

School Social Climate and Generalized Peer Perception in Traditional and Cyberbullying Status*

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Abstract

The purpose of this study was to determine whether there were any differences in perceptions of school social climate and peers in terms of bullying status, and to investigate the psychometric properties of the School Social Climate and Generalized Peer Perception Scales. The students participated from six different cities in Turkey were in secondary and high schools. The sample consisted of 1263 students (612 male, 651 female), of mean age 14.92 years (SD = 2.07). The results revealed that adolescents who were not involved both in school and cyberspace perceived the school and their teachers more positively than bullies and bully-victims, and also victims in cyberspace perceived their teachers more positively than bullies. Furthermore, not involved adolescents in school and cyberspace perceived other students in school more positively than bullies. In terms of peer perception, not involved adolescents and bullies in school and cyberspace significantly differed from bully-victims, and also not involved adolescents and bullies in school differed significantly from victims; not involved adolescents and bullies had more positive perception about their peers. Results also revealed that the Turkish adaptation of these two measurement instruments had sufficiently high validity and reliability.

Key Words

Traditional Bullying, CyberBullying, Bullying Status, School Social Climate, Generalized Peer Perception.

Since 1980, there has been growing interest in the influences of extra-familial contexts on human development (Bronfenbronner, 1979). Schools are one of the longest-term and most comprehensively organized context in shaping human development

and there have been many researches about the components of schools and school climate (Çalık & Kurt, 2010; Hanna, 1998; Haynes, Emmons, & Comer, 1993; Hoy, Smith, & Sweetland, 2002; Johnson & Johnson, 1993; Johnson, Johnson, & Zimmerman, 1996; Khoury-Kassabri, Benbenishty, & Astor, 2005; Kuperminc, Leadbeater, & Blatt, 2001; Loukas, Suzuki, & Horton, 2006; Manning & Saddlemire, 1996; Ryan & Patrick, 2001). Children spend more time in schools than in any other place outside their homes from the time they first enter school until they complete their formal schooling. It has been argued that schools play a critical role in children's cognitive and social development, but researchers have only recently been interested in how school and classroom experiences influence children's feelings, beliefs and behavioral choices (Eccles & Roeser, 2005). Peers are also an integral part of school that shapes the social and academic life of individual particularly during adolescence

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(Bee & Boyd, 2007; Hortaçsu, 2003; Patterson, DeBaryshe, & Ramsey, 1989; Rabiner, Keana, & MacKinnon-Lewis, 1993; Rubin, Chen, Coplan, Buskirk, & Wojslawowics, 2005).

The school and the peer group, as social contexts apart from family, provide several means and opportunities for children and adolescent development and bring about some risks at the same time. For example, schools have been the primary social contexts for studying bullying (Olweus, 1993; Whitney & Smith, 1993). Bullying is usually taken to be a subset of aggressive behavior, characterized by an imbalance of power, and often by repetition (Olweus & Limber, 1999). However, cyberbullying is a relatively new type of bullying that describes forms of bullying using electronic devices, mainly mobile phones and the Internet, that have become prevalent in the last decade as the use of these devices has spread rapidly among adolescents (Kowalski & Limber, 2007; Li, 2006; Ybarra & Mitchell, 2004).

Several studies have examined the impact of various contextual characteristics of school and school social climate on bullying. For example, high-conflict and disorganized schools, low levels of supervision within school settings, disciplinary harshness, safety problems, poor commitment to school and negative peer interactions have been associated with higher rates of bullying (e.g. Andreou, 2000; Bayraktar, 2009; Brown, Birch, & Kancherla, 2005; Craig, Pepler, & Atlas, 2000; Çalık, Özbay, Özer, Kurt, & Kandemir, 2009; Hazler, Hoover, & Oliver, 1992; Hilooğlu, 2009; Kasen, Barenson, Cohen, & Johnson, 2004; Kochenderfer & Ladd, 1996; Olweus & Limber, 1999; Varjas, Henrich, & Meyers, 2009; Welsh, 2000; Williams & Guerra, 2007). Moreover, positive relations between teachers and students increase the likelihood of acceptance of school values on part of students and their behavioural adaptation (Bryk & Schneider, 2002; Juvenen & Murdock, 1995; Urdan & Maehr, 1995) and these students are less involved in bullying (Attar-Schwartz, 2009; Freiberg, 1998; Hamre & Pianta, 2001; Lee & Wong, 2009; Roeser, Eccles, & Sameroff, 1998; Yaban, 2010).

