832	268	.005**	-1.923	0.679
School	0.016	268	.987	0.010	0.612
Quality of Life	1.248	266.8	.213	2.890	2.316
Self-esteem	-0.834	259.2	.405	-0.685	0.821
Ethnic identity	2.146	268	.033*	2.696	1.256

*:p<.05, **:p<.005, ***:p<.001

An independent sample t-test was employed for seven factors that passed the normality test. Among them, the quality of life and self-esteem did not pass the equal variance assumption test so those were indicated by the value of Welch-t. As a result of verification,

there was no significant difference between the two groups among physical health ($t=0.810$, $df=268$, $p=.418$), school ($t=0.016$, $df=268$, $p=.987$), quality of life ($t=1.248$, $df=266.8$, $p=.213$), and self-esteem ($t=-0.834$, $df=259.2$, $p=.405$). Meanwhile, psychological health ($t=3.524$, $df=268$, $p=.000$), friends ($t=-2.832$, $df=268$, $p=.005$) and ethnic identity ($t=2.146$, $df=268$, $p=.033$) showed significant differences between the groups. When it comes to psychological health, which means subjective psychological well-being, Goryeoin adolescents turned out to have higher psychological health than Korean adolescents (Korean group average: 20.866; Goryeoin group average: 22.933). For the friend factor, Korean adolescents showed a higher level of satisfaction compared to Goryeoin adolescents (Korean group average: 22.106; Goryeoin group average: 20.183). Lastly, Goryeoin adolescents showed a higher sense of ethnic identity than Korean adolescents (Korean group average 37.25; Goryeoin group average: 40.025).

Table 5: Mann-Whitney U test

Mann-Whitney U test			
	<i>U</i>	<i>p</i>	Mean difference
Family	7201	0.005**	2.000
Bullying	7747	0.038*	0.000
Depression	8405	0.350	-1.000
Anxiety	7212	0.005**	1.000
Trauma	7786	0.049*	0.000
*: $p < .05$, **: $p < .005$, ***: $p < .001$			

Having conducted a non-parametric test, the Mann-Whitney U test on five factors that did not pass the normality test revealed that there was no significant difference in depression between the two groups ($U=8405$, $p=.350$), while the family ($U=7201$, $p=.005$), bullying ($U=7747$, $p=0.038$), anxiety ($U=7212$, $p=0.005$), and trauma ($U=7786$, $p=0.049$) factors showed significant differences between the two groups.

Satisfaction with family (Korean group average: 21.80; Goryeoin group average: 23.72) was higher in the Goryeoin group. The group of Korean adolescents experiences more bullying (Korean group average: 4.68; Goryeoin group average: 3.58) at a higher level. Anxiety (Korean group average: 4.30; Goryeoin group average: 5.75) and trauma (Korean group average: 1.56; Goryeoin group average 1.88) were found more in the Goryeoin group.

5. Discussion

The study examined the psychology of Goryeoin adolescents, who came to South Korea due to the war in Ukraine, compared with Korean adolescents. Given that this subject was never addressed, this research is significant. Goryeoin adolescents showed higher family satisfaction and psychological health than Korean adolescents, and their sense of ethnic identity was also higher than Korean adolescents. Contrary to concerns, our research showed that the level of bullying in Goryeoin adolescents was relatively lower compared to South Korean adolescents; however, the level of satisfaction with friendship turned out to be lower, suggesting their possible difficulties in building broad friendships.

In addition, the Goryeoin group shows a high level of trauma, which could be a promising cause for anxiety. This suggests that the war as a variable may have had an

influence on their psychological impact, and therefore, additional research is needed to clarify further.

It was a meaningful discovery that Goryeoin adolescents have a higher sense of ethnic identity than Korean adolescents, while many assume the opposite.

The Overseas Koreans Act might have influenced their sense of ethnic identity as the Act helped Goryeoin adolescents to come to South Korea easier when they were confused about where to go under the extraordinary circumstance of the war. Another reason for their high sense of ethnic identity could be their childhood upbringing while listening to their grandparents' stories about Korea.

Another analogous survey result, which was part of a research conducted by Ko Ga-Young (2009), shows that Goryeoin adolescents from Moscow, Russia, also feel a high sense of ethnic identity. Goryeoin adolescents from Moscow knew that they needed to put more effort than Russians to make their lives successful in society, and there might be significant social obstacles. However, regarding ethnic identity, 55% of the respondents said they were "very proud of being Goryeoin," and 21% answered they were "proud of" their ethnicity.

In that respect, providing more active support and intervention for their trauma treatment and better school life, including language and friendship, seems necessary.

This research suggests further studies to conduct in the areas below:

1) Policies and initiatives for overseas Korean youth, such as how Goryeoin should be carefully developed and implemented, should be created.

2) Psychological intervention in trauma should be made more urgently in the case of adolescents from Ukraine who have experienced the war directly or indirectly.

In a preliminary interview with eight Goryeoin adolescents from Ukraine from August 10th to 16th, most participants said they felt fortunate and safe to come to Korea in the process of choosing a country to evacuate after the war. They added that it was because Korea is their grandparents' home country, and some of their parents have worked in Korea in the past. All these made them feel natural to come to Korea. These factors allow Goryeoin adolescents to have a higher sense of ethnic identity than Korean teenagers.

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