

Examining the Impact of Self-Esteem and Moral Sensitivity on Teasing among Adolescents: A Cross-Sectional Study

Sookyung Kim¹ · Sanghee Kim² · Jaeun Jang³ · Soomin Hong⁴

¹Assistant Professor, School of Nursing, Soonchunhyang University

²Professor, College of Nursing · Mo-Im Kim Nursing Research Institute, Yonsei University

³Researcher, College of Nursing, Yonsei University

⁴Assistant Professor, College of Nursing, Konyang University

ABSTRACT

Purpose: This study aims to examine the factors influencing teasing among adolescents, focusing on its associations with self-esteem, moral sensitivity, and relationship satisfaction with parents and peers. The goal is to provide insights that can support the development of interventions to reduce the incidence and adverse effects of teasing within school settings, ultimately fostering a safer and more inclusive school environment for all students.

Methods: This cross-sectional study utilized the Child-Adolescent Teasing Scale, Rosenberg Self-Esteem Scale, Moral Sensitivity Scale, and relationship satisfaction assessments. Descriptive statistics, independent t-tests, ANOVA, Pearson's correlations, and multiple regression analyses were conducted to assess the prevalence of teasing and its association with key psychosocial factors. Participants were recruited from multiple middle schools, representing a diverse adolescent population. The data were collected through self-reported surveys, ensuring confidentiality to encourage honest responses. **Results:** The study found a significant correlation among teasing, self-esteem, and moral sensitivity. Higher teasing levels were linked to increased moral sensitivity and lower self-esteem, alongside less satisfaction in adolescents' relationships with parents and peers. Teasing prevalence was observed across gender and age groups, suggesting its widespread nature and relevance. These findings are crucial for school education and health professionals to develop targeted interventions to reduce teasing and its adverse outcomes. Understanding these dynamics enables educators and policymakers to address adolescent teasing, contributing to healthier school environments. **Conclusion:** This study underscores the importance of school psychological perspectives in adolescent health, highlighting the need for proactive, evidence-based strategies in school health interventions and policies. Such strategies should address the social and emotional development of adolescents, equipping them with skills to build positive peer relationships and constructively manage conflicts.

Key Words: Bullying; Adolescent health; Schools, public health; Social interaction; Morals

INTRODUCTION

In recent years, the issue of peer teasing and bullying among adolescents has become increasingly prominent, with significant psychological and physical impacts reported worldwide and within Korean society [1,2]. Friend-

ships undergo significant changes during adolescence, both in terms of quantity and quality. These changes contribute to the accomplishment of important developmental tasks. Positive peer group interactions during adolescence promote psychological stability, foster positive self-esteem, and guide adolescents in building inter-

Corresponding author: Soomin Hong

College of Nursing, Konyang University, 158, Gwanjeodong-ro, Seo-gu, Daejeon 35365, Korea.
Tel: +82-42-600-8576, Fax: +82-42-600-8555, E-mail: soominsnow@naver.com

- This work was supported by the Soonchunhyang University Research Fund.

Received: Nov 13, 2024 / Revised: Dec 11, 2024 / Accepted: Dec 11, 2024

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/4.0>) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

personal relationships. However, it is important to note that not all changes in peer relationships during adolescence are positive. Negative peer connections, such as bullying and taunting, can lead to school maladaptation, delinquent behavior, and psychological distress, including depression or anxiety [3]. Given the tendency for teasing and bullying to become commonplace within peer groups over time, prevention and early detection are crucial.

Bullying is defined as persistent, hostile, power-imbalanced, disturbing behavior [4]. Teasing, a precursor to bullying, is degrading or intentionally hurting others verbally or physically. When adolescents are teased by their peers if the victim responds poorly, the teasing continues, and if the response remains poor despite continued teasing, it escalates to peer bullying [5]. After entering middle school, adolescents spend more time at school, making friendships more significant for individuals, and they become more sensitive to teasing and bullying. Although teasing is less severe than bullying, it is associated with adolescent depression, suicidal ideation, and school adjustment problems [6]. Interventions for teasing should not only aim to prevent bullying but also address the negative impact of teasing itself. Therefore, it is vital to understand the factors that influence teasing and to attempt to solve problems based on the study findings.

The victim's environment influences the severity of the suffering caused by teasing and bullying. A previous study conducted on 752 middle school students using the Children and Youth Panel Survey found that parental emotional abuse directly affected adolescents' depression, social disengagement, and experiences of peer emotional teasing and bullying [7]. There is a correlation between sex, family characteristics, school life satisfaction, and peer teasing and bullying. Identifying demographic factors that influence the damage caused by teasing can help establish a social safety net.

Adolescent self-esteem is significant as it predicts healthy growth and the successful completion of developmental tasks. The more adolescents are teased and bullied by their peers, the higher the psychological distress they experience is, including low self-esteem, high depression, and anxiety [8,9]. The frequency of teasing is related to self-esteem: the more frequent the teasing, the lower the self-esteem. Low self-esteem contributes to the formation of negative associations with others, making victims more vulnerable and sensitive to teasing.

