Bullying in Schools: What Can We Glean from Self-concept Theory?

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There is a growing recognition that bullying, violence, aggression, victimisation, and peer-relation difficulties in schools are pervasive problems with long-term psychosocial consequences for bullies, victims, other classmates, and communities. Bullying is linked to: diminished school performance, poor mental health, delinquent behaviour and future criminality. Bullying also impacts upon schools and communities, leading to: unsafe schools; alienation from the school community; distrust amongst students; formation of formal and informal gangs as a means either to instigate bullying or gain protection from being bullied; low staff morale; higher occupational stress; and a poor educational climate. The present paper presents the results of a comprehensive study examining the relation of multiple dimensions of bullying and victimisation as measured by the Adolescent Peer Relations Instrument: Bully/Target (Parada, 2000) to multiple dimensions of self-concept as measured by the Self-Description Questionnaire – Short (SDQ II – S) (Marsh, Ellis, