



Prevalence and Risk Factors of School Bullying Among Iranian Children: Elementary School Students with ADHD

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Abstract

The present study aimed to predict various forms of bullying based on moral disengagement and moral identity subscales among elementary school students. For this purpose, 450 elementary school students, consisting of 230 boys and 220 girls, were selected using cluster sampling and simple random sampling methods from the entire population of elementary school students. Participants completed three questionnaires: bullying, moral disengagement and moral identity. The data were analyzed using multivariate regression analysis with SPSS software. The results indicated that both moral disengagement and moral identity subscales significantly predicted bullying among students with ADHD ($p \leq 0.05$). Consequently, it can be inferred that, in line with the concept of moral agency, investigations into student bullying should consider the mechanisms of moral disengagement and moral identity. Specifically, bullying was positively associated with moral disengagement and negatively associated with moral identity.

Keywords: Bullying; Moral Disengagement; Moral Identity; ADHD; Elementary School Students

Introduction

Research findings underscore that bias-based bullying, prejudice, and discrimination persist as prevalent and deleterious forms of school-based aggression (Newman & Fantus, 2015; Toomey & Storlie, 2016). Approximately 40% of secondary school students encounter bullying experiences in educational settings stemming from factors such as racial or ethnic background, religious affiliation, gender, sexual orientation, or physical impairments.

Indeed, school-based bullying is delineated as a pattern of recurrent and chronic negative behavior directed towards a student or a collective cohort, distinguished by an asymmetry of power dynamics between the aggressor and the target. It encapsulates a form of aggression wherein students leverage their influence to inflict harm upon individuals or groups during school attendance or engagement in various scholastic pursuits. Prevalent manifestations of bullying encompass physical aggression (e.g., physical assault, theft, property damage), verbal abuse (e.g., derogatory language, taunting, harassment), social exclusion (e.g., ostracism from peer groups, rumor spreading, undermining friendships), sexual misconduct (e.g., lewd comments, unwanted physical contact, sexual propositions), and electronic or cyberbullying (e.g., dissemination of malicious rumors, derogatory remarks via digital platforms such as mobile devices, email, or social media) [1,2].

Several predisposing risk factors may contribute to the propagation of bullying within educational environments, spanning individual, peer, institutional, parental, societal, and communal domains. Noteworthy among individual risk factors are conditions such as underweight or obesity, elevated socioeconomic status, male gender, and substandard academic performance, all of which heighten susceptibility to victimization by bullying behaviours. Likewise, peer-related risk factors encompass nonconformity with peer norms and a history of delinquent behavior. Children exhibiting bullying tendencies may also hail from socioeconomically disadvantaged backgrounds characterized by authoritarian parental styles.

Given that bullying constitutes an inappropriate and unwarranted means of exerting dominance, control, or coercion over others, and serves as a social malpractice and a tool for achieving objectives such

as dominance, control, and popularity within a peer group, bullying behavior inherently denotes an unethical act, as it contravenes fundamental rights of children regarding education, freedom, and safety.

A cognitive-social theory explicitly affirming the role of self-regulatory moral processes in negative behaviors is Bandura's social cognitive theory of moral agency. Specifically, Bandura proposes the concept of moral disengagement to refer to the social and cognitive processes through which an individual can justify their unethical behavior, thus typically avoiding feelings of guilt. Bandura outlines eight mechanisms of moral disengagement, comprising four broad categories through which moral self-regulation is relinquished: cognitive restructuring, minimizing the role of the agent, disregarding or distorting consequences, and dehumanizing or blaming the victim.

Through these enumerated psychological mechanisms, individuals can ethically justify their unethical behaviors without experiencing the negative sanctions typically associated with immoral conduct, such as feelings of shame and guilt. Indeed, moral disengagement extends beyond military contexts and criminal violence to everyday situations wherein individuals commonly engage in behaviours that accrue benefits to themselves at the expense of others. Hence, the theory of moral disengagement may provide a useful framework for understanding antisocial behaviours, including aggression and bullying, among school-aged children.