Moral sensitivity is defined as the ability to perceive moral issues embedded in a specific situation, interpret the situation, and evaluate the impact of one's own behav-

ior on the well-being of others [10]. Moral sensitivity varies among individuals, and these differences act as a factor that impedes moral behavior [10]. Bullying or teasing is related to moral behavior, and it has been reported that adolescents with high moral sensitivity tend to advocate for victims of peer bullying, which helps the victim adjust to school and ultimately eradicates peer bullying [11]. However, little is known about the correlations and influencing factors between moral sensitivity and victims of teasing.

While moral sensitivity has been the subject of considerable research in the context of bullying perpetration and bystander intervention, its role in the phenomenon of teasing victimization remains relatively understudied. Recent studies, however, indicate a complex relationship between moral sensitivity and experiences of peer victimization. Individuals with higher moral sensitivity may be more attuned to subtle forms of social aggression, which could result in an increased reporting of teasing experiences [12]. Additionally, adolescents with heightened moral sensitivity could interpret ambiguous social interactions more negatively, perceiving them as teasing even when not intended as such [13]. This heightened awareness and interpretation of social cues could, conversely, result in elevated reported levels of teasing victimization among individuals who are morally sensitive. Furthermore, moral sensitivity has been shown to play a role in adolescents' responses to peer interactions, influencing their ability to recognize and navigate moral dilemmas in social contexts [14]. However, existing studies predominantly focus on bullying, with limited exploration of moral sensitivity in the context of teasing, leaving a gap in understanding its specific influence.

The interplay between teasing and moral sensitivity warrants further investigation. Research suggests that moral sensitivity affects adolescents' perception of fairness, justice, and empathy in peer interactions, which could shape their experience of teasing [15]. For instance, adolescents with higher moral sensitivity may feel more distressed by teasing due to their heightened perception of injustice or harm caused by such interactions [16]. Conversely, adolescents with lower moral sensitivity may be less likely to recognize or report teasing, potentially normalizing the behavior within peer groups [15]. This highlights the need to explore the bidirectional relationship between teasing and moral sensitivity, particularly to understand how moral sensitivity contributes to the interpretation and impact of teasing experiences. By addressing this gap, the present study aims to provide a comprehensive understanding of the theoretical foundations link-

ing moral sensitivity and teasing, thereby offering valuable insights for developing targeted interventions.

Schools play a critical role in supporting adolescent mental health, providing both universal support systems and individualized interventions for students at risk [17]. Prevention of teasing and bullying is necessary to alleviate the immediate suffering of adolescents. In addition, efforts to eliminate teasing and bullying can be of long-term health benefits, as the physical and psychological trauma caused by adolescent teasing and bullying continues into adulthood. The purpose of this study is to investigate teasing among adolescents, its effects, and associated factors by examining the correlations between teasing and relevant variables. The identification of the factors that influence teasing is the basis for the development of effective psychosocial interventions under the guidance of psychiatric professionals. Specifically, this study seeks to (a) identify levels of teasing, self-esteem, and moral sensitivity among adolescents, and (b) analyze factors associated with teasing behavior.

METHODS

1. Design

This study used a cross-sectional descriptive design based on this conceptual framework (Figure 1).

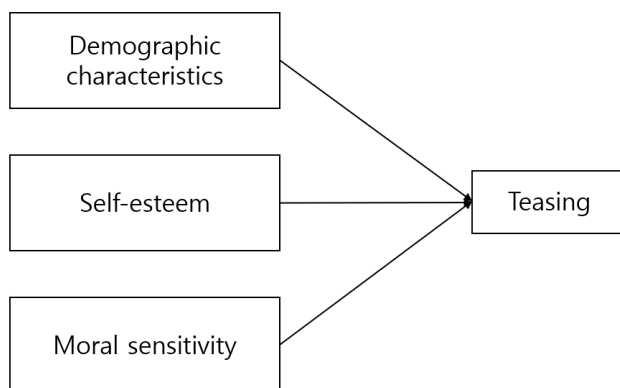


Figure 1. Conceptual framework of this study.

2. Setting and Samples

This study was conducted with 289 adolescents from four middle schools in Seoul, South Korea. Participants' inclusion criteria were as follows: (a) adolescents attending middle school; (b) ability to understand the purpose of the study and the contents of the survey; and (c) volun-

tary consent to participate, obtained from both adolescents and their parents. After excluding participants with incomplete data on the dependent and independent variables, the final sample consisted of 257 adolescents (105 boys and 152 girls).

3. Measurements/Instruments

Self-esteem. Self-esteem was measured using the Rosenberg Self-Esteem Scale developed by Rosenberg (1965) [18] and translated into Korean by Jon (1974) [19]. The measurement comprised 10 items, which consisted of five positive and five negative items, and was scored on a 5-point Likert scale (1= "Strongly disagree," 5= "Strongly agree"). Examples of items include: "I feel that I am a person of worth" and "I feel that I have a number of good qualities." Negative items were calculated inversely, and the higher the score, the higher the self-esteem. Cronbach's α was .85 in the original instrument and .86 in this study.

Moral sensitivity. Moral sensitivity was measured using the Moral Sensitivity Scale for Adolescents [20]. The scale comprised a total of 27 items with three dilemmas, and each dilemma included five critical fact perceptions, and four consequence perceptions, for a total of nine items in each dilemma. Examples of items include: "Jiwon is wondering whether to copy their desk mate's assignment" and "Jiwon is struggling with issues related to fair competition" in first dilemmas. The measurement was scored on a 7-point Likert scale (1= "Strongly disagree," 7= "Strongly agree"). Cronbach's α was .91 in the original instrument and .87 in this study.

