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## Attributions about Peer Victimization in US and Korean Adolescents and Associations with Internalizing Problems

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#### Abstract

Although there is cultural variability in how individuals make attributions for their own and others' behaviors, cultural variation in youth's attributions about peer victimization and their relation with internalizing problems has gone unexamined. To address this issue, adolescents from the U.S. (n = 292, 60% female, 79.5% White,  $M_{\text{age}} = 13.6$ , SD = 0.65) and Korea (n = 462, 50.2% female,  $M_{\text{age}} = 13.7$ , SD = 0.58) reported on their peer victimization, depressive symptoms, social anxiety, self-worth, and rated their attributions to vignettes about peer victimization. Multigroup confirmatory analyses found that Korean and American youth conceptualized characterological self-blame, behavioral self-blame, and externalization of blame similarly. However, Korean youth differentially endorsed each of the three types of attributions, while U.S. adolescents endorsed characterological self-blame and behavioral self-blame at similar levels. Attributions had unique relations with internalizing problems (depression, social anxiety, global self-worth) in each culture. In multigroup SEM analyses, characterological self-blame predicted all internalizing problems for U.S. adolescents, while behavioral self- blame was not uniquely related to internalizing problems. For Korean adolescents, behavioral self-blame significantly predicted all internalizing problems, whereas characterological self-blame predicted global self-worth only. The results suggest that attributions about victimization have different adjustment implications in Korea than in the U.S.

**Keywords** Victimization, Attributions, Self-blame, Internalizing problems, Crosscultural

#### Introduction

In American adolescents, peer victimization, or being the recipient of aggression from peers, is concurrently and longitudinally related to internalizing symptoms, like depression, anxiety, and low self-worth (Graham et al., 2009; Olweus, 1994). Similarly, experiencing peer victimization has been found to be related to depression and anxiety in Korean youth as well (Kwon, 2011). To explain how and why victimization and internalizing problems are associated, the attributions that youth make about victimization have been examined as a mechanism linking the two in the United States (e.g., Graham et al., 2009; Schacter et al., 2015). However, as there is evidence that East Asians may make attributions about behavior differently than Americans (e.g., Miller, 1984; Morris & Peng, 1994), it may be that there is cultural specificity in how attributions may account for the relation between victimization and internalizing problems. This question has gone relatively unexplored, even though attributions for victimization have implications for the coping strategies youth may employ and how interventions may address the internalizing problems of victimized youth (Visconti et al., 2013). The primary aim of the current study was to address this gap in the literature by investigating cross-cultural similarities and differences in the relation between victimization and attributions about victimization as well as how these attributions are related to internalizing problems in adolescents from the U.S. and Korea.

#### Youth Attributions in the Context of Peer Relations

How youth make sense of peers' social behaviors are indicative of their social and emotional adjustment (e.g., Ciarrochi & Heaven, 2008; Toner & Heaven, 2005). For instance, upon experiencing a negative event, a child may derive pejorative selfevaluations to explain why such an event occurred to them (i.e., "This happened to me because I am not as good as others"). Making critical self-referent attributions has implications for internalizing problems such as depression, loneliness, and anxiety because of their negative influence on self-perceptions and mood (Prinstein et al., 2005; Seo et al., 2021). These attributions are also highly associated with other poor peer experiences such as peer rejection (Prinstein et al., 2005).

Guiding the current research are Weiner's Attribution Theory (1986) and Abramson et al. (1989) model of learned helplessness. Weiner's Attribution Theory (1986), originally developed to study attributions about achievement, is concerned with people's interpretation of causality, or why a particular (negative) event occurred and the effect of the attribution on their emotional, motivational, and behavioral reactions. According to Weiner (1986), people make attributions along three causal dimensions: internal vs. external, stable vs. unstable, and controllable vs. uncontrollable. Similarly, Abramson et al. (1989) model of learned helplessness suggests that an individual who attributes failures or other negative life events to internal, global, and stable causes is at a higher risk for developing depressive symptoms. According to the model, when an individual perceives the causes of a negative event to be internal and stable, it leads to feelings of help-lessness; the situation is uncontrollable because an individual's acts are not associated with the desired outcomes. The model further suggests that the consequences of the expectation of uncontrollability are motivational and cognitive deficits, which can lead to the inappropriate generalization of the learned helplessness to new controllable situations (Lieder et al., 2013).

Self-blame is an attribution often examined in the peer victimization literature. There are two types of self-blame, characterological self-blame and behavioral selfblame, and these differ on where they fall on Weiner's causal dimensions (1986). Characterological self-blame attributions made by victims of peer harassment ascribe the cause of victimization to uncontrollable, stable, and unmodifiable internal characteristics (e.g., "It's because I'm ugly"), leading victims to believe that they have little control over the situation. Often characterized as self-criticism, characterological self-blame is psychologically maladaptive; these attributions are correlated with indicators of mal- adjustment such as depression, loneliness, anxiety, and negative self-worth (Graham & Juvonen, 1998; Schacter et al., 2015). A number of past studies have found that characterological self-blame explains the victimizationmaladjustment association in adolescents (Graham et al., 2009; Perren et al., 2013).

In contrast, behavioral self-blame focuses on the execution of one's behaviors. Behavioral self-blame attributions are internal but also unstable and

controllable (i.e., "it's because of what I did"). Behavioral self-blame is theoretically believed to be more adaptive compared to characterological self-blame because it ascribes some control to the actor in comparison to characterological self- blame which reflects a lack of control and helplessness (Janoff-Bulman, 1979).

However, it is unclear if behavioral self-blame is beneficial for victimized youth. In a sample of middle school students, behavioral self-blame was similarly correlated to victimization and internalizing problems as characterological self-blame (Graham & Juvonen, 1998). Moreover, there is no evidence directly linking behavioral self-blame with better adjustment outcomes. Based on findings inconsistent with Janoff-Bulman's (1979) argument that behavioral self-blame can be adaptive (e.g., Graham & Juvonen, 1998; Tilghman-Osborne et al., 2008), whether behavioral self-blame is indeed positively associated to recovery from negative life events has been questioned in the past (e.g., Graham & Juvonen, 1998). Janoff-Bulman (1979) also failed to find that non-depressed students engage in more behavioral self-blame compared to depressed students. Thus, behavioral selfblame's adaptive function needs further investigation.

On the opposite spectrum of the causal dimensions from self-blame is externalization of the blame. A victim may ascribe the blame of the negative peer interactions to external sources, such as the perpetrator or other "external" features of the situation, instead of blaming themselves. In the achievement literature, failures that are attributed to external causes (e.g., the test was way too difficult) do not hurt a person's self-esteem compared to failures ascribed to internal causes (e.g., I'm not smart enough) (Graham & Juvonen, 2002). Additionally, attributing negative events to external, unstable, and specific causes are considered an optimistic explanatory style as well (Peterson et al., 1993). In this way, children may be able to maintain their mental health and their sense of self-esteem even after experiencing peer mistreatment if they make more external attributions rather than internal ones. However, previous studies have shown that having a more external locus of control is associated with aggression, which may be detrimental to interpersonal relationships and mental health (Muris et al., 2004; Wallace et al., 2012). Therefore, how external attributions about peer victimization are related to adjustment needs more attention.

In addition, few studies have examined these different attributions simultaneously in their relations to victimization and adjustment. In an exception, Graham and Juvonen (1998) examined the shared effects of characterological selfblame and behavioral self-blame and found only characterological self-blame uniquely predicted adjustment. As people do not make attributions one at a time, considering several different attributions and their role in adolescent adjustment will be useful to distinguish their unique contributions to internalizing problems. The current study addresses this issue.

#### **Cultural Specificity of Attributions**

Most of what is known about children's attributions about peer victimization and their subsequent adjustment out- comes are based on the relevant research conducted in the West (e.g., Graham et al., 2009; Schacter et al., 2015). There is little information available on whether the relations between attributions, victimization, and adjustment would be similar or different across cultures. As cultural norms and values affect behaviors and the meaning of interpersonal interactions (e.g., French et al., 2005; Martínez-Lozano et al., 2011), individuals may interpret the meaning of provocations differently across cultures (Severance et al., 2013) and it may be that these interpretations have different implications for wellbeing. Based on research about other types of attributions, there is reason to suspect that there may be cultural specificity in how youth make sense of their negative peer experiences, including the roles of the self and others in victimization. For instance, evidence suggests that in East Asian cultures there is less of a focus on explaining behaviors in terms of internal attributes of the target com- pared to Western cultures (Miller, 1984; Morris & Peng, 1994). In addition, Koreans considered more information to be relevant when explaining both the deviant and prosocial behaviors of others compared to Americans, suggesting that Koreans may use a more holistic assessment when making causal attributions about peoples' behaviors (Choi et al., 2003). These past findings suggest that when making attributions regarding peer victimization, East Asians may rely on situational features more than trait attributes and thus rely on

behavioral self-blame more than they would characterological self-blame.

#### Peer Victimization in Korea

Peer victimization is a global phenomenon. Unfortunately, peer victimization is fairly common among youth in both the United States and in Korea (Gladden et al., 2014; Ministry of Education, 2019). However, there are different cultural contexts of peer victimization between the two countries that should be considered. Korean society is considered to be collectivist, in which members of the society are interdependent on each other, and group harmony and norms are prioritized (Triandis, 2001; Yun, 2008). On the other hand, the United States is an individualistic society that depends on individual attitudes rather than group norms to determine behaviors (Triandis, 2001). Such a distinction in cultural values is reflected in the characteristics of peer victimization.

In Korea, peer victimization at school shows a stronger group-orientation compared to peer victimization in the United States. One of the widely used and well-known terms for peer victimization or bullying in Korea is *wangta*. *Wang* is translated as "king," and *ta* is an abridged form of *ttadolim* meaning exclusion or isolation. Together, *wangta* means extreme exclusion and is used to describe the act of rejecting or excluding a peer and also to describe the target of group exclusion. As this popular term suggests, peer victimization in Korea is often group based and involves ostracizing a particular individual from a peer group (Han et al., 2021). Korean youth described *wangta* as isolating a victim in active and intentional ways. Moreover, Korean youth also described the victim as "abnormal," indicating that for many Korean youth, they perceive *wangta* as something that is experienced by those that do not fit into a group (Lee et al., 2012). The group nature of *wangta* is also reflected in Korea's rather high ratio of bullies to victims compared to other countries (Koo et al., 2008).

Additionally, considering school is the context where most peer victimization takes place, it is important to note the difference in the school systems. In the United States, youth change classrooms and take lessons from different teachers with a different group of peers. However, in Korean middle schools, youth continue to have class-based lessons, in which they stay with the same group of peers for the entire school year and take lessons in their homeroom classroom while teachers rotate. Moreover, over 75% of bullies in Korea come from the same class as the victim (Koo et al., 2008). This classroom setting may make it even more difficult for the victim and make peer victimization and rejection more chronic problems in Korea.

#### The Current Study

As of yet, research on attributions about victimization has not acknowledged that there may be cultural differences in how youth make sense of victimization and how attributions are related to adjustment. To address this gap, the current research examined both within- and between-culture differences in externalizing attributions, behavioral self-blame, and characterological self-blame. It was hypothesized that Korean and U.S. youth would make more externalizing attributions than self-blame attributions (characterological self-blame and behavioral self-blame) (Hypothesis 1a). However, it was also hypothesized that U.S. youth would endorse externalizing attributions more than Korean youth (Hypothesis 1b). Additionally, it was hypothesized Korean youth would make more behavioral self-blame than characterological self-blame attributions but that the groups would not differ on characterological self-blame endorsement (Hypotheses 1c-1d). Further, the current study also examined how peer victimization was related to each attribution and how these attributions were related to internalizing problems in each culture. Consistent with past research, it was hypothesized that characterological self- blame would be related to internalizing problems for U.S. youth (Hypothesis 2) and an exploratory research question was if similar associations would be found in Korea as well.

#### Methods

#### **Participants**

Participants were 7<sup>th</sup> and 8<sup>th</sup> graders from schools in South Korea and in the Southern region of the United States. In both countries, letters were sent home to all 7<sup>th</sup> and 8<sup>th</sup> grade parents at cooperating schools describing the study and asking for parent consent to participate. Korean participants were recruited from public schools

in Seoul, Incheon, and Gwangju, large urban cities in South Korea. For the Korean sample, 52.6% (n = 243) were recruited from two middle schools in Seoul, 27.1% (n = 125) were recruited from a school in Incheon, and 20.3% (n = 94) were recruited from a school in Gwangju. The participation rates ranged from 62 to 92.45% across the four schools. In total, 77.52% of recruited Korean participants received parental consent and assented to participate in the study. The final Korean sample was composed of 463 students (48.3% male, 50.2% female, 44.6% 7<sup>th</sup> grade, 55% 8<sup>th</sup> grade,  $M_{age} = 13.7$ , SD = 0.58). Participants self-identified as Korean (96.8%), Southeast Asian (0.9%), multiracial (1.3%), other race (0.2%), or did not respond to this question (0.9%). Using the MacArthur Scale of Subjective Social Status-Youth Version (Goodman et al., 2001), Korean participants reported their subjective socioeconomic status to be middle to upper class (M = 6.1, SD = 1.4, median = 6.0, scale range = 1–10, observed range = 2–10).