The influence of peers has also been examined. In their social interactions, adolescents observe both their own behaviours and reactions of their peers, make inferences and shape their behaviors accordingly (Bishop, 1999; Crick & Dodge, 1994; Dodge & Coie, 1987; King & Terrance, 2006; Ladd & Troop-Gordon, 2003; Rudolph, Hammen, & Burge, 1995; Tolson & Urberg, 1993; Wall, Power, & Abrona,

1993). Within the school setting, peers can escalate bullying through encouragement and validation (Salmivalli, Huttunen, & Lagerspetz, 1997; Salmivalli & Isaacs, 2005; Salmivalli, Ojanen, Haanpää, & Peets, 2005); they can also provide a supportive social context that encourages acceptance, belonging and trust, which in turn, decreases the likelihood of being victimized (Totan, 2008). Consistent with these findings, it is shown that involvement in cyberbullying is negatively related with perceiving peers as trustable, sympathetic and helpful (Williams & Guerra, 2007). In sum, researchers have argued that peer support has a dual role both as preventing victimization and reinforcing bullying.

Purpose

The purpose of the present study was to examine the psychometric properties of the School Social Climate Scale (Hanif & Smith, 2010) and Generalized Peer Perception Scale (Salmivalli et al., 2005) with Turkish urban adolescents, and to contrast whether there were any differences in perceptions of school social climate and peers in terms of bullying status (bully, victim, bully-victim, not involved), to compare with the recent literature examining correlates and predictors of cyberbullying.

Method

Participants

The sample consisted of 1263 (48.5 % male, 51.5 % female) secondary and high school students with an age range of 12 to 18 years ($M = 14.92$, $SD = 2.07$). Participants were selected from six different cities in Turkey including metropolitan and other developing large-to-small scale cities in the east and south part of the country. Parental educational level was assessed with an eight-point scale (1 = illiterate to 8 = graduate), and the mean was 4.36 ($SD = 1.76$) for mothers and 5.04 ($SD = 1.68$) for fathers. Accordingly, a majority of the mothers completed secondary school and a majority of the fathers completed high school. Perceived level of income was assessed with a five-point scale ($M = 3.20$, $SD = .80$) and it seems that students came mainly from middle income families.

Measures

The age and gender of adolescents, parents' education level and socioeconomic status were identified from a Demographic Information Form.

Traditional Bullying Inventory: Traditional Bullying Inventory (Uçanok, Karasoy, & Durmuş, 2011) consists of 31 items with 6 subscales (physical, verbal, threatening, relational, attacks on property, social exclusion). Participants were asked to report their experiences on a 4-point Likert type scale as a bully or a victim for the last six months (1 = *never*, 4 = *more than three times*). The internal consistency was .90 for traditional bullying and .91 for traditional victimization. Originally, this scale was based on The Multidimensional Peer-Victimization Scale (Mynard & Joseph, 2000) to assess physical victimization, verbal victimization, social manipulation, and attacks on property. The adaptation of the scale was carried out by Gültekin and Sayıl (2005) for 11-16 years old Turkish adolescents.

Cyberbullying Inventory: Cyberbullying Inventory (Uçanok et al., 2011) originally based on CBI (Erdur-Baker & Kavşut, 2007; Topçu, 2008). It consists of 26 items which includes bullying through e-mail, instant messaging in a chat room, on a website, or through digital messages or images sent to a cell phone. Participants were asked to report their experiences on a 4-point Likert type scale providing for being a bully or a victim for the last six months (1 = *never*, 4 = *more than three times*). The internal consistency was .93 for cyberbullying and .92 for cybervictimization.