Teasing. Teasing was measured using the Child-Adolescent Teasing Scale (CATS) proposed by Vessey et al. (2008) [21]. CATS comprises 32 items in four domains: personality and behavior teasing (14 items), family and environment teasing (seven items), school-related teasing (nine items), and teasing about my body (two items). Examples of items include: "I am teased about the way I dress" and "I am teased about my grades." The CATS consists of two responses per item (i.e., how much and it bothers me). The item "I am teased about the way I dress" was structured to have two responses: one asking, 'how much' and the other asking 'it bothers me.' The responses were scored on a 4-point Likert scale (1= "Never," 2= "Sometimes," 3= "Often," and 4= "Very often"). The total score was calculated by multiplying the two responses, 'how much' and 'it bothers me' for each item and summing the results across all 32 items. The scores ranged from 32 to 512. The higher the CATS score, the more

teased the child was. Cronbach's α was .93 in the original instrument and .95 in this study.

After obtaining approval from the original author to use CATS, it was implemented according to the process of translation and adaptation of the instruments [22]. A translator who was fluent in English and Korean and had a career as a school health teacher in Korea translated the English version into Korean. Another English-Korean translator who had not seen the original version translated the Korean version back into English. Research team members (a nursing professor and three graduate nursing students) corrected the unclear or difficult-to-understand Korean items by discussing the differences between the original and back-translated items. Content validity was assessed by five experts, including one child health nursing professor, two advanced practice nurses in childcare in Korea, and two teachers. While thirty items with a content validity index were more than 0.8, two items were less than 0.8. The two items were "I am teased about getting into trouble." and "I am teased about my school-work.", with a CVI of 0.6. Although the two items needed to meet the CVI absolute standard, the research team determined that the two items included the concept in the instrument's context and maintained it. The Korean version of the CATS was finalized with 32 items.

Demographic characteristics. Participants' demographic characteristics, such as age, sex, grade, self-reported academic achievement, satisfaction with parents' relationships, satisfaction with friendships, and subjective morality were self-reported. The item for self-reported academic achievement was, "Where do you think your academic performance roughly stands in comparison to your classmates?" This item was assessed using three categories: 'poor,' 'moderate,' and 'good.' Satisfaction with parents' relationships was evaluated with the question, "How satisfied are you with your relationship with your parents?" Satisfaction with friendships was assessed by asking, "How satisfied are you with your relationships with your friends?" Both satisfaction items were measured using three categories: 'dissatisfied,' 'moderate,' and 'satisfied.' Subjective morality was assessed with the question, "How moral do you consider yourself to be?" and this item was evaluated using three categories: 'high,' 'moderate,' and 'low.'

4. Data Collection/Procedure

Data collection for this study was conducted by a researcher from four middle schools in South Korea between May and July 2018. Prior to distributing the survey

questionnaires, the researcher provided a detailed explanation of the study's purpose and the participation procedure to the participants. Informed written consent was obtained from the adolescents and their parents, indicating their voluntary agreement to participate in the study. The adolescents themselves completed the questionnaires. School teachers were not involved in the data collection process. The sample size was calculated for multiple regression, a medium effect size (Cohen's f^2) of 0.15, a two-tailed significance of 0.05, a power of 95%, and 25 predictors using G*Power version 3.1.9.2 (Faul, 2009). The minimum required sample size was 242 participants. Therefore, the sample size ($n=257$) exceeded the requirements of the power analysis.

5. Ethical consideration

This study was approved by the Institutional Review Board of [blinded for review] (IRB No. [blinded for review]). We provided the participants and their guardians with information about the study and obtained their informed written consent before the commencement of the study. Researchers explained that participants were free to withdraw from the study at any time and that the submitted information would be kept anonymous and confidential.

6. Data Analysis

Data analysis was conducted using SPSS version 25 (IBM, Armonk, NY, USA). Descriptive statistics, including frequencies, means, and standard deviations, were calculated to summarize the participants' characteristics, as well as their levels of self-esteem, moral sensitivity, and teasing. The differences in demographic variables according to self-esteem, moral sensitivity, and teasing were analyzed using the independent t-test and analyses of variance (ANOVA), and we used Scheffé tests to determine the differences among the demographic characteristics. Pearson's correlation analyses were conducted to examine the associations between the three main variables. Multiple regression analyses were used to identify the factors associated with teasing, controlling age and sex.