U.S. participants were recruited from three Christian (Protestant or Catholic) private schools in the South. 54.8% (n = 160) were recruited from a school in Birmingham, AL and 45.2% (n = 132) were recruited from two schools in Tuscaloosa, AL. The participation rates ranged from 52.6 to 95.1% across the three schools. In total, 57.9% of recruited U.S. participants received parent consent and also assented to participate in the study. The U.S. sample comprised 292 students (40% male, 60% female, 44.5% 7<sup>th</sup> grade, 55.5% 8<sup>th</sup> grade,  $M_{age} = 13.6$ , SD = 0.65) and self-identified as White/Caucasian (79.5%), African American/Black (4.8%), Hispanic (3.8%), American Indian/ Alaska native (1.0%), Asian (0.7%), Native Hawaiian/ Pacific Islander (0.7%), other race or ethnic minority group (1.4%), or did not indicate their race/ethnicity (7.9%). Using the MacArthur Scale of Subjective Social Status-Youth Version (Goodman et al. 2001), U.S. participants felt that they were of middle to upper class socioeconomically (M = 6.4, SD = 1.7, median = 6.0, scale range = 1–10, observed range = 2–10).

#### Procedure

All procedures were approved by the University of Alabama's Institutional Review Board and at Yonsei University in South Korea. The study was administered in group or classroom sessions in school settings. The study was administered over two days in the U.S. and in one day in Korea. Adolescents whose parents had consented to let their child participate were read the assent script and allowed to choose whether to participate. The participating students received gift as compensation. Adolescents who assented completed paper-and-pencil measures as described below.

#### Measures

#### Attributions

Attributions were assessed using a modified vignette measure based on Graham and Juvonen (1998). Attributions were assessed through adolescents' responses to hypothetical vignettes depicting themselves as the targets of peer victimization. Six hypothetical peer victimization scenarios relevant for a middle school setting were presented to participants. Participants read and responded to three situations depicting verbal victimization scenarios (i.e., someone says a curse word to you, people talk badly about the way you look, a classmate calls you stupid) and three situations depicting relational victimization scenarios (i.e., someone stops a person from helping you, people ignore you, people don't allow you to hang out with them).

After reading each vignette, participants were then asked, "What would you be thinking in this situation?" followed by 12 statements representing three different styles of attributions. Five items assessed characterological self- blame ("If I were a cooler kid, this wouldn't happen to me"; "This happened to me because of how I look"; "This happened to me because I can't stay out of trouble;" "This happened to me because I'm poorer than my classmates;" "This happened to me because I'm poorer than my class- mates"). Three items assessed behavioral self-blame ("I shouldn't have been there," "I should have been more careful," "I was at the wrong place at the wrong time"). Four items assessed externalizing attributions ("These kids were in a bad mood." "These kids pick on everybody," "The kids are just mean," "These kids are prejudiced"). The vignettes and the items were translated then back-translated by two independent translators fluent in English and Korean. Collaborators

in Korea validated the cultural relevance of the social situations. Youth responded similarly to each individual attribution across all six vignettes ( $\alpha = 0.728-0.908$ ), so one score was created for each by aver- aging across the vignettes.

#### **Peer victimization**

Adolescents' peer victimization experiences were assessed using the Children's Social Experiences Questionnaire-Self Report (CSEQ-SR; Crick & Grotpeter, 1996). The CSEQ- SR consists of three subscales: relational victimization (e.g., "How often do other kids leave you out on purpose when it is time to play or do an activity?"), overt victimization (e.g., "How often does another kid kick you or pull your hair?"), and received prosocial behavior (e.g., "How often do other kids let you know that they care about you?"). Each sub- scale contains five items and participants rate each item on a scale from 1 (never) to 5 (all the time) regarding how often they experience overt or victimization or prosocial behavior at school. All three subscales have demonstrated high internal reliability in past studies (Crick & Grotpeter, 1996). For this study, all items on the CSEQ-SR except the items on the prosocial behavior scale were used. The items were translated and back-translated by two independent translators fluent in both Korean and English. The Cronbach's α of the combined scale was 0.814 for Korean sample and 0.886 for U.S. sample.

#### **Depressive symptoms**

Depressive symptoms were measured using the Center for Epidemiological Studies Depression Scale for Children (CES-DC). The Korean version of the CES-DC translated by Boo et al. (2016) was used. The CES-DC is an 11-item scale measuring three domains of behavioral and cognitive components of depression (e.g., "I felt lonely, like I didn't have any friends"). Participants rated each item on a scale from 0 (*not at all*) to 3 (*a lot*) regarding how much they had felt a certain way during the previous week. Total scores were calculated by summing up the scores with possible scores ranging from 0 to 33. The CES-DC has demonstrated good internal consistency for children and adolescents in the United States (Faulstich et al., 1986) as well as in Korea (Kim & Min, 2006). Cronbach's  $\alpha$  for the scale in the

present study was 0.893 for Korean sample and 0.855 for U.S. sample.

#### Social anxiety

Social anxiety was measured using selected items from the Social Anxiety Scale for Children-Revised (LaGreca & Stone, 1993) and Social Phobia and Anxiety Inventory for Children (Beidel et al., 1995). For the proposed study, we selected 22 statements that had factor loadings greater than 0.40 in the study by Moon and Oh (2002) with Korean children and adolescents. The scale comprised items concerning avoidance of or distress in various social situations (e.g., "I'm scared to speak in front of the class"; "I feel that other kids talk about me behind my back"). Participants rated each statement on a scale from 1 (*not at all*) to 5 (*all the time*). Cronbach's  $\alpha$ for the scale for the present study was 0.933 for Korean sample and 0.924 for U.S. sample.