In fact, the concept of moral disengagement has garnered significant attention in the literature on bullying. Nearly two decades of research have demonstrated that most children and adolescents

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who exhibit moral disengagement mechanisms tend to engage more readily in various forms of aggressive behaviors. Additionally, moral disengagement and bullying behaviours in various forms of aggression have been found to exist from at least mid-childhood onward. Conversely, moral disengagement has been found to have a negative relationship with prosocial behaviours. Multiple studies have shown that bullying and pro-bullying behaviours (assisting and reinforcing the bully) are more commonly observed in students with higher levels of moral disengagement [3-5].

Several moral theories view moral identity as a key source of motivation for moral behavior. Moral identity entails thinking about and perceiving oneself in terms of moral attributes such as kindness, justice, and generosity. Moral identity, in essence, derives from an understanding of morality and moral emotions, which serve as stronger and more enduring sources of moral motivation.

Indeed, contemporary research has demonstrated that individuals with higher levels of moral identity exhibit greater adherence to ethical standards. Moral identity is complex and multifaceted, making its definition and operationalization challenging, and generally involves a coherence between an individual's moral beliefs and their sense of self. Consequently, subsequent research in ethics has focused on the construction of moral identity structure [6-8].

In general, moral identity pertains to the extent to which an individual's morality is tied to their personal identity. The concept of moral identity in psychology largely grew out of the work of Blasi, who proposed that moral identity may aid in moral judgments and prompt individuals to engage in appropriate moral actions. We must first assess our responsibility in moral judgment, whether we feel responsible for that moral action or not, which to a large extent depends on our identity. If our judgment of responsibility for that action aligns with our identity, motivation for engaging in ethical behavior is generated, as individuals guided by their identities are more inclined to act accordingly. There is limited empirical knowledge regarding the processes and predictors of moral identity development. Moral identity may involve the integration of moral systems and self; additionally, it may involve the formation and increased access to moral schemas. Furthermore, evidence suggests that the evolution of personal identity formation and moral understanding may be prerequisites for moral identity development.

Ultimately, engagement in social services and religious activities, as well as having competent and authoritative parents, may facilitate the development of moral identity. In fact, some argue that moral identity may be the best predictor of moral commitment and behavior. Mechanisms associated with and dependent on moral identity formation have been conceptualized. These mechanisms may include self-integration, narrative identity, goals, and moral schemas.

While some of these studies adopt a personality-based approach and others adopt a cognitive-social approach, all these perspectives consistently link moral identity to ethical behavior. Therefore, based on the presented research, both moral disengagement and moral identity can be considered predictors of bullying and can be examined.

Moreover, some researchers believe that there is a close relationship between psychological maladjustment and bullying, while others disagree. There is evidence suggesting a bidirectional relationship between psychological maladjustment and bullying. According to Hwang and children exhibiting disruptive behaviours, such as attention-deficit/hyperactivity disorder (ADHD), may be more involved in peer violence. A study conducted in Finland showed

that ADHD is the most common psychiatric disorder among bullied children. Numerous studies examining risk factors for bullying have also reported that children with ADHD are more likely to be involved in bullying, both as aggressors and victims, compared to neurotypical children. Bullying also predicts a range of violent and non-violent behaviours. Based on a multivariate analysis controlling for lifelong psychiatric disorders, individuals with a history of bullying are almost 11 times more likely to exhibit conduct disorder than non-bullied peers and are almost eight times more likely to meet criteria for antisocial personality disorder and family history of antisocial behavior. Students who are bullied at school are more likely to experience serious psychological, social, educational, and mental health problems [9,10]. However, further research is needed on the psychological factors involved in bullying. Therefore, the present study aims to investigate the following hypotheses:

H1: Components of moral disengagement can be predictors of bullying among students with ADHD.

H2: Components of moral identity can be predictors of bullying among students with ADHD.

Research methodology

Method: The present research employs a correlational method, which was conducted using correlation and linear regression analysis. Data analysis was performed using SPSS software.

Population: The population of this study includes all Iranian elementary school students diagnosed with ADHD.