RESULTS

1. General Characteristics

The general characteristics of the participants are presented in Table 1. The mean age of the participants was

Table 1. General Characteristics (N=257)

Characteristics	Categories	n (%) or M±SD
Age		13.61±0.99
Sex	Boy	105 (40.9)
	Girl	152 (59.1)
Grade	1st	74 (28.8)
	2nd	92 (35.8)
	3rd	91 (35.4)
Self-reported academic achievement	Poor	56 (21.8)
	Moderate	113 (44.0)
	Good	88 (34.2)
Satisfaction of parent's relationship	Satisfied	224 (87.1)
	Moderate	22 (8.6)
	Dissatisfied	11 (4.3)
Satisfaction of friendship	Satisfied	227 (88.4)
	Moderate	24 (9.3)
	Dissatisfied	6 (2.3)
Subjective morality	High	101 (39.3)
	Moderate	145 (56.4)
	Low	11 (4.3)
Self-esteem		37.99±6.44
Moral sensitivity		151.60±18.47
Teasing		46.46±21.19

13.61±0.99 years; 40.9% of the sample were boys; 28.8% were first-year students, and 34.2% had good academic achievement. The majority of participants (87.1%) were satisfied with their parents' relationships, and 88.4% of the participants were satisfied with their friendships, but 9.3% were moderately satisfied. Subjective morality was recognized by 39.3% of the participants as high, 56.4% as moderate, and only 4.3% as low. The self-esteem score of the participants was 37.99±6.44, the moral sensitivity score was 151.60±18.47, and teasing scores were 46.46±21.19.

2. Differences in Self-esteem, Moral Sensitivity, and Teasing

Table 2 presents the differences in self-esteem, moral sensitivity, and teasing among the participants. Self-esteem scores were significantly higher in boys (39.61±5.68) than in girls (36.87±6.71, $p < .001$), and there were no significant differences according to grade level ($p = .981$). Adolescents with poor academic achievement (33.88±5.54) had significantly lower self-esteem scores than adolescents with moderate (38.32±6.63) or good academic achievement (40.19±5.50, $p < .001$). Adolescents who were satisfied with parental (38.86±6.05) relationships had significantly higher self-esteem scores than adolescents who were moderately satisfied (33.04±6.24) or dissatisfied with

Table 2. Differences in Self-Esteem, Moral Sensitivity, and Teasing according to General Characteristics (N=257)

Characteristics	Categories	Self-esteem		Moral sensitivity		Teasing	
		M±SD	t or F (<i>p</i>)	M±SD	t or F (<i>p</i>)	M±SD	t or F (<i>p</i>)
Sex	Boy	39.61±5.68	3.54	152.90±19.76	0.94	43.89±19.16	-1.62
	Girl	36.87±6.71	(< .001)	150.70±17.53	(.360)	48.24±22.38	(.096)
Grade	1st	38.11±6.12	0.02	153.64±20.28	1.03	45.57±20.00	0.22
	2nd	38.00±6.44	(.981)	151.98±15.43	(.359)	46.04±20.88	(.807)
	3rd	37.91±6.76		149.55±19.90		47.60±22.58	
Academic achievement	Poor ^a	33.88±5.54	19.08	148.34±18.90	3.26	51.71±27.42	2.22
	Moderate ^b	38.32±6.63	(< .001)	150.15±19.16	(.040)	44.96±19.09	(.110)
	Good ^c	40.19±5.50	a < b, c	155.52±16.73		45.03±18.82	
Satisfaction of parents' relationship	Satisfied ^a	38.86±6.05	18.94	152.46±18.17	5.37	44.52±19.24	8.88
	Moderate ^b	33.04±6.24	(< .001)	151.50±16.27	(.005)	63.40±31.89	(< .001)
	Dissatisfied ^c	30.18±5.13	b, c < a	134.09±21.49	b, c < a	52.09±18.83	a < b
Satisfaction of friendship	Satisfied ^a	38.56±6.25	10.63	152.30±18.23	1.58	45.34±20.03	7.89
	Moderate ^b	35.58±5.82	(< .001)	147.21±19.07	(.209)	48.96±23.45	(< .001)
	Dissatisfied ^c	27.83±6.37	b, c < a	142.50±23.68		78.83±31.28	a, b < c
Self-morality	High ^a	41.06±5.86	25.92	155.07±17.26	7.22	42.51±18.00	4.15
	Moderate ^b	36.30±5.65	(< .001)	150.49±18.22	(.001)	48.31±21.87	(.017)
	Low ^c	31.55±8.89	c < b < a	134.27±22.41	b, c < a	58.36±31.69	

a, b, c=Group for post hoc.

parental relationships (30.18 ± 5.13 , $p < .001$). Adolescents who were satisfied with friendships (38.56 ± 6.25) had significantly higher self-esteem scores than adolescents who were moderately satisfied (35.58 ± 5.82) or dissatisfied with friendships (27.83 ± 6.37 , $p < .001$). Adolescents with high self-morality (41.06 ± 5.86) had higher self-esteem than adolescents with moderate self-morality (36.30 ± 5.65), and adolescents with moderate self-morality had higher self-esteem than adolescents with low self-morality (31.55 ± 8.89 , $p < .001$).

There were no significant differences in moral sensitivity according to sex or grade. There was a significant difference in moral sensitivity according to academic achievement ($p = .040$). Adolescents who reported satisfaction with their parents' relationship (152.46 ± 18.17) had significantly higher moral sensitivity than those who were moderately satisfied (151.50 ± 16.27) or dissatisfied with their parents' relationship (134.09 ± 21.49 , $p = .005$). The difference in moral sensitivity according to friendship satisfaction was not significant. Adolescents with high self-morality (155.07 ± 17.26) displayed significantly higher moral sensitivity than those with moderate (150.49 ± 18.22) or low self-morality (134.27 ± 22.41 , $p < .001$).