#### Self-worth

Participants completed the 5-item global self-worth subscale from Harter's (2012) Self-Perception Profile for Adolescents (SPPA). For each item, participants were instructed to read two statements and then decide which statement described them more closely. Scale items were phrased as follows: "Some teenagers are often disappointed with themselves BUT other teenagers are pretty pleased with themselves." After choosing one of the two statements, participants chose how true the statement was for them ("Sort of True to me"; "Really True for me"). Higher scores indicate greater global self-worth. Korean translations of the Self-Perception Profile (Harter, 1985) have been validated in past studies (Lee et al., 1992; Oh, 2006), but the translated items were unavailable. For this study, the measure was translated and back-translated by two independent translators fluent in both Korean and English. Cronbach's  $\alpha$  for the scale in the present study was 0.859 for Korean sample and 0.843 for U.S. sample.

#### Demographics

Participants were asked to report their age, grade level, gender, race/ethnicity,

and subjective socioeconomic status. Participants' subjective social socioeconomic status was assessed using the MacArthur Scale of Subjective Social Status-Youth Version (Goodman et al., 2001). The measure consists of a ladders with 10 rungs representing people with different levels of socioeconomic status. Participants were instructed to fill in the circle next to the rung where they felt their family's socioeconomic status stands relative to others in their country's society.

#### Results

#### **Missing Data**

The percentages of missing values for the Korean sample were 0–2.6% for the predictor and outcome variables and 0.6% for gender which was used as a covariate. The per- centages of missing values for the U.S. sample were 3.8– 8.2% for the predictor and outcome variables and 0% for gender. However, analyses indicated that participants missing data did not systematically differ from those with complete data and thus data were assumed to be missing completely at random (MCAR). To include as many participants as possible, those with missing endogenous variables in the SEM analyses were included using maximum likelihood estimation in Mplus. Thus, only three Korean participants were excluded from data analyses because they were missing data on gender and 12 U.S. participants were excluded from data analyses for missing data on victimization. Thus, the sample retained for SEM analyses was 459 for the Korean sample (99.4%) and 280 for the U.S. sample (95.9%).

#### **Overview of Analyses**

Prior to examining hypotheses, a series of multigroup confirmatory factor analyses (CFA) were used to examine the structure of attributions and measurement invariance as this measure had not been previously used with Korean youth. Ensuring that measures have the same structure across samples is a necessary prerequisite when using new measures in cross-cultural research (Wu et al., 2007). Next, preliminary analyses examined the normality of variables, descriptive statistics, and correlations amongst variables. To examine hypotheses about within and between group differences on the endorsement of attributions, a mixed ANOVA analysis was conducted on attributions. To examine similarities and differences in the relations of victimization, attributions, and internalizing problems, we used multigroup structural equation modeling in Mplus 7.4 (Muthén & Muthén, 2017).

#### **Confirmatory Factor Analyses for Attributional Styles**

Testing of multigroup invariance involves a series of ana- lyses which examine increasingly restrictive levels of measurement invariance as outlined by past literature (e.g., Cheung & Rensvold, 2002; Schmitt & Kuljanin, 2008). The first step is configural invariance which tests for the equivalence of the factor structure across groups. The aim of this step is to determine whether the patterns of loadings on each latent factor are equivalent across groups. Next, metric invariance is tested, which compares the loading of each item on the latent factors across groups by constraining factor loadings to be equivalent in all groups. If full or partial metric invariance is supported, scalar invariance is tested by constraining item intercepts to be the same across groups. Lastly, the most stringent step tests equal residuals invariance across groups. If equal residuals invariance is supported, it can be claimed that the factors are measured identically across groups.

In evaluating the models, several goodness-of-fit statistics were examined. In large samples, the power of the  $\chi^2$  measure of absolute fit and the  $\chi^2$ -difference test of differences between nested models to detect trivial deviations from a perfect fit or minor changes in nested models is high (Fan et al., 1999). Therefore, we also report the root mean square error of approximation (RMSEA), the standardized root mean square error of approximation (SRMR), and the comparative fit index (CFI). Good model fit is indicated by an RMSEA below 0.08, an SRMR below 0.08, and values of CFI above 0.90 (Hu & Bentler, 1999). The measurement invariance tests were compared using CFI difference tests. Although the chi-square difference test is widely used for model comparison, Cheung and Rensvold (2002) found that the chisquare difference test was highly dependent on the sample size and model complexity. Instead, they proposed using  $\Delta$ CFI to evaluate measurement invariance. As suggested, when  $\Delta$ CFI < 0.01 the more restrictive model is justified. In preliminary CFAs conducted by country, the modification indices indicated two items to be problematic. Item "This happened to me because I can't stay out of trouble" had a factor loading below 0.40 in American adolescents, but not in Korean adolescents. Additionally, the item "These kids were in a bad mood" loaded onto all three factors for Korean adolescents. Based on these results, these two items were removed from further analyses. The final 10 items are shown in Table 1.

The first configural model of the multigroup CFA demonstrated an adequate model fit ( $\chi^2(45) = 262.301$ , p = 0.000; CFI = 0.940; RMSEA = 0.114; SRMR = 0.045). Modification indices suggested that the error variances of two sets of items should be allowed to covary (i.e., "If I were a cooler kid, this wouldn't happen to me" and "This happened to me because I'm poorer than my classmates"; "I shouldn't have been there" and "I was at the wrong place at the wrong time"). With these changes, the final configural model demonstrated good model fit ( $\chi^2(41) = 165.314$ , p = 0.000; CFI = 0.966; RMSEA = 0.091; SRMR = 0.039).

Next, a metric invariance model was tested wherein factor loadings were constrained to be equal across two groups. The metric invariance model was then compared to the final configural model to determine fit. The overall model fit did not change significantly compared to the configural model, indicating that factor loadings were equivalent across two groups and metric invariance was supported ( $\chi^2(49) = 174.382$ , *p* = 0.000; CFI = 0.966; RMSEA = 0.083; SRMR = 0.058).

Scalar invariance was then tested by constraining intercepts to be equal across the two groups. The scalar invariance model fit was significantly worse compared to the configural invariance model, indicating that at least one intercept was not equivalent across the two groups ( $\chi^2(57) = 374.585$ , p = 0.000; CFI = 0.913; RMSEA =0.123; SRMR = 0.120). In order to investigate the source of non-invariance, intercept constraints were sequentially added in the order of least intercept difference to the greatest intercept difference between the two groups until a partially invariant model with the most optimal model fit was achieved. After constraining five out of eight intercepts to be equal, the attribution model met criteria for partial scalar invariance ( $\chi^2(51) = 183.142$ , p = 0.000; CFI = 0.964; RMSEA = 0.084; SRMR = 0.058). Three items (i.e., "If I were a cooler kid, this wouldn't happen

to me," "This happened to me because of how I look," "The kids are just mean") had different intercepts between the U.S. and Korea. Final subscales were aver- aged together across all 6 vignettes to create three composite scores for characterological self-blame (CSB), behavioral self-blame (BSB), and externalizing attributions (EXT). CSB, BSB, and EXT attributions demonstrated adequate to good reliability for both samples (U.S.:  $\alpha = 0.708 \alpha = 0.838$ ,  $\alpha = 0.800$ ; Korea:  $\alpha = 0.819$ ,  $\alpha = 0.838$ ,  $\alpha = 0.777$ ).

