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An investigation of empathy in Vietnamese and Indonesian children

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ABSTRACT

Empathy is essential to healthy relationships and overall well-being. Previous research suggests that children from East Asian cultures experience more personal distress and less empathic concerns than those from western cultures, but none of these

differences between children from Vietnam or Indonesia have been specifically studied. This study attempted to determine the differences between children's empathy in Vietnam and Indonesia. Seven hundred nine children aged 8-12 years-old participated, including 336 Vietnamese and 373 Indonesian children. Results found significant differences in gender, grade level, and nationality on the children's empathy. Girls were higher than boys, younger children were higher than older children, and Indonesian children were higher than Vietnamese children. For the interaction, it was found the interactions between gender and grade level, gender and nationality, and grade level and nationality. Therefore, the differences in children's empathy between Vietnamese and Indonesian children can be explained under a general trend in development as well as the cultural influences in their experience of empathy.

Keywords: Empathy, Vietnamese, Indonesian, children, gender, grade

1. INTRODUCTION

Our ability to comprehend others may be a key element in our performance as effective communicators. Empathy is described as the ability to be conscious of oneself and other people's emotions and thoughts and distinguish one's sentiments and thoughts (Yoon, 2014). Empathy in life is what can bring people together, especially for students in school.It is composed of two principal components, which are cognitive and affective (Batson et al., 1987; Eisenberg, 2001; Hoffman, 1987; Lawrence et al., 2004). Affective empathy denotes all various sharing of other people's feelings through emotional contagion procedures (Eisenberg, 2001). Affective empathy is asserted to be genetic and even detected in infancy at an early stage of life (Hoffman, 1987). Besides, cognitive empathy evolves as an outcome of cognitive development throughout childhood, which is the ability to recognize and reflect on the emotions of everyone in particular by placing oneself within the others' experiences (Eisenberg, 2001; Hoffman, 1987). Empathy is the fundamental ability for students to prosper and to integrate themselves into the local community or school. There are numerous studies found that those girls have a more exceptional ability to understand others' emotions and thoughts than boys, which asserts the gender differences in empathy (Hoffman & Levine, 1976; Landazabal, 2009; Mestre et al., 2009). Nevertheless, Lafferty (2004), in a study with a participant of 12 to 14 years old, found that whereas girls scored significantly higher in the affective component of empathy, there were no gender differences in the cognitive component.

Some researchers proposed that the ability in empathy improves with age throughout adolescence in their analysis of the relations between empathy and age (Lennon & Eisenberg, 1987; Litvack-Miller et al., 1997). In this direction, Litvack et al. (1997) indicated the age-related changes with greater empathy in older children than the younger ones in a sample of children aged 8 to 11. Lennon and Eisenberg (1987) also found that self-reports of empathy increase in the school years until age 11; however, findings were not very consistent after that age. Effect sizes for age-related increase in empathy varied with the method of assessing empathy-related responding; they were larger for observational (usually behavioral) and self-report indices than for nonverbal (facial/physiological) or other-report measures (for which the effects sizes were not significant) (Eisenberg et al., 2013). Nevertheless, the study by Calvo, González, and Martorell (2001) with children and adolescents aged 10 to 18 confirmed only increased empathy with age in girls, and the research by Escrivá, Navarro, and García (2004) with adolescents aged 13 to 18 did not reveal significant differences as a function of age either in males or females.

Empathy also varies widely among countries and cultures, and psychological research has found cross-cultural differences in East Asian and European Canadian young adults (Chung et al., 2010), Korean and Korean American adolescents (Yoon, 2014), British compared to East Asian young adults (Atkins et al., 2016). Chung et al. (2010) investigated the difference of empathy in samples of East Asian and European Canadian young adults. They found that Westerners reported a more empathic concern, but less personal distress than did Easterners. Yoon (2014) explored cross-cultural differences in empathy between Korean and Korean American adolescents. Yoon (2014) indicated different features of empathy constructs between the Korean and Korean American groups. Korean youths scored high on vertical individualism. However, the ratings of individualism scores were lower than those of collectivism scores among the American sample. This may be because the American sample was collected from the Southern part of America, which includes the cultural nature of collectivism. A recent study has examined the difference between British and East Asian young adults (Atkins et al., 2016). They found that British participants report a greater empathic concern and show lower empathic accuracy compared with East Asian participants. There is limited research directly examining the cross-cultural differences in the Vietnamese and Indonesian. To fill this gap, we examine the influence of gender, grade, and nationality on children's empathy concerns: Understanding of Feelings (UF), Feelings of Sadness (FS), and Tearful Reaction (TR), with the subject are children in Vietnam and Indonesia to discover the differences. The research starts with reviewing the literature of students' perception of

empathy. In the second section, a basic analytical frame work is described, including the research methodology, result and discussion respectively. Finally, the conclusion is in the last section.

2. METHODS

Research hypotheses

A 2×3x2 factorial design was used. The independent variables were three aspects of the student: gender (boy, girl), grade (2, 4, 6), and *nationality* (*Vietnamese, Indonesian*). Three dependent variables were measured: Understanding of Feelings (UF), Feelings of Sadness (FS), and Tearful Reaction (TR). The following null hypotheses were tested:

Ho_1 (main effect): There is no significant difference among the two study groups of different gender when they are compared simultaneously on the Understanding of Feelings (UF), Feelings of Sadness (FS), and Tearful Reaction (TR).

Ho_2 (main effect): There is no significant difference among the three study groups of different grade when they are compared simultaneously on the Understanding of Feelings (UF), Feelings of Sadness (FS), and Tearful Reaction (TR).

Ho_3 (main effect): There is no significant difference among the two study groups of different nationalities when they are compared simultaneously on the Understanding of Feelings (UF), Feelings of Sadness (FS), and Tearful Reaction (TR).

Ho_4 (interaction effect): There is no significant interaction between gender and *grade level* when students are compared simultaneously on the Understanding of Feelings (UF), Feelings of Sadness (FS), and Tearful Reaction (TR).

Ho_5 (interaction effect): There is no significant interaction between gender and *nationality* when students are compared simultaneously on the Understanding of Feelings (UF), Feelings of Sadness (FS), and Tearful Reaction (TR).

Ho_6 (interaction effect): There is no significant interaction between grade and *nationality* when students are compared simultaneously on the Understanding of Feelings (UF), Feelings of Sadness (FS), and Tearful Reaction (TR).

Ho_7 (interaction effect): There is no significant interaction between gender, grade, and *nationality* when students are compared simultaneously on the Understanding of Feelings (UF), Feelings of Sadness (FS), and Tearful Reaction (TR).

Participants

Seven hundred and nine from 8 to 12-year-old children participated in this prospective study from November 2018 to July 2019. The ethics committee approved this study at the Ho Chi Minh City University of Education, Vietnam. Written informed consent from participating family members was obtained. 336 Vietnamese children, including 177 boys (27 grade two, 64 grade four and 86 grade six) and 159 girls (42 grade two, 43 grade four and 74 grade six) from schools of Southern Vietnam and 373 Indonesian children, including 184 boys (65 grade two, 54 grade four and 65 grade six) and 189 girls (63 grade two, 60 grade four and 66 grade six) from schools of Southern Vietnam from schools of Semarang, Indonesia (table 1 & figure 1).

Table 1 Number of Participants in the Nationality by Groups of *Grade*

Nationality	Grade group			
	Grade 2	Grade 4	Grade 6	Total
Vietnamese	69	107	160	366
Indonesian	128	114	131	373

Participants were selected randomly from students of primary and middle schools. All participants provided informed consent after receiving an explanation of the purpose of the research. After they were provided a description of this research's purpose, all participants received the informed consent.