Generalized Perception of Peers: Generalized Perception of Peers (Salmivalli et al., 2005) was assessed with 13 items describing positive and negative qualities of children's peers such as supportiveness, kindness and trustworthiness versus unsupportiveness, hostility and untrustworthiness (e.g. "They can really be relied on" or "They are hostile"). The scale values range from 1 (no, not at all) to 4 (yes, completely). The internal consistency of the original scale was .89.

The PCF analysis was performed by forcing the data to a one-factor solution as in the original form. This single factor solution accounted for 44.3 % of the variance and the Cronbach alpha coefficient was .90 in the present study.

School Social Climate Scale: School Social Climate Scale (Hanif & Smith, 2010) contains 3 subscales and there are 33 items scored on a 5 point scale ranging from 1 (strongly disagree) to 5 (strongly agree). Items assessed perceptions of the school generally (e.g. "Do you feel your school is a safe and secure place?"), teachers (e.g. "Do you think teachers in your school are friendly with students?") and other students (e.g. "Do you think students in your

school are friendly and cooperative?"). The inter-rater consistency of the original scale was .78.

Since the correlations between subscales were moderately high, the PCF analysis with promax rotation (Field, 2007; Tabachnick & Fidell, 2007) was conducted and initial solution included 5 factors with eigenvalues over 1 according to Kaiser Criterion. The total variance accounted for this solution is 62.3 %. But one factor was negatively correlated with other factors in scale including two reverse items from school (item 6 "has overly stressed discipline and rules") and teachers subscale (item 19 "are strict in classroom discipline"). Therefore scoring of these two items was modified. In addition, item-total correlations of three items (items 23, 24 and 30) in student subscale were under .30 and the Cronbach alpha coefficient for this factor was .60. Therefore these items were excluded from the scale. As a result, PCF analysis was repeated to the 30 items scale. Three-factor solution accounted 57.2 % of the variance and the three factors were named as school, teachers and students, as in the original form of the scale. Cronbach alphas were found to be .96 for the total scale and .90, .94 and .88 for the subscales respectively.

Procedure

The institutional ethics committee approved the study and permission was obtained from the Ministry of National Education. Data were collected between March and May 2010. Adolescents participated in the questionnaire sessions on a voluntary basis, in their classrooms during a regular school day. Completion of the questionnaires required approximately 50 minutes.

Results

In order to determine four groups of bullying status, as bully, victim, bully/victim and not involved, we computed means and standard deviation scores of the bullying and victimization forms from the Traditional Bullying Inventory and Cyberbullying Inventory. The adolescents who had +1 SD above the mean on bullying scores were categorized as bully. The same procedure was performed to identify the victims. The adolescents who had scores +1 SD above the mean on both bully and victim scores were categorized as bully/victims. The participants who had scores out of the above criteria were called not involved.

Firstly, a MANOVA was conducted to examine the

effects of traditional bullying status on school social climate. The results revealed that there was a main effect of bullying status on school ($F_{(3,1253)} = 9.70, p < .001, \eta^2 = .02$), teachers ($F_{(3,1253)} = 11.26, p < .001, \eta^2 = .03$) and students ($F_{(3,1253)} = 7.95, p < .001, \eta^2 = .02$). Further post-hoc analyses yielded that not involved adolescents perceived the school and teachers more positive than bullies and bully-victims, they perceived other students more positive than bullies ($p < .05$).

Secondly, a MANOVA was conducted to examine the effects of cyber bullying status on school social climate. The results revealed that there was a main effect of bullying status on school ($F_{(3,1247)} = 13.50, p < .001, \eta^2 = .03$), teachers ($F_{(3,1247)} = 13.56, p < .001, \eta^2 = .03$) and students ($F_{(3,1247)} = 9.47, p < .001, \eta^2 = .02$). Further post-hoc analyses yielded that not involved adolescents perceived school and teachers more positive than bully and bully-victims. They perceived other students more positive than bullies. Victims perceived teachers more positive than bullies ($p < .05$).

Thirdly, an ANOVA was conducted to examine the effects of traditional bullying status on peer perception. The results revealed that there was a main effect of bullying status on peer perception ($F_{(3,1257)} = 41.22, p < .001, \eta^2 = .09$). Further post-hoc analyses yielded that not involved and bullies perceived their peers more positive than victims and bully-victims ($p < .05$).

Lastly, an ANOVA was conducted to examine the effects of cyber bullying status on peer perception. The results revealed that there was a main effect of bullying status on peer perception ($F_{(3,1250)} = 6.63, p < .001, \eta^2 = .02$). Further post-hoc analyses yielded that not involved and bullies perceived their peers more positive than bully-victims ($p < .05$).

Discussion

One aim of the present study was to test the psychometric properties of measurement instruments and the results indicated that reliability and validity values of the School Social Climate Scale and Generalized Peer Perception Scale were satisfactory. Our findings implied that peer perception and three dimensions of school climate can be used as reliable and valid measure for future studies both in secondary and high school students in Turkish sample. However, there is an interesting point that should be emphasized. The two reverse items including strict discipline and rules in school and class showed a different pattern in our sample. It

may be explained in terms of cultural difference. In a country such as ours, which is more collectivist and traditional compare to U.K. (although original research sample also includes Pakistani students living in England), school personnel and teachers may be perceived as authority figures and responsible for applying the rules both by students themselves and their parents, so students may evaluate or interpret these type of discipline techniques more positively.

A second aim was to examine differences in scores by bullying status group. The findings showed that adolescents not involved in bullying both in school and cyberspace perceived their school and teachers more positively than bullies and bully-victims. Additionally, cyber victims had a more positive perception of their teachers than bullies. In addition, adolescents not involved in bullying, both in physical and virtual environments evaluated other students in their school more positively than bullies. Overall, these results suggest a similar pattern with previous findings (e.g. Arıman, 2007; Batsche & Knoff, 1994; Bayraktar, 2009; Brand, Felner, Shim, & Seitsinger, 2003; Bilgiç, 2007; Craig et al., 2000; Goodenow, 1993; Hoover, Oliver, & Thomson, 1993; Kasen et al., 2004; Varjas et al., 2009; Kuperminc, Leadbeater, Emmons, & Blatt, 1997; Matson & Ollendick, 1988; Pekel-Uludağlı & Uçanok, 2005; Romeo, 1996; Sprott, Jenkins, & Dobb, 2005; Welsh, Greene, & Jenkins, 1999; Williams & Guerra, 2007) and expand the recent literature investigating the predictors of traditional forms of bullying and cyberbullying. Moreover, these findings may be accepted as an indirect support for the potential overlap between traditional and electronic bullying means that victims, bullies and bully/victims were likely to retain their roles across the school and cyberspace (Beran & Li, 2005; Raskauskas & Stoltz, 2007; Topçu, 2008). In this respect, it was found that there was 63 % and 68 % overlap between traditional and cyberbullying in the pilot study (Burnukara & Uçanok, 2012) and main study of a large-scale project (Uçanok et al., 2011) which also included this study.

However in terms of peer perception, our findings revealed a somewhat different pattern for traditional and cyberbullying. Both bullies and adolescents that are not involved in bullying in school evaluated their peers more positively than victims and bully-victims. These results are consistent with research asserting that peer support has a dual function in bullying (Cowie, 2004; Totan, 2008). On the other hand, those who are not involved in cyberbullying and cyber bullies perceive their peers more positively than bully-victims. It may be

explained in a certain extent in terms of anonymity of cyberspace. Victims may have limited knowledge about their perpetrators and not correlated these experiences with their peer group.

This study has some limitations. Firstly, it relies on self-report measures to assess school climate and peer perceptions as well as bullying experiences in school and cyberspace. Secondly, despite the fact that school environment is a much more comprehensive concept, the scope of this study is limited to how the students evaluate the general characteristics of the school, their teachers and other students in school subjectively. Finally, it is not possible to suggest a causal connection between school environment and involvement in bullying owing to the cross-sectional nature of the study. Despite these limitations, this study has validated some research instruments for future use in Turkish schools, and the findings of the study support the views emphasizing that creating a positive school atmosphere is a way to diminish violent behaviors and specifically bullying both in school and cyberspace.

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