Regarding teasing, the total teasing score was significantly lower in adolescents who were reported satisfaction with their parental relationship (44.52 ± 19.24) compared to those who were moderately satisfied (63.40 ± 31.89 , $p < .001$). Conversely, the total teasing score was significantly higher in adolescents who were dissatisfied with their friendship (78.83 ± 31.28) than in those who were moderately satisfied (48.96 ± 23.45) or satisfied with their friendship (45.34 ± 20.03 , $p < .001$). The teasing score indicated significant differences between the self-morality groups ($F = 4.15$, $p = .017$).

3. Correlations between Self-esteem, Moral sensitivity, and teasing

There was a significant positive correlation between self-esteem and moral sensitivity ($r = .22$). Teasing had a significant positive correlation with moral sensitivity ($r =$

$.12$) and a negative correlation with self-esteem ($r = -.27$) (Table 3).

4. Factors associated with Teasing

To identify the factors associated with teasing among adolescents, four variables that were statistically associated with self-esteem ($r = -.27$, $p < .001$), moral sensitivity ($r = .12$, $p = .025$), satisfaction with parents' relationships ($F = 8.88$, $p < .001$), and satisfaction with friendship ($F = 7.89$, $p < .001$) were included in the multiple regression. The multiple regression model with six factors explained 17.8% of the variance in teasing ($F = 6.72$, $p < .001$), adjusted for age and sex.

Four factors—self-esteem, moral sensitivity, moderate satisfaction with parents' relationships, and dissatisfied satisfaction with friendships—significantly affected teasing among adolescents. Increased self-esteem was associated with lower teasing ($\beta = -.21$, $p = .002$). Participants with higher moral sensitivity displayed higher teasing ability ($\beta = .19$, $p = .001$). Participants who felt moderately satisfied with their parents' relationships showed higher teasing than participants who felt satisfied with their parents' relationship ($\beta = .18$, $p = .002$). Furthermore, participants who felt dissatisfied with friendship satisfaction displayed higher teasing than participants who felt satisfied with their friendships ($\beta = .19$, $p = .002$) (Table 4).

DISCUSSION

This study examined the relationships between self-esteem, moral sensitivity, and experiences of teasing among adolescents, with the aim of identifying factors associated with incidents of teasing. The findings emphasize the necessity of prompt identification of factors associated with teasing. This enables school health professionals, including school nurses, counsellors and social workers, to devise and implement proactive intervention strategies aimed at preventing the escalation of teasing into bullying.

In this study, we found that sex, academic achievement, satisfaction with friends' and parents' relationships, and

Table 3. Correlation of Self-Esteem, Moral Sensitivity, and Teasing

($N = 257$)

Variables	Moral sensitivity	Self-esteem	Teasing
	r (p)	r (p)	r (p)
Moral sensitivity	1		
Self-esteem	.22 ($< .001$)	1	
Teasing	.12 (.025)	-.27 ($< .001$)	1

Table 4. Factors Influencing the Teasing

(N=257)

Variables	Categories	β	B	SE	95% CI	t	p
Self-esteem		-.21	-0.68	0.22	-1.10~-0.26	-3.16	.002
Moral sensitivity		.19	0.22	0.07	0.09~0.36	3.23	.001
Satisfaction of parents' relationship*	Satisfied (ref.)						
	Moderate	.18	13.89	4.53	4.98~22.80	3.07	.002
	Dissatisfied	.01	1.06	6.50	-11.75~13.87	0.16	.871
Satisfaction of friendship*	Satisfied (ref.)						
	Moderate	.03	2.07	4.27	-6.34~10.47	0.49	.628
	Dissatisfied	.19	26.72	8.49	9.99~43.44	3.15	.002

 $R^2=17.8$, $F=6.72$, $p < .001$

Note. Adjusted for age and sex variables.

self-morality had specific effects on self-esteem, moral sensitivity, and teasing. These results are consistent with those of previous studies [23]. For example, girls generally have lower self-esteem due to their increased focus on peer relationships and concerns about body image [24]. The study emphasizes the importance of addressing the moral sensitivity of adolescents who experience teasing, as higher moral sensitivity was associated with increased teasing experiences [12]. Moreover, the quality of the parent-child relationship was found to influence self-esteem, moral sensitivity, and teasing experiences. Therefore, it is suggested that school-based interventions to prevent school violence should consider the specific factors that influence adolescents' self-esteem, moral sensitivity, and teasing experiences, including sex, academic achievement, and the quality of family relationships.

Additionally, moral reasoning education should include character education programs that cultivate empathy, ethical decision-making, and the ability to consider diverse perspectives in social interactions [25]. Such programs can be integrated into existing curricula and delivered through interactive workshops, fostering adolescents' ability to navigate morally challenging situations and reducing the likelihood of negative peer interactions such as teasing. This approach could help build a school culture that emphasizes mutual respect and ethical behavior, ultimately contributing to more positive social outcomes.