Sampling method and sample size: Generally, determining the sample size can be between 5 and 15 observations per measured variable: $5q < n < 15q$, where q is the number of observed variables or the number of items (questions) in the questionnaire and n is the sample size. It should be noted that the sample size should not be less than 200 individuals. $5(46) < n < 15(46)$ Therefore, according to the above formula, the number of sample individuals can range from 230 to 690, with the median being 450 individuals selected using cluster random sampling and stratified by grade level and gender. Finally, the research samples consisted of 230 male students and 220 female students.

Tools used in the research

Thorneberg and Jungert bullying questionnaire: A 6-item scale was used to measure bullying behavior among participants. The reliability of this questionnaire was reported as 72% using Cronbach's alpha method. The validity of this tool was confirmed through face and content validity.

Thorneberg and Jungert ethical breach questionnaire: An 18-item scale was used to measure ethical breaches in bullying situations. The reliability of this questionnaire was calculated as 86% using Cronbach's alpha method. The validity of this tool was confirmed through face and content validity.

Aquino and Reed ethical identity questionnaire: This self-report scale, developed by Aquino and Reed in 2002, measures "self-importance ethical identity" and has been validated. It consists of two sub-scales: internalization (questions 1-2-4-7) and symbolization (3-5-6-8-9). The reliability of this questionnaire was reported as 75% using Cronbach's alpha method. The validity of this tool was confirmed through face and content validity.

Results

Descriptive statistics related to the research variables are presented

in Table 1. According to the results of this table, in the Ethical Breach Questionnaire, among the 7 investigated components, the mean of the “Transfer of Responsibility” component (10.72) is higher than the other components. In the Bullying Questionnaire, the highest mean is related to the “Relational Bullying” component (4.71). Also, in the Ethical Identity Questionnaire, the mean of the internalization component (30.74) is higher than the means of the other components, with a significant difference (Table 1).

Before conducting the regression analysis, the assumptions of linearity, correlation between variables, and normality of their distribution were assessed, and all assumptions were met (Table 2).

If observed in Table 2, the adjusted coefficient of determination (ADJ.R2) indicates that the sub-scales of moral disengagement predict 28 percent of the variance in bullying. Furthermore, considering the beta values for each of the subscales, it can be stated that with an increase of one standard deviation in the score of moral justification, labeling without guilt, comparison of benefits, shifting responsibility, diffusion of responsibility, and victim attribution, the bullying score will increase by 0.13, 0.36, 0.19, 0.21, 0.28, 0.02, and 0.10 standard deviations, respectively. Therefore, by considering the values of P-Value, F and T, it can be concluded that except for the sub-scale of victim attribution, the other subscales are at a desirable level of significance, and thus the first hypothesis of the study is generally confirmed while the null hypothesis is rejected ($P\text{-Value}\leq 0.05$). Hence, it can be said that the sub-scales of moral disengagement (except for victim attribution) can be suitable predictors for bullying. In other words, with an increase in moral disengagement, the level of bullying also increases (Table 3).

Table 3 shows that the adjusted coefficient of determination (ADJ.R2) for the two sub-scales of Internalization and Symbolization predicts 20% of the variance in bullying. Also, considering the beta values for each of the sub-scales, it can be stated that with an increase of one standard deviation in the score of Internalization, the bullying score will increase by 0.36 standard deviations. Similarly, with an increase of one standard deviation in the score of Symbolization, the bullying score will increase by 0.13 standard deviations. Therefore, considering the values of P-Value, F, and T, it can be concluded that the second hypothesis of the research is confirmed, and the null hypothesis is rejected ($P\text{-Value}\leq 0.05$). Hence, it can be said that the sub-scales of ethical identity can also predict the level of bullying. That is, as ethical identity increases, the level of bullying decreases.

Discussion

Bullying is commonly understood and labelled as aggression. However, in reality, bullying is a specific form of aggression that occurs under certain conditions. According to experts, bullying occurs when there is an imbalance of power between individuals, which can take various forms. The bully may be physically stronger, verbally more adept at tormenting the other person, or may possess greater social skills, a more dominant social position, or more supporters. In other words, bullying is used as a tool to achieve goals such as dominance and popularity within a peer group. Therefore, bullying behavior signifies an unethical act, as it violates children’s fundamental rights to education, freedom, and safety.