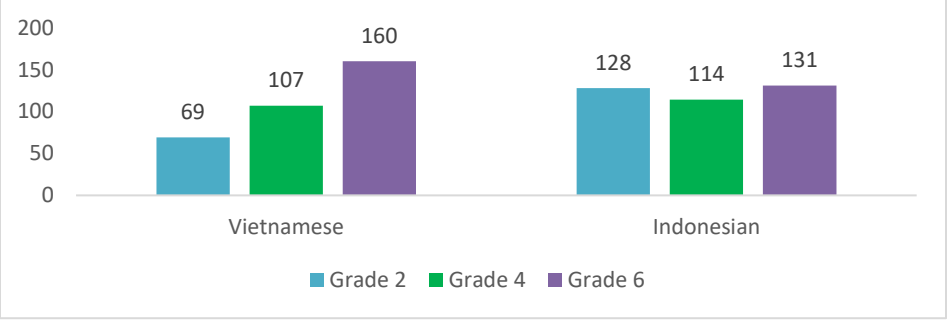

Figure 1 Number of Participants in the Nationality by Groups of Grade

Measurement

Participants were asked to complete the following questionnaire: the Vietnamese versions of the Bryant's Empathy Index (BEI) for children and adolescents based on the original Bryant (1982), a 22-item questionnaire measure of dispositional affective empathy. The BEI consists of three subscales: Understanding of Feelings (UF), Feelings of Sadness (FS), and Tearful Reactions (TR). The 22 items of BEI were translated into Vietnamese by two bilingual researchers who were both familiar with the construct being assessed. For one of them, the first language was Vietnamese; for the other, the first language was English. Forward and backward translation procedures were executed following the guidelines. The same sequence of items was maintained in the Vietnamese translation of the index. All participants were instructed to read the questionnaire questions carefully and choose the responses that best described themselves. The BEI consists of 22 questions administered to the entire class at once. Items are scored dichotomously (1 or 0 for yes or no and for true or false respectively). Scale reliability estimates, which ranged from .54 for the first graders, .68 for the fourth graders, and .79 for the seventh graders (Bryant, 1982). Cronbach's alpha for this scale was 0.41 in the current study. A value that is low but still usually considered sufficient for a questionnaire (Bowling, 2014; Taber, 2018).

Procedure

Participants and their parents voluntarily agreed to participate and then signed consent forms regarding their rights in the completion of the study. In the beginning, participants are required to complete the General Information form, including grade, gender, and country. Subsequently, the instructions of BEI were introduced to students to understand the questionnaire. Students were informed that other peers would not know their responses, and the questionnaire did not have wrong answer. They were asked to answer and complete each question based on their own experience.

Ethical approval

The study protocol was approved by the Educational Psychology Research Group, Ho Chi Minh City University of Education, Vietnam (No. 3019/QD-DHSP)

3. RESULTS

Descriptive Analysis

According to the norms from the BEI (Bryant, 1982), the participants scored in the average range on the empathy scale. The mean score for the UF subscale was .46 (SD = .19). The mean score on the FS subscale was .69 (SD = .24). The mean score for the TR subscale was.43 (SD = .22). Table 2 presents descriptive statistics of dependent variables, including UF, FS, and TR results by gender and grade level groups.

Table 2 Summary of Mean (M) and Standard Deviation (SD) of BEI Questionnaire

Gender	Grade Group			
	Grade 2	Grade 4	Grade 6	Combined
Boy(*N*)	92	118	151	361
UF				
M	.45	.52	.45	.47
SD	.19	.18	.17	.18
FS				
M	.67	.70	.60	.65
SD	.24	.23	.27	.25
TR				
M	.34	.43	.38	.39
SD	.21	.22	.20	.21
Girl(*N*)	105	103	140	348
UF				
M	.48	.46	.41	.45
SD	.22	.18	.18	.20
FS				
M	.79	.72	.68	.72
SD	.20	.23	.23	.23
TR				
M	.42	.48	.52	.48
SD	.21	.21	.21	.21

Inferential Analysis

The null hypotheses were tested with a two-way MANOVA procedure performed by SPSS. In order to run MANOVA, we conducted preliminary assumption check for normality, homogeneity of variance-covariance matrices. If the sizes of groups are approximately equal or the size of the largest group is less than about 1.5 times the size of the smallest group, MANOVA is robust to violations of the homogeneity of variance/covariance matrices (Leech et al., 2005). The largest group in this research (n = 160) was about 2.32 times larger than the smallest group (n = 69), the multivariate homogeneity of variance-covariance matrices tested with Box's M test revealed that the M value of 100.742 was significant (p = 0.006). Therefore, the assumption of homogeneity of covariance matrices was not satisfied. For this reason, a more robust statistic, Pillai's Trace value, was used for reporting the result (table 3).