Table 1 Standardized factor loadings of the items ratings to hypothetical
victimization

	CSB		BSB		EXT		R <sup>2</sup>	
Items	US	KOR	US	KOR	US	KOR	US	KOR
If I were a cooler kid,	0.773	0.899	0	0	0	0	0.598	0.808
this wouldn't happen								
to me.								
This happened to me	0.774	0.918	0	0	0	0	0.601	0.844
because of how I								
look.								
This happened to me	0.560	0.663	0	0	0	0	0.314	0.439
because I'm poorer								
than my classmates.								
I shouldn't have	0	0	0.842	0.724	0	0	0.709	0.525
been there.								
I should have been	0	0	0.765	0.770	0	0	0.585	0.593
more careful.								
I was at the wrong	0	0	0.847	0.814	0	0	0.717	0.663
place at the wrong								
time.								
These kids pick on	0	0	0	0	0.960	0.995	0.922	0.990
everybody.								
These kids are just	0	0	0	0	0.801	0.842	0.642	0.708
mean.								
Note. CSB characterological self-blame, BSB behavioral self-blame, EXT								
externalizing attributions								

#### **Descriptive Statistics**

Descriptive statistics and correlations among the variables are presented in Table 2. The normality of all variables was examined. Based on acceptable skewness and kurtosis ranges for SEM analyses (Kline, 2011), all variables for the current study were assumed to be normally distributed.

	1	2	3	4	5	6	7	US Mean
								(SD)
1. CBS	_	0.477***	0.285***	0.471***	-0.488***	0.544***	0.501***	2.17(0.77)
2. BSB	0.758***	_	0.341***	0.138*	-0.180**	0.246***	0.203**	2.25(0.75)
3. EXT	0.277***	0.347***	_	0.059	0.016	0.106	0.075	3.18(0.93)
4. Victimizat	ion 0.268***	0.230***	0.085	_	-0.470***	0.352***	0.559***	1.76(0.65)
5. Global se worth	lf0.288***	-0.286***	-0.068	-0.212***	-	-0.488***	-0.668***	2.99(0.70)
6. Social anxiety	0.340***	0.363***	0.209***	0.312***	-0.430***	_	0.502***	2.10(0.69)
7. Depressio	on 0.287***	0.305***	0.074	0.351***	-0.603***	0.399***	_	0.87(0.59)
Korea								
Mean (SD)	1.76(0.70)	2.18(0.84)	2.65(1.01)	1.31(0.40)	2.78(0.72)	1.92(0.64)	0.76(0.61)	

# Table 2 Descriptive statistics and correlations between variables for US and Korean adolescents

*Note.* Correlations between variables for Korean adolescents are presented below the diagonal and correlations amongst the variables for US adolescents are presented above the diagonal. Bolded correlations indicated cultural differences in the magnitude of the correlations  ${}^{*}p < 0.05, {}^{**}p < 0.01, {}^{***}p < 0.001$ 

Correlation coefficients for U.S. and Korean adolescents are presented in Table 2. Fisher's r-to-z transformations (Lenhard & Lenhard, 2014) were used to compare correlations for U.S. and Korean adolescents. In general, correlations amongst the variables were similar for U.S. and Korean adolescents with few exceptions. The differences were mainly found in correlations involving CSB. CSB was more strongly related to BSB for Korean adolescents (z = 6.20, p = 0.000). However, CSB was more strongly correlated to victimization (z = -3.1, p =0.001), global self-worth (z = 3.09, p = 0.001), social anxiety (z = -3.27, p = 0.0005), and depression (z = 3.33, p = 0.0004) for U.S. adolescents. Victimization was more strongly associated with global self-worth (z = -3.85, p = 0.0001) and depression (z = -3.46, p = 0.0003) for U.S. adolescents.

Preliminary analyses also found gender differences on a CSB and EXT attributions, as well as on internalizing problems. Girls endorsed CSB (t(731) = -2.53, p = 0.012) and EXT (t(730) = -3.14, p = 0.002) more than boys. Girls also reported higher depressive symptoms (t(728) = -3.07, p = 0.002) and social anxiety

(t(721) = -3.54, p = 0.000) and reported lower global self-worth (t(720) = 3.17, p = 0.002) compared to boys.

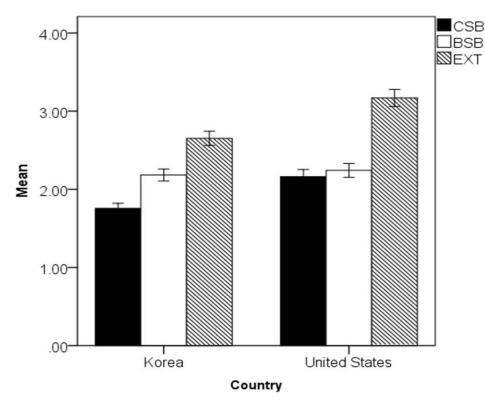


Fig. 1 Attribution endorsement by country. Note. Error bars: 95% CI

#### **Cross-cultural Comparison of Attribution Endorsement**

To address hypothesis 1a-1c, endorsement of victimization attributions was compared both between and within countries with a 2 (country) X 3 (attribution) mixed ANOVA. The results showed that there was a significant main effect of country (*F* (1, 736) = 43.66, *p* < 0.001,  $n_p^2$  = 0.056) and attribution type (*F* (1.583, 1164.95) = 392.52, *p* < 0.001,  $n_p^2$  = 0.35), on overall attribution ratings. There was also a significant interaction between attribution style and country (*F* (1.583, 1164.95) = 23.11, *p* < 0.001,  $n_p^2$  = 0.03). To probe this interaction, two within-subjects ANOVAs were conducted, one for U.S. adolescents and one for Korean adolescents. Supporting hypothesis 1a, for both U.S. and Korean adolescents, EXT was endorsed the most and CSB the least. Comparing across countries, t-tests indicated that U.S. adolescents endorsed CSB (*t*(738) = -7.44, *p* = 0.000) and EXT (*t*(737) = -7.07, *p* = 0.000) attributions more than Korean adolescents, but they did not differ on BSB attributions (*t*(737) = -1.01, *p* = 0.31). Thus, hypothesis 1b was supported, but 1d was not. Within country comparison

indicated that Korean adolescents differentially endorsed each of the three types of attributions. Supporting hypothesis 1c, Korean adolescents endorsed BSB more than CSB (see Fig. 1). U.S. adolescents endorsed CSB and BSB at a similar level and endorsed EXT at a significantly higher level.