The results suggest that experiencing teasing does not necessarily lead to negative outcomes. Increasing adolescents' moral sensitivity may contribute to a culture of empathy, potentially reducing school violence. Comprehensive school strategies refer to a holistic approach that combines various interconnected initiatives with the aim of preventing bullying and promoting a positive school

environment. This approach is antithetical to isolated interventions, which are narrowly focused and address single issues without considering the broader context of peer relationships and school dynamics [26]. Examples of comprehensive strategies include integrating empathy training, conflict resolution education, and anti-bullying campaigns into the school culture, ensuring that interventions are interconnected and sustainable. By addressing multiple factors simultaneously, such strategies are more likely to create long-lasting improvements in adolescent peer interactions compared to isolated, one-time interventions. Educational initiatives that promote mutual respect and constructive communication among adolescents can reduce peer aggression, including teasing and bullying. School health professionals should train students to express their thoughts and actions healthily and to consider others from an ethical, preventive perspective. For example, assertiveness can be approached in the context of adolescent mental health practitioners [27]. By providing moral sensitivity training for both potential offenders and victims, schools can transform peer group dynamics and promote positive relationships.

In light of the pivotal role that peer relationships play in the context of teasing and school violence; this study posits that enhancing peer satisfaction should be a central tenet of intervention strategies. To this end, strategies aimed at improving satisfaction with peer relationships should be incorporated into interventions designed to prevent teasing and bullying. Public healthcare providers, as integral members within the community and school, can play a pivotal role in fostering positive peer relationships among adolescents [28]. They are capable of implementing various strategies, such as promoting empathy, teaching conflict resolution skills, and initiating social inclusion efforts. These interventions can be integrated into

community programs or extracurricular activities, providing opportunities for students to build meaningful connections and enhance their satisfaction with peer relationships. Collaborating with other stakeholders, including teachers, school health teachers, counselors, and administrative personnel, public healthcare providers can strive towards constructing a supportive and inclusive community environment [29]. This involvement encompasses implementing anti-bullying campaigns, establishing peer support programs, and facilitating communication channels for students to express their concerns and seek help when needed. By addressing the factors influencing satisfaction with peer relationships, public healthcare providers have the potential to contribute to the reduction of teasing incidents and the cultivation of a positive social climate within the school community. Taking a comprehensive approach that includes strategies aimed at enhancing satisfaction with peer relationships, public healthcare providers can effectively address issues related to teasing and promote beneficial social dynamics among adolescents.

Finally, teasing among adolescents is closely related to self-esteem and satisfaction in both parental and peer relationships. The complex nature of these relationships makes it challenging to establish clear causal links; however, the findings underscore the importance of addressing these multi-faceted dynamics in school-based interventions. International evidence suggests that structured, in-house intervention programs, as demonstrated in primary school settings in Brazil, can reduce violent behaviors and support healthier peer interactions [30]. It is essential that adolescents receive guidance and support from their family, school, and peer groups during this formative period to ensure a healthy transition to adulthood. In addition to the family environment, schools play a significant role in shaping adolescents' values and well-being. Therefore, school-based public health professionals have a critical role in designing programs and extracurricular activities that support adolescent development, taking into account family dynamics, peer groups, and self-esteem.

This study reveals a complex relationship between moral sensitivity and experiences of teasing among adolescents, identifying a notable correlation between high moral sensitivity and increased reported experiences of teasing. This finding challenges the initial assumption that enhancing moral sensitivity is an effective standalone strategy for preventing teasing to bullying. Instead, this indicates the necessity for a more nuanced approach. The results emphasize the crucial role of school professionals,

particularly school health practitioners, in providing specialized interventions and counselling that address this complexity.

Given these findings, it is crucial for school health interventions to adopt a multifaceted approach. This approach should focus on helping adolescents with high moral sensitivity develop resilience and coping strategies to navigate social interactions effectively. Additionally, it is important to educate peers about the diverse ways individuals may perceive and respond to social cues, fostering a more inclusive and understanding environment. Furthermore, implementing programs that balance the development of moral sensitivity with practical social skills and emotional intelligence could prove beneficial.

Future strategies should focus on creating a supportive school environment that acknowledges and accommodates varying levels of moral sensitivity among students. This may involve educational programs about empathy, relationship dynamics, and effective communication, thereby enhancing the overall effectiveness of school health services. These steps are vital in advancing school practice by proactively addressing the complex interplay of adolescent development, moral sensitivity, mental health, and social interactions. This unexpected finding opens new avenues for research into the role of moral sensitivity in peer interactions and highlights the need for a more comprehensive understanding of how moral sensitivity influences adolescents' social experiences. Further studies are needed to explore the mechanisms behind this relationship and to develop targeted interventions that can effectively support adolescents with varying levels of moral sensitivity.

The results underscore the imperative role of school health professionals, especially school health practitioners, in delivering specialized interventions and counselling. Given these findings, it is crucial for school health interventions to not only cater to the specific emotional and social needs of adolescents with high moral sensitivity but also to involve their peer groups actively. This approach aims to create a more supportive and understanding school environment. Future strategies should focus on broadening these interventions to include educational programs about empathy and relationship dynamics, thereby enhancing the overall effectiveness of school health services. These steps are vital in advancing school practice by proactively addressing the complex interplay of adolescent development, mental health, and social interactions.