On the basis of the significant effects from the result of MANOVA, a separate two-way univariate analysis of variance (ANOVA) for each of the dependent variables was conducted without undue inflation of the experiment wise Type I error (Grimm & Yarnold, 1995). Within the MANOVA and ANOVA the assumption that the variances of each variable are equal across the groups is checked byThe Levene's Test of Equality of Error Variances. If the Levene's test produces a significant result, this means that the assumption has been violated. In this research, the value of Levene's test came out to be non-significant for all the variables with the exception of FS [$F_{(11, 697)}$ = 3.160, p < 0.05]. So,the assumption that the variances of each variable are equal across the groups was met for the other variables (UF [$F_{(11, 697)}$ = 0.925, p > 0.05], TR [$F_{(11, 697)}$ = 1.594, p > 0.05]). Therefore, when the follow-up ANOVAs were conducted, results for Feelings of Sadness were interpreted with caution.

Table 3 Effects of gender, grade, nationality on children's empathy

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial η^2
Corrected Model	UF	2.929[a]	11	.266	8.334	.001	.116
	FS	4.958[b]	11	.451	8.593	.001	.119
	TR	3.495[c]	11	.318	7.376	.001	.104
	UF	134.892	1	134.892	4222.094	.001	.858
	FS	310.633	1	310.633	5922.332	.001	.895
	TR	121.104	1	121.104	2811.157	.001	.801
Gender	UF	.048	1	.048	1.496	.222	.002
	FS	.798	1	.798	15.213	.001	.021
	TR	1.197	1	1.197	27.774	.001	.038
Grade	UF	.441	2	.220	6.900	.001	.019
	FS	.736	2	.368	7.013	.001	.020
	TR	.580	2	.290	6.727	.001	.019
Nationality	UF	1.819	1	1.819	56.926	.001	.076
	FS	.671	1	.671	12.800	.001	.018
	TR	.002	1	.002	.042	.837	.000
Gender * Grade	UF	.344	2	.172	5.390	.005	.015
	FS	.306	2	.153	2.919	.055	.008
	TR	.319	2	.160	3.703	.025	.011
Gender * Nationality	UF	.034	1	.034	1.078	.299	.002
	FS	.256	1	.256	4.872	.028	.007
	TR	.455	1	.455	10.569	.001	.015
Grade * Nationality	UF	.053	2	.026	.827	.438	.002
	FS	1.198	2	.599	11.425	.001	.032
	TR	.361	2	.181	4.195	.015	.012
Gender * Grade * Nationality	UF	.114	2	.057	1.783	.169	.005
	FS	.141	2	.071	1.345	.261	.004
	TR	.014	2	.007	.161	.851	.000
Error	UF	22.269	697	.032			

	FS	36.558	697	.052
	TR	30.027	697	.043
	UF	174.889	709	
Total	FS	376.166	709	
	TR	165.939	709	
	UF	25.198	708	
Corrected Total	FS	41.516	708	
	TR	33.522	708	