#### Path Analyses Predicting Internalizing Problems

To examine hypothesis 2 and explore if the relations of victimization, attributions, and internalizing problems differed across countries, Mplus was used to examine how the three types of attribution were related to victimization, global selfworth, social anxiety, and depression in Korean and US adolescents. Because preliminary analyses found that there were gender differences in CSB, EXT, and internalizing problems, gender was included in the model as a control. A multigroup path analysis was conducted to test model invariance between two groups. Paths from victimization to EXT, EXT to depression, and EXT to social anxiety were deleted because they were not significant for both countries. The fully unconstrained model provided a good fit ( $\chi^2$  (12) = 41.558, p = 0.000, CFI = 0.981; RMSEA = 0.082; SRMR = 0.034). Then, to examine cultural specificity in the relations amongst constructs, including victimization's relation to attributions, each path in the model was constrained one at a time and the CFI difference test was used to compare models. When  $\Delta CFI < 0.01$ , the more restrictive model was justified (Cheung and Rensvold 2002). The final model constrained the following paths to be the same between two countries: from gender to depression and global self-worth, from victimization to CSB, BSB, and depression, and from EXT to global self- worth. Bolded paths in Figure 3 are those that were con-strained. Model comparisons indicated that all other paths should be free to vary.

For U.S. adolescents, self-reported victimization was positively related to CSB and BSB attributions about peer victimization. Both victimization and CSB attributions were negatively related to global self-worth and positively related to depression and social anxiety, supporting hypothesis 2. EXT attributions significantly predicted greater global self- worth, but BSB did not uniquely predict any of the internalizing problems. Gender was a significant predictor for all internalizing problems (see Fig.

Similar to U.S. adolescents, in Korean adolescents, victimization was positively related to both CSB and BSB attributions and victimization was related to all three internalizing problems as well. Different from U.S. youth, for Korean adolescents CSB attributions only uniquely predicted lower global self-worth. Also dissimilar to the findings for U.S. youth BSB attributions were uniquely related to internalizing problems for Korean youth. Similar to the U.S., EXT attributions were significantly related to global self-worth. Similar to the U.S. adolescents, gender had significant effects on all internalizing problems (see Fig. 2).

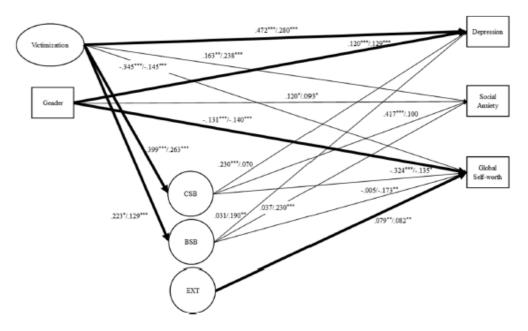


Fig. 2 Path analysis of the latent attribution constructs' relation to internalizing symptoms. *Note*. Standardized coefficients are reported with those for the U.S. sample presented first and those for Korean presented second.

Bolded paths indicate that they were constrained. p < 0.05; p < 0.01; p < 0.01; p < 0.001

#### **Sensitivity Analysis**

Two additional analyses were conducted to examine how sensitive findings were to possible outliers or school context. For every attribution outcome relationship, Cook's distances were computed to examine if any data points were overly influential in the data set. No data point with a probability value for the Cook's distance of 50% probability or more on the F distribution was detected, indicating that there were no influential data points that significantly influenced the fitted regression lines between attributions and outcomes.

Additionally, multigroup path analyses were conducted to examine the robustness of the results across schools in each country. All paths from attributions to internalizing problems examined in the path analysis could be constrained across three schools in the U.S. without decreasing the CFI significantly ( $\Delta$ CFI < 0.01). In the Korean sample, five of the paths from attributions to internalizing problems were con- strained to be the same across four schools without decreasing the CFI significantly ( $\Delta$ CFI < 0.01). However, constraining the paths from BSB to global selfworth (observed  $\beta$ 's ranged from -0.385 to 0.047) and EXT to global self-worth (observed  $\beta$ 's ranged from -0.075 to 0.354) decreased the unconstrained model's CFI from 0.986 to 0.964. Therefore, results pertaining to how BSB and EXT are related to self-worth in Korea should be interpreted with more caution and acknowledgement that these associations may also vary by school context.

#### Discussion

Research on child and adolescent peer experiences has established that making critical self-referent attributions about victimization can explain the link between peer victimization and internalizing problems like depression, anxiety, and poor perceived self-worth (e.g., Schacter et al., 2015) but whether this process is similar across cultures has remained underexplored. The goal of this study was to address this gap in the literature by examining the structure of attributions for victimization in Korean and U.S. adolescents, comparing U.S. and Korean youth's endorsement of attributions, and examining attributions' unique relations to victimization and adjustment problems in U.S. and Korean adolescents.

Multigroup CFA analyses indicated that U.S. and Korean youth conceptualized the three types of attributions in a similar fashion, however betweenand within-group comparisons indicated similarities and differences in the levels that Korean and U.S. youth endorsed these attributions. As hypothesized, both groups endorsed externalizing attributions more than the two self-blaming attributions, although U.S. youth endorsed externalizing attributions more than Korean youth. This likely reflects self-protective biases in youth from both cultures. People tend to feel personally responsible for positive outcomes while blaming external factors for negative outcomes (Shepperd et al., 2008; Wang et al., 2017). Additionally, externalizing attributions were associated with greater global self-worth in both groups (although this result should be interpreted with caution in the Korean sample based on the sensitivity analyses results), yet it did not protect youth from depression or social anxiety. Considering that externalizing the blame is also related to aggression and difficulty in peer relations (e.g., Wallace et al., 2012), externalizing attributions could have both positive and negative effects on victims' adjustment.