This study broadens the scope of existing research by conducting a comprehensive analysis of self-esteem, moral sensitivity, and relationship satisfaction in the context

of teasing among adolescents. For example, Lee [9] and Szcześniak [8] emphasized the negative correlation between bullying and self-esteem, yet did not examine the complex interrelationship between self-esteem and moral sensitivity in the context of teasing. In contrast, this study demonstrates that moral sensitivity, while generally associated with prosocial behaviors as noted by Rest [10] and Kollerova [11], could also increase susceptibility to the adverse effects of teasing. These results highlight the importance of considering both the protective and risk-enhancing dimensions of moral sensitivity when addressing teasing. By integrating these variables, this study provides a more comprehensive understanding of the psychological mechanisms underlying teasing behaviors, offering actionable insights for the development of school-based intervention programs. The findings of this study contribute to the evidence base for the design of targeted interventions that not only mitigate bullying but also foster emotional and social resilience among adolescents.

Limitations

This study is meaningful as moral sensitivity was identified as a significant factor in teasing; however, there were several limitations. Firstly, because of the nature of the CATS tool and the concept of moral sensitivity, the results pertaining to the two primary variables, namely moral sensitivity and teasing, are constrained in their applicability to practice. This is due to the fact that moral sensitivity is a construct that encompasses not only the individual but also the surrounding context, whereas the CATS tool measures self-focused scores. Further research is required to develop a tool that incorporates teasing experiences, including contextual factors, and to investigate the relationship between teasing and moral sensitivity among adolescents.

The low explanatory power of this study may be attributed to potential factors not addressed, such as teacher attitudes, school culture, which may influence teasing. Future research should consider the comprehensive influences of the teasing. Further investigation is required to elucidate the full extent of the impact of teasing. Furthermore, longitudinal studies are advised to investigate the causal relationship between teasing and its influencing factors over time. As this study employed a cross-sectional design, it was not possible to confirm the direction of causality between teasing and self-esteem or between teasing and moral sensitivity. It is also important to exercise caution when generalizing the results, as the samples included in this study were limited to middle school

students in a specific region and may not be representative of all age groups of adolescents. Further studies suggest expanding the scope to include high school students.

CONCLUSION

High teasing levels were significantly associated with high moral sensitivity, low self-esteem, and low satisfaction with parental relationships and friendships among adolescents. This study highlights the need for more careful counseling from school health professionals in relation to friends of adolescents with high moral sensitivity. In addition, these findings suggest that they can be used as evidence to develop and implement school health-based intervention strategies for adolescents' teasing behavior, self-esteem, moral sensitivity, and relationship satisfaction to prevent school violence. Based on the results of this study, subsequent research could be conducted to assess the efficacy of community health-based intervention strategies in mitigating teasing behavior among adolescents exhibiting high moral sensitivity, low self-esteem, and unsatisfactory relationships. This study also explored the long-term impacts of such interventions on the well-being and social relationships of these adolescents. Additionally, a comparative study examining the differences in teasing behavior among adolescents from different cultural backgrounds could provide further insight into the factors that contribute to this behavior and inform the development of culturally sensitive intervention strategies.

DECLARATION OF INTEREST STATEMENT

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

CONFLICTS OF INTEREST

The authors declared no conflict of interest.

REFERENCES

1. Seo HJ, Jung YE, Kim MD, Bahk WM. Factors associated with bullying victimization among Korean adolescents. *Neuropsychiatric Disease and Treatment*. 2017;13:2429-35. <https://doi.org/10.2147/NDT.S140535>
2. Zhang X, Liu L, Zhou Z, Qi M, Chen L. Prevalence and associated factors of school bullying among adolescents in Inner Mongolia, China. *Heliyon*. 2024;10(17):e37201. <https://doi.org/10.1016/j.heliyon.2024.e37201>
3. Xu JB, Jiang N, Qin Q, Jiang Q. The relationship between negative peer relationship and non-suicidal self-injury in Chinese adolescents: a moderated-mediation model. *Frontiers in Psy-*