In this study, alongside the issue of bullying as a predictor variable,

Table 1: Descriptive statistics related to research variables.

Variables	Mean	Standard Deviation
Moral justification	4.46	3.21
Labeling without malice	6.73	3.87
Utilitarian comparison	5.85	3.65
Transfer of responsibility	10.72	5.21
Blame dispersion	6.67	3.43
Severity of consequences	10.01	5.48
Documentation of bullying behavior towards the victim	6.10	3.47
Physical bullying	0.489	1.05
Verbal bullying	1.56	1.58
Relational bullying	4.71	2.91
Internalization	30.74	5.06
Symbolization	24.24	7.23

Table 2: Regression coefficients of subscales of moral disengagement in predicting bullying among students.

Predictor variables:	B	SE	Beta	T	P
Moral Justification	0.127	0.055	0.138	2.253	0.003
Euphemistic Labeling	0.203	0.034	0.368	5.441	0.011
Advantageous Comparison	-0.161	0.046	-0.191	-3.602	0.001
Displacement of Responsibility	0.183	0.045	0.217	3.763	0.001
Diffusion of Responsibility	-0.169	0.026	-0.285	-5.854	0.001
Distortion of Consequences	-0.024	0.054	-0.026	0.475	0.639
Dehumanization of Victims	0.095	0.044	0.124	2.126	0.035
Note:	R=0.545	F=24.720	R2 =0.295	ADJ.R2=0.282	

Table 3: Regression coefficients of subscales of moral identity in predicting bullying among students.

Predictor variables:	B	SE	Beta	T	P
Internalization	-0.221	0.033	-0.365	-7.203	0.001
Symbolization	-0.058	0.021	-0.137	-2.713	0.007
Note:	R=0.456;	F= 54.373;	R2 =0.208;	ADJ.R2=0.202	

the concept of “ethics” was also chosen as a predictive variable, focusing on two dimensions: “ethical breach” and “ethical identity”. To better understand the concept of bullying in the realm of ethics, Bandura’s cognitive-social theory was chosen as an appropriate conceptual framework, in which the ethical dimensions of bullying are also described. This theory, which clearly emphasizes the role of moral processes in negative behaviours within the cognitive-social framework, is Bandura’s Social Cognitive Theory of Moral Agency. Bandura introduced the concept of moral disengagement for social and cognitive processes in which individuals can justify their unethical behavior without feeling guilty.

As mentioned at the beginning of this study, the concept of moral disengagement in the context of bullying has received significant attention. Recent research has shown that individuals who use mechanisms of moral disengagement are more likely to engage in bullying behavior. In fact, moral disengagement is positively associated with aggressive and antisocial behaviours and negatively correlated with prosocial behaviours. Another variable of interest is moral identity. The formation of moral identity leads to increased ethical consistency in individuals and shapes their particular perspective on themselves. Researchers believe that what facilitates adherence to ethical behavior is the formation of moral identity, making ethical values an intrinsic part of an individual’s personality. Some argue that moral identity is solidified during adolescence and is closely related to the self. In fact, moral identity is also an important source of motivation for ethical action, leading to greater alignment between personal ethical principles and ethical behavior.

In the first hypothesis of the study, it was suggested that the sub-scales of moral disengagement are suitable predictors of bullying in students. Since the obtained statistic value ($F=24.718$) falls within the confidence level ($p\text{-value} \leq 0.05$), the null hypothesis is rejected, and the research hypothesis is confirmed. Thus, it is evident that there is a relationship between moral disengagement and bullying, and the sub-scales of moral disengagement can be predictors of the phenomenon of bullying. However, it should be noted that out of the 7 sub-scales of moral disengagement, one of them - namely, lack of awareness of the consequences - did not show a significant relationship, which warrants further investigation.

In support of the results of this hypothesis, numerous studies were found, with the most significant ones being cited here: Kokkinos and Kipritsi demonstrated in their study that moral disengagement was associated with high levels of bullying. They also showed that an increase in moral disengagement led to an increase in bullying behavior among students. Thornberg, Pozzoli, Gini, and Jungert who examined the effects of moral disengagement on bullying in students, stated in their results that moral disengagement was positively related to bullying, confirming the positive relationship between moral disengagement and bullying in the present study.