As predicted, Korean youth endorsed behavioral self- blame more than characterological self-blame, while U.S. adolescents endorsed behavioral self-blame and characterological self-blame at similar levels. One possible explanation for why Korean adolescents endorsed behavioral self-blame more than characterological self-blame is that it reflects their situationist perception of the world. Past studies indicate that when available, East Asians are more likely to utilize situational factors to explain causality of behaviors while their Western counterparts still make disposition-based explanations (e.g., Knowles et al., 2001; Norenzayan et al., 2002). Choi et al. (2003) explained that because East Asians consider a greater amount of information in explaining behaviors, they tend to have a more holistic view of causality compared to people from the West and they are more likely to make situational attributions because of this holistic view. These cultural differences are also reflected in past findings on achievement attributions. In general, East Asians emphasize their own effort (controllable actions) more in explaining failures whereas Americans on the other hand, emphasized ability more and were likely to distribute responsibility of failure more evenly across options (Armbrister et al., 2002).

Additionally, American youth and Korean youth endorsed behavioral selfblame at a similar level. Perhaps, this similarity was due to the lack of situational saliency in the vignettes. Norenzayan et al. (2002) found that in the absence of situational information, Koreans and Americans were equally unlikely to explain an actor's behavior in terms of the situation. However, when situational constraints became available, Koreans were more likely to draw situationist inferences in predicting social behaviors com- pared to Americans. Similarly, other studies found that Koreans and Japanese corrected their correspondence bias when situational constraints were made salient, while Americans were not affected (Masuda & Kitayama, 2004; Valenzuela et al. 2005). If future studies provided more sufficient and salient situational information, we might find Korean youth to endorse behavioral self-blame significantly more than American youth.

Multigroup path analyses also revealed cross-cultural differences in attributions' associations with adjustment between the two cultures. Previous research in the U.S. has found that characterological self-blame may explain how victimization may lead to internalizing problems (Graham & Juvonen, 1998; Schacter et al., 2015). Characterological self-blame is a critical self-referent attribution that negative events are internally caused, unchangeable, and uncontrolable. Blaming one's internal characteristics for failures and other negative experiences puts adolescents at a higher risk for internalizing problems such as depression, loneliness, negative self-worth, and anxiety (Graham & Juvonen, 1998; Schacter et al., 2015). Although there have been comparisons of how East Asians and Americans make attributions about other's behaviors, this is the first study to examine differences in how attributions about one's own victimization by peers are related to internalizing problems cross-culturally.

Consistent with past findings, the present study found that characterological self-blame significantly predicted depression, social anxiety, and lower global self-worth in American adolescents. However, this was not replicated in the Korean sample. Unlike their American counterparts, for Korean adolescents, characterological self-blame significantly predicted lower global self-worth only. Instead, it was behavioral self-blame that significantly predicted depression and social anxiety in Korean adolescents and behavioral self-blame had no unique relation to American adolescents' adjustment. The current study's findings are notable because they suggest that attributions about victimization may have unique associations with adjustment in non-Western cultures like Korea. Although lacking in empirical support, behavioral self-blame has been considered a more adaptive attribution for coping with victimization because it attributes difficulty to something

that is changeable or controllable by the adolescent (Janoff-Bulman, 1979). However, results show that behavioral self- blame attributions may confer risk such that they are linked to internalizing problems for Korean youth.

These multigroup path analyses results are especially interesting combined with the mixed ANOVA results. In the current study, when imagining themselves as the tar- gets of various forms of victimization, Korean adolescents may have considered their own efforts or situational fac- tors more, leading them to make more behavioral self- blame attributions relative to characterological self-blame. As noted, U.S. adolescents endorsed characterological self-blame and behavioral self-blame at equal levels. However, only characterological self-blame, not behavioral selfblame, predicted internalizing problems in U.S. youth. It may be that in cultures like America, where the focus is on dispositions when making attributions about others (Lee et al., 2017), negative attributions about traits of the self rather than situational factors have greater implication on adjustment; while in cultures like Korea where the focus is more on the characteristics of the situation when evaluating people's behaviors, it is one's behavior in that situation that may make one feel more at fault, increase guilt, and lead to feelings of shame. We suggest that behavioral self-blame attributions induce enhanced feelings of behavioral responsibility. Past studies have perceived behavioral self-blame to be internal, unstable, and controllable, and comparable to lack of effort which may make people work harder toward their achievement goals and encourage more active coping strategies (Försterling, 1985). However, would attributions of behavioral self- blame be adaptive in high victimization situations, especially within a culture in which victimization is often collectively implemented?

A distinctive feature of victimization or *wang-ta* in Korea is its collective aspects that often result in an extremely ostracizing environment for the victim. In such environment, active coping may not be ideal and could even exacerbate the situation. Indeed, past findings have indicated that problem solving strategies are ineffective or even put victimized children at greater risk for peer rejection when they are dealing with severe and less controllable harassment (Kochenderfer-Ladd & Skinner, 2002; Tenenbaum et al., 2011). It may be that recognizing that you cannot change the stressor (i.e., characterological self-blame or externalizing attributions) might be more adaptive in such situations. Moreover, in Korea, engaging in or being a bystander in wang-ta behaviors may be conforming to the group norm. In such an environment, where victims are viewed as abnormal by the group (Lee et al., 2011), feeling like your victimization is because of something you can control may be maladaptive. In sum, due to the group characteristic of bullying in Korea, even if victims can differentiate situational factors from dispositional ones and therefore make more behavioral self-blame over characterological self-blame, it may still lead to helplessness and increased internalizing problems.

Furthermore, it is also important to consider why characterological self-blame was not uniquely predictive of depression and anxiety for Korean youth. First, Korean youth may consider dispositions to be more malleable than American youth (Norenzayan et al., 2002). Thus, it may be that attributions that blame one's disposition is not actually seen as uncontrollable for Korean youth. For American youth relative to Korean youth, traits are considered more stable and uncontrollable (Norenzayan et al., 2002). Second, it may be that characterological self-blame align with East Asian culture's emphasis on modesty (Cullen et al., 2015). In such a cultural context, characterological self-blame may be considered a form of humility and be less maladaptive for Korean youth. In contrast, in an individualistic culture like the U.S., being confident and asserting oneself are emphasized (Triandis, 1995). Thus, characterological self-blame in the U.S. may indicate low self-confidence and a failing to meet individualistic values.