There was a significant difference between boys and girls when considered jointly on the variables Understanding of Feelings, Feelings of Sadness, and Tearful Reaction. Pillai's Trace value = 0.50; $F_{(3, 695)}$ = 12.236, p = 0.001, partial η^2= 0.05. Therefore, the results suggested that the first hypothesis (Ho_1) was rejected. A separate ANOVA was conducted for each dependent variable, with each ANOVA evaluated at an alpha level of 0.017 (i.e., 0.05/3). There was a significant difference between boys and girls on Feeling of Sadness, $F_{(1, 697)}$ = 15.213, p = 0.001, partial η^2 = 0.021, with girls (M = 0.72, SD = 0.25) scoring higher than boys (M = 0.65, SD = 0.23) and there was a significant difference between boys and girls on Tearful Reaction, $F_{(1, 697)}$ = 27.774, p = 0.001, partial η^2 = 0.038, with girls (M = 0.48, SD = 0.21) scoring higher than boys (M = 0.39, SD = 0.21). There was not a significant difference between boys and girls on Understanding of Feelings, $F_{(1, 697)}$ = 1.496, p = 0.222, partial η^2 = 0.002.

There was a significant difference between Vietnamese and Indonesian when considered jointly on the variables Understanding of Feelings, Feelings of Sadness, and Tearful Reaction. Pillai's Trace value = 0.097; $F_{(6, 1392)}$ =24.819, p = 0.001, partial η^2= 0.097. Hence, the results suggested that the second hypothesis (Ho_2) was also rejected. A separate ANOVA was conducted for each dependent variable, with each ANOVA evaluated at an alpha level of 0.017 (i.e., 0.05/3). There was a significant difference between Vietnamese and Indonesian on Understanding of Feelings, $F_{(1, 697)}$ = 56.926, p = 0.001, partial η^2 = 0.076, with Indonesian (M = 0.51, SD = 0.18) scoring higher than Vietnam (M= 0.41, SD = 0.19) and there was a significant difference between Vietnamese and Indonesian on Feeling of Sadness, $F_{(1, 697)}$ = 12.8, p = 0.001, partial η^2 = 0.018, with Indonesian (M = 0.73, SD = 0.23) scoring higher than Vietnamese (M = 0.64, SD = 0.25). There was not a significant difference between Vietnamese and Indonesian on Tearful Reaction, $F_{(1, 697)}$ = 0.042, p = 0.837, partial η^2 = 0.001.

There was a significant difference between Grade 2, 4, 6 when considered jointly on the variables Understanding of Feelings, Feelings of Sadness, and Tearful Reaction. Pillai's Trace value = 0.066 , $F_{(6, 1392)}$ = 7.894, p = 0.001, partial η^2 = 0.033. Consequently, the results suggested that the third hypothesis (Ho_3) was rejected. A separate ANOVA was conducted for each dependent variable, with each ANOVA evaluated at an alpha level of 0.017 (i.e., 0.05/3). There was a significant difference between Grade 2, 4, 6 on Understanding of Feelings, $F_{(2, 697)}$ = 6.9, p = 0.001, partial η^2 = 0.019, with Grade 4 (M = 0.49, SD = 0.18) scoring higher than Grade 2 (M = 0.47, SD = 0.21) and Grade 6 (M = 0.43, SD = 0.19) and there was a significant difference between Grade 2, 4, 6 on Feeling of Sadness, $F_{(2, 697)}$ = 7.013, p = 0.001, partial η^2 = 0.02, with Grade 2 (M = 0.73, SD = 0.23) scoring higher than Grade 4 (M= 0.71, SD = 0.23) and Grade 6 (M= 0.64, SD = 0.25), there was a significant difference between Grade 2, 4, 6 on Tearful Reaction, $F_{(2, 697)}$ = 6.727, p = 0.001, partial η^2 = 0.019, with Grade 4 (M = 0.46, SD = 0.22) scoring higher than Grade 6 (M = 0.45, SD = 0.22) and Grade 2 (M = 0.38, SD = 0.21).