Furthermore, Nansel and colleagues found that students who scored low on moral disengagement did not show a tendency toward bullying compared to other students; however, when moral disengagement scores were high, bullying behavior increased. Wang, Yang, Gao, and Zhao also examined the variables of this hypothesis in their study. The results indicated that moral disengagement affects bullying behavior. Specifically, bullying behavior is more commonly observed at lower levels of moral disengagement. Hymel, Rocke, and Bonanno investigated the process of moral disengagement in relation to bullying, and their results were consistent with the hypothesis under study. This research also demonstrated a significant association between

the ability to disengage from morality, self-sanctions, and aggressive behavior (including bullying). Perren and Gutzwiller also examined moral disengagement in relation to traditional and cyberbullying. The results showed that moral disengagement, especially the moral justification scale, predicted traditional bullying but not cyberbullying. The predictive power of moral disengagement for bullying was also confirmed in the present study.

In addition to the aforementioned studies, research by Grey and Wegner, Bierhoff Eisenberg Almeida, Caria, and Marinho, Hyde, Shaw, and Moilanen, Bandura, Perren and Gutzwiller, Perren, Gutzwiller, Malti, and Hymel, Helkama, Altevogt, Bandura, each focusing on the role of one dimension of moral development on antisocial behaviors (such as bullying), are supportive of the results obtained from the first hypothesis of the study. There is almost no research that opposes the significant role of moral development in bullying.

In the second hypothesis of the study, it was proposed that the sub-scales of moral identity are suitable predictors of bullying behavior in students. Since the obtained statistical value ($F=54.371$) reached significance level ($P\text{-Value} \leq 0.05$), the null hypothesis was rejected, confirming the second hypothesis of the research. Therefore, it is evident that the sub-scales of moral identity are appropriate predictors of bullying behavior.

The results of Wang, Yang, and Li’s study on violence and bullying among adolescents also support the results of the second hypothesis. In their study, Wang and colleagues stated that although aggression plays an important role in bullying, attention should also be paid to the underlying mechanisms of bullying. They identified identity as one of the factors related to bullying. Additionally, the findings of Blasi, Kohlberg and Damon, Hart, Yates, Fegley, and Wilson, Freeman, Carter, and Reimer were consistent with the results of this hypothesis. Furthermore, Kokkinos and Read in their research on the importance of moral identity somewhat confirmed the results of this hypothesis, stating that moral identity can influence individual ethical performance through self-regulatory mechanisms. In fact, these self-regulatory mechanisms are the main competitors of moral disengagement mechanisms, and individuals with positive moral identity can reduce moral disengagement mechanisms and create negative emotions toward unethical behaviours, thereby reducing unethical behaviours (such as bullying).

In confirmation of the results of this hypothesis, based on the pieces of research conducted in recent decades, it can be said that researchers have increasingly become convinced that identity may play an important role in ethical performance, and above all, the studies by Blasi have been a promising start for understanding the relationship between identity and ethical performance.

Conclusion

In moral psychology, due to the dominance of the cognitive developmental approach by Kohlberg and Piaget, ethics in individuals has long been examined solely based on their arguments. However, in recent decades, extensive research has been conducted, which considered ethical reasoning as an insufficient predictor of moral behavior and proposed other predictors. One of the most important of these predictors is moral disengagement. Another predictor of ethical behavior that should be considered is ethical identity. A positive ethical identity stimulates moral motivations in individuals. By examining the backgrounds of moral development and bullying more closely, one can realize that all these factors have their roots in the individual’s

morality itself. Therefore, focusing on the concept of “self” and strategies to strengthen moral self can lead individuals to more easily set aside mechanisms of moral disengagement and, with the help of their ethical identity, decide to refrain from unethical behaviours such as bullying. A limitation of this study was the low cooperation of school administrators and teachers in implementing the questionnaires. Due to the perceived importance of the research topic, it was feared that its results might indicate a low level of morality among their students. It is recommended that in a broader study, the role of culture and race in ethical identity and inclination toward bullying should be investigated, preferably with samples including diverse cultural backgrounds.

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