An interesting finding to note is that victimization significantly predicted characterological self-blame and behavioral self-blame in both countries, and these two paths could be constrained to be the same across two countries without significantly decreasing the model fit. This indicates that experiences of victimization are similar in their pre- diction of characterological self-blame and behavioral self-blame in U.S. and Korea. That victimization is similarly related to characterological self-blame and behavioral self-blame and behavioral self-blame across countries suggests that youth make sense of these negative peer experiences in similar ways. Being highly picked on by peers increases self-blame similarly for youth—repeated negative peer experiences

are linked to feelings of self-blame.

#### Implications

Results for the current study indicate that adolescents' attributional processes underlying victimization and their relations to internalizing problems are not the same across cultures and that there is need to more carefully consider cultural specificity in attributional processes. Self-blaming, in general, is maladaptive for victimized children, but whether the focus of the self-blame is on one's disposition or behavior seems to have different mental health implications depending on the culture. Clinicians and interventionists should be more sensitive to these cultural variations when treating or creating interventions for targets of peer victimization.

The results also suggest that there is not one panacea attribution about victimization that is beneficial for adjustment. Instead, results suggest that youth may benefit from developing attributional flexibility, or the ability to consider various factors, both internal and external and which are situationally-specific. Low flexibility in attributions has been associated with depression and social anxiety in the face of negative life events (Fresco et al., 2007; Liu et al., 2022). Thus, interventions that focus on developing attributional flexibility may help youth to better cope with peer victimization.

#### **Limitations and Future Directions**

Several limitations of the present study should be noted. First, U.S. participants were primarily White and were living in the southern United States and Korean participants were recruited from three cities in South Korea. Addition- ally, all U.S. participants were recruited from religiously affiliated private schools. It is possible that there is variation in youth attributions based on regional differences, rural or urban contexts, and by religious affiliation. However, the findings in the U.S. sample replicate what has been found in previous studies about victimization, characterological self-blame, and adjustment from other regions of the United States and from more ethnically diverse samples (e.g., Graham et al., 2006; Graham et al., 2009). This suggests that the U.S. findings are likely generalizable to more diverse youth from other parts of the U.S. and from other types of schools. Regarding the Korean sample, although the schools were selected at random and Korea has standardized education and classroom settings across schools (Shin & Koh, 2005), possible regional differences may still exist. Future work should collect samples from various regions of Korea. In addition, the current study did not collect any data that would account for individual differences in cultural norms within Korea and the United States. To understand the psychological processes behind country differences, it is suggested that future studies assess cultural contexts or norms at the individual level. Careful continued examination of contextual, racial/ethnic, and cultural variation is encouraged in future work.

In addition, we are also aware that the current study's cross-sectional examination cannot speak to the longitudinal or causal relations between victimization, attributions, and internalizing problems. It may be that internalizing problems drive attributional styles and that these attributions lead to more victimization. However, past findings that have examined the longitudinal relationship of victimization, characterological self-blame, and adjustment support the directionality and the reciprocal nature of the hypothesized model (Graham et al., 2009; Schacter et al., 2015). It is likely that peer victimization predicts self-blame and internalizing problems, and that self-blame and internalizing problems predict increases in victimization over time (Schacter et al., 2015). Future experimental designs should target attributions as a mechanism of change to see if changing students' attributions about victimization changes their subsequent victimization and internalizing problems to help disentangle the direction of effects.

Another limitation to note is that the current study only included dispositional items to measure externalization of blame. External attribution items in the current study ascribed the cause of victimization to the perpetrators' stable disposition (e.g., The kids are just mean), but there were no items blaming situational external factors such as the perpetrator being in a bad mood. Future studies should include more diverse set of external attribution items that better distinguish between these two different subdimensions of external attributions.

Finally, it may be that results were inflated due to shared method variance,

as all data were collected through self-reports. This, however, does not discount the validity of self-reported measures. The principal aim of the current study was to investigate adolescents' subjective perceptions and interpretations of their experiences, which can only be gathered via self-reports. Moreover, subjective experiences are a better predictor for psychological well- being compared to peerreports (Hawker & Boulton, 2000). It will, however, be valuable for future research to utilize both self-reports and peer nominations of victimization and compare the two reports. Graham and Juvonen (1998) distinguished between self-identified victims, who had elevated self-perceptions of victimization, and peer- nominated victims, who have reputations as victims but did not view themselves as highly victimized. Selfidentified victims were more similar to true victims in terms of their adjustment indices and characterological self-blame attributions, while peer-nominated victims were more similar to non-victims on these dimensions. Thus, the attributions of selfidentified victims likely have a stronger association with internalizing problems compared to those of peer-nominated victims. In addition, those that are both peernominated and self-report as a victim may demonstrate different attributional styles in peer provocation situations and likely have implications for both social and emotional maladjustment (Graham & Juvonen, 1998; Graham et al., 2003).

#### Conclusion

Empirical research on attributions within the peer victimization context and their relation to adjustment outcomes is scarce in non-Western contexts. To test the cultural specificity of attributions made about peer victimization and their relation to internalizing problems, this study compared Korean and U.S. youth's attributions and internalizing problems. There were cross-cultural differences in attributions and their relation to adjustment between U.S. youth and Korean youth. Blaming internal characteristics predicted depression, social anxiety, and low global self-worth for US adolescents, while blaming one's behaviors predicted internalizing problems in Korean adolescents. It is crucial that we further our understanding of cultural variation in adolescents' cognitive appraisals of negative peer experiences and their subsequent adjustment outcomes, in order to develop more culturally sensitive interventions for victims of peer harassment. Future investigation should aim to understand the nature and consequences of attributions as well as the implications for attributions about the self in different cultures.

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**Authors' Contributions** J.Y. conceived of the study, designed the study, collected the data, performed the statistical analyses, interpreted findings, and drafted the manuscript; K.M. helped to conceive of the study, participated in the study design, and helped interpret findings and draft the manuscript; S.S. participated in the data collection and helped to draft the manuscript. All authors read and approved the final manuscript.

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**Data Sharing and Declaration** The datasets generated and/or analyzed during the current study are not publicly available but are available from the corresponding author on reasonable request.

#### **Compliance with Ethical Standards**

Conflict of Interest The authors declare no competing interests.

**Ethical Approval** All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. The questionnaires and methodology for this study was approved

by the Human Research Ethics committee of the University of Alabama (Protocol ID: 18-08-1415) and by Yonsei University Institutional Review Board.

**Informed Consent** Consistent with Federal Regulation 45.46.116, and with approval by the University of Alabama Institutional Review Board, parents were informed about the study and were asked to contact the researchers or the school if they had any questions or did not want their child to participate. Children also gave their assent before every data collection session.

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