The results revealed that there was a significant multivariate effect for interaction between gender and grade level when considered jointly on the variables Understanding of Feelings, Feelings of Sadness, and Tearful Reaction. Pillai's Trace value = 0.035, $F_{(6, 1392)}$ = 4.187, p = 0.001, partial η^2 = 0.018. Thus, the results suggested that the fourth hypothesis (Ho_4) was rejected. A separate ANOVA was conducted for each dependent variable, with each ANOVA evaluated at an alpha level of 0.017 (i.e., 0.05/3). There was a significant difference between gender and grade level when considered jointly on the variables Understanding of Feelings, $F_{(2, 697)}$ = 5.390, p = 0.005, partial η^2 = 0.015 and Tearful Reaction, $F_{(2, 697)}$ = 3.703, p = 0.025, partial η^2 = 0.011, but no significant on Feeling of Sadness, $F_{(2, 697)}$ = 2.919, p = 0.055, partial η^2 = 0.008. Follow-up univariate analysis found that boys had higher Understanding of Feelings than girls in Grade 4 and Grade 6, but not in Grade 2. Girls had higher Tearful Reaction than boys through all three years.

The results revealed that there was a significant multivariate effect for interaction between gender and nationality when considered jointly on the variables Understanding of Feelings, Feelings of Sadness, and Tearful Reaction. Pillai's Trace value = 0.021 , $F_{(3, 695)}$ = 4.939, p = 0.001, partial η^2 = 0.021. Accordingly, the results suggested that the fifth hypothesis (Ho_5) was rejected. A separate ANOVA was conducted for each dependent variable, with each ANOVA evaluated at an alpha level of 0.017 (i.e., 0.05/3). There was a significant difference between gender and nationality when considered jointly on the variables Feeling of Sadness, $F_{(1, 697)}$ = 4.872, p = 0.028, partial η^2 = 0.007 and Tearful Reaction, $F_{(1, 697)}$ = 10.569, p = 0.001, partial η^2 = 0.015, but no significant on

Understanding of Feelings, $F_{(1, 697)} = 1.078$, $p = 0.299$, partial $\eta^2 = 0.002$. Follow-up univariate analysis found that Indonesians had higher Feeling of Sadness than Vietnameses through all gender. Girls had higher Tearful Reaction than boys through all countries.

The results revealed that there was a significant multivariate effect for interaction between grade level and nationality when considered jointly on the variables Understanding of Feelings, Feelings of Sadness, and Tearful Reaction. Pillai's Trace value = 0.041, $F_{(6, 1392)} = 4.867$, $p = 0.001$, partial $\eta^2 = 0.021$. Therefore, the results suggested that the third hypothesis (Ho_6) was rejected. A separate ANOVA was conducted for each dependent variable, with each ANOVA evaluated at an alpha level of 0.017 (i.e., 0.05/3). There was a significant difference between grade level and nationality when considered jointly on the variables Feeling of Sadness, $F_{(2, 697)} = 11.425$, $p = 0.001$, partial $\eta^2 = 0.032$ and Tearful Reaction, $F_{(2, 697)} = 4.195$, $p = 0.015$, partial $\eta^2 = 0.012$, but no significant on Understanding of Feelings, $F_{(2, 697)} = 0.827$, $p = 0.438$, partial $\eta^2 = 0.002$. Follow-up univariate analysis found that Indonesians had higher Feeling of Sadness than Vietnameses in Grade 2 and Grade 6, but not in Grade 4. Vietnamese had higher Feeling of Sadness than Indonesians in Grade 2 and Grade 4, but not in Grade 6. Our findings showed that there was a non-significant multivariate effect for interaction between gender, grade level, and nationality when considered jointly on the variables Understanding of Feelings, Feelings of Sadness, and Tearful Reaction. Pillai's Trace value = 0.010, $F_{(6, 1392)} = 1.119$, $p = 0.001$, partial $\eta^2 = 0.005$. So the results suggested that the third hypothesis (Ho_7) was rejected.

4. DISCUSSION

The present study investigated children's empathy between Vietnamese and Indonesian cultures. Our results indicated significant effects of gender, grade, nationality, the interaction between gender and grade level, the interaction between gender and nationality, and the interaction between grade level and nationality groups of children when they are compared simultaneously on the Understanding of Feelings, Feelings of Sadness and Tearful Reaction. However, this research showed there was no significant interaction between gender, grade, and nationality groups of children when they are compared simultaneously on the BEI subscales. This research indicates that significant effects of gender on the Feelings of Sadness and Tearful Reaction scores among the boy and girl children. Except for Understanding of Feelings, girls seemed to score higher than boys on the two other subscales of BEI, Which are the affective components of this concept – i.e., the capacity to perceive and express other people's emotions, as opposed to the Understanding of Feelings., that is the cognitive aspect of empathy, i.e. the ability to understand others' emotions (De Wied et al., 2007). As previous research has demonstrated that although generally, girls show higher levels of empathy than boys, the magnitude of this difference is greater for the affective than its cognitive dimension (Jolliffe & Farrington, 2006; Mitsopoulou & Giovazolias, 2013). Empathy among girls can be more effective than boys before adolescence through early socialization (Hoffman & Levine, 1976). Our findings from this research showed a decline in empathy between grade 2, 4 and 6. The results showed that cognitive empathy was down, and that fourth and fifth grades would be the ideal time to focus on social and emotional growth and empathy for the students, in Williford, Boulton, and Jenson (2014) who found that the majority of students in a study reached middle school age. All were either in a sixth grade or during the middle school transition. And they decreased cognitive empathy as the students progressed from late to early childhood, coinciding with their transition from primary to secondary school. We subsequently found that Indonesian participants report greater Understanding of Feelings and Feeling of Sadness compared with Vietnamese participants. Hofstede and Minkov (2005) were reported that Indonesian people are collectivist. Society in Indonesia promotes durable relationships, in which everybody is responsibility for their fellow members. Most of the Islamic community, religion and faith in Indonesia make decision which rely on a more subjective basis than in most Western cultures. However, Vietnam is a communistic oriented country. Although, the cultural style is also collectivism but there are more rules to be obligated. The results of this study found children's empathy was different between Vietnam and Indonesia that indicating the significant impact of cultures on empathy. Instead of the previous categorization, the effect can aggregate with the developmental path of children or it can be the mix of multiple cultures that only a country can be collectivist or individual.

The present research also found an interaction between gender and grade level. We found not only a similar typical pattern of girls but also an increase of quality with the grade level in girls, especially in Tearful Reaction. Girls generally had an intellectual and social cognitive role ahead of them about two years by rapidly developing cerebral cortex at an early age (Silberman & Snarey, 1993). Findings revealed that Indonesian students have greater Feeling of Sadness than Vietnamese students. Besides, results showed that Tearful Reaction scores of girl participants are higher than boy participants, and girl participants have a tendency toward affective empathy. A grade level and nationality interaction effect demonstrating culture influences children's empathy with different grade levels. Learning will create different daily experiences in every culture to shape learning and cognitive and social development for the students In Vietnam, and their education system is structured in sixth grade at secondary school. When children enter junior secondary school, empathy with peers differs from that of primary school. This educational framework may lead to differences in developmental empathy among children. Evidence has shown that the school climate structure and organization

can influence how child empathy functions with their friends. Cultural contexts, including their educational environment, can, therefore, play a role in the experience and in developing child empathy.

These research limitations were mainly related to the sample and the self-reported measurements. Even if it was big, the samples of this present research came from certain regions of Vietnam and Indonesia, so that may not be enough to represent the entire country and cultural influences. In addition, this research only used questionnaires for itself, which could also bias the findings and cross-sectional research, which does not allow us to conclude causal relations between research variables. These limitations should be addressed by future studies and empathy for children further examined.

5. CONCLUSION

The correlations of Vietnamese and Indonesian children's empathy could be clarified both under a general trend of growth and under the cultural influences. The current research has further strengthened our understanding of how gender, ages, and cultures can influence empathy. Our results indicated that it would be imperative to consider variations between the two countries in the same cultural context, such as comparing two Asian cultures. To the best of the authors' knowledge, this is the first research to examine the differences between children's empathy in Vietnam and Indonesia. The results of this research are necessary for school leaders and teachers of two countries to have a better understanding of their students' empathy.

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Conflicts of interest

There are no conflicts of interest.

Data and materials availability

All data associated with this study are present in the paper.

Peer-review

External peer-review was done through double-blind method.

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