- chology. 2022;13:913872.
<https://doi.org/10.3389/fpsyg.2022.913872>
4. Farrington DP. Understanding and preventing bullying. *Crime and Justice*. 1993;17:381-458.
<https://doi.org/10.1086/449217>
 5. Vessey JA, DiFazio RL, Strout TD. Youth bullying: a review of the science and call to action. *Nursing Outlook*. 2013;61(5):337-345. <https://doi.org/10.1016/j.outlook.2013.04.011>
 6. Day S, Bussey K, Trompeter N, Mitchison D. The impact of teasing and bullying victimization on disordered eating and body image disturbance among adolescents: a systematic review. *Trauma, Violence, & Abuse*. 2022;23(3):985-1006.
<https://doi.org/10.1177/1524838020985534>
 7. Heo IY. The effect of emotional maltreatment by parents on revictimization of emotional maltreatment by youth peers- Multiple mediated effects of depression and social withdrawal. *Korean Journal of Social Welfare*. 2017;69(2):63-88.
<https://doi.org/10.20970/kasw.2017.69.2.002>
 8. Szcześniak M, Bajkowska I, Czaprowska A, Sileńska A. Adolescents' self-esteem and life satisfaction: communication with peers as a mediator. *International Journal of Environmental Research and Public Health*. 2022;19(7):3777.
<https://doi.org/10.3390/ijerph19073777>
 9. Lee H. A longitudinal study of bullying victimization and depression: mediating effects of self-esteem and self-resilience. *Journal of the Korean Society of School Health*. 2017;30(3):274-283. <https://doi.org/10.15434/kssh.2017.30.3.274>
 10. Rest JR. Morality. In: Markman JHFEM, editor. *Handbook of child psychology: cognitive development*. 3. New York, NY: Willey & Sons; 1983. p. 559.
 11. Kollerová L, Janošová P, Řičan P. Moral motivation in defending classmates victimized by bullying. *European Journal of Developmental Psychology*. 2015;12(3):297-309.
<https://doi.org/10.1080/17405629.2015.1006125>
 12. Thornberg R, Jungert T. Bystander behavior in bullying situations: basic moral sensitivity, moral disengagement and defender self-efficacy. *Journal of Adolescence*. 2013;36(3):475-483.
<https://doi.org/10.1016/j.adolescence.2013.02.003>
 13. Carmona-Rojas M, Ortega-Ruiz R, Romera E, Bravo A. Aggressive and defensive behaviour, normative and social adjustment in the complex dynamics of school bullying. *Psychosocial Intervention*. 2023;32(3):165.
<https://doi.org/10.5093/pi2023a11>
 14. Kellij S, Lodder GM, Giletta M, Zimmer-Gembeck MJ, Guroğlu B, Veenstra R. Are there negative cycles of peer victimization and rejection sensitivity? testing ri-CLPMs in two longitudinal samples of young adolescents. *Development and Psychopathology*. 2024;36(2):844-856.
<https://doi.org/10.1017/S0954579423000123>
 15. Sjogren B, Thornberg R, Kim J, Hong JS, Kloos M. Basic moral sensitivity, moral disengagement, and defender self-efficacy as predictors of students' self-reported bystander behaviors over a school year: a growth curve analysis. *Frontiers in Psychology*. 2024;15:1378755. <https://doi.org/10.3389/fpsyg.2024.1378755>
 16. Koenig S, Gao Y. Moral decision making in adolescents: the effects of peer attachment, interpersonal affect, and gender. *Journal of Adolescence*. 2022;94(2):166-175.
<https://doi.org/10.1002/jad.12015>
 17. Kubik MY, Maughan ED. The mental health of school-aged youth: a call to action for school nursing. *Journal of School Nursing*. 2022;38(5):426-427.
<https://doi.org/10.1177/10598405221113312>
 18. Rosenberg M. *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press; 1965.
 19. Jon BJ. Self-esteem: a test of its measurability. *Yonsei Nonchong*. 1974;11(1):107-130.
 20. Lim Y, Son K, Shin T, Chung K. A study on the development of the moral sensitivity test for adolescents II. *Journal of Ethics Education Studies*. 2012;29:1-28.
 21. Vessey JA, Horowitz JA, Carlson KL, Duffy M. Psychometric evaluation of the child-adolescent teasing scale. *Journal of School Health*. 2008;78(6):344-350.
<https://doi.org/10.1111/j.1746-1561.2008.00312.x>
 22. Process of translation and adaptation of instruments: WHO guidelines on translation and adaptation of instruments [Internet]. Geneva: WHO; 2020 [cited 2021 February 2]. Available from:
https://www.who.int/substance_abuse/research_tools/translation/en/
 23. Bretl BL, Goering M. Age-and sex-based differences in the moral intuitions of American early adolescents. *Evolutionary Human Sciences*. 2022;4:e33. <https://doi.org/10.1017/ehs.2022.34>
 24. Gauthier-Duchesne A, Hébert M, Blais M. Child sexual abuse, self-esteem, and delinquent behaviors during adolescence: the moderating role of gender. *Journal of Interpersonal Violence*. 2022;37(15-16):NP12725-NP44.
<https://doi.org/10.1177/08862605211001466>
 25. Yontem Z, Ağirkan M. What are the psychosocial predictors of peer bullying among middle school students? *School Mental Health*. 2024;1-16.
<https://doi.org/10.1007/s12310-024-09719-w>
 26. Miller TW. School-related violence: Definition, scope, and prevention goals. In: Miller TW, editor. *School violence and primary prevention*. 2nd ed. New York, NY: Springer; 2023. p. 3-18.
 27. Keliat BA, Tololiu TA, Daulima N, Erawati E. Effectiveness assertive training of bullying prevention among adolescents in West Java Indonesia. *International Journal of Nursing*. 2015;2(1):128-134. <https://doi.org/10.15640/ijn.v2n1a14>
 28. Lin S, Li Y, Sheng J, Wang L, Han Y, Yang X, et al. Cyber-

- victimization and non-suicidal self-injury among Chinese adolescents: a longitudinal moderated mediation model. *Journal of Affective Disorders*. 2023;329:470-476.
<https://doi.org/10.1016/j.jad.2023.02.124>
29. Hutson E, Melnyk MB. An adaptation of the COPE intervention for adolescent bullying victimization improved mental and physical health symptoms. *Journal of the American Psychiatric Nurses Association*. 2022;28(6):433-443.
<https://doi.org/10.1177/10783903221127687>
30. Wink Junior MV, Ribeiro FG, Paese, Zanandrea LH. Early childhood home-based programmes and school violence: evidence from Brazil. *Development in Practice*. 2022;32(2):133-143.
<https://doi.org/10.1080/09614524.2020.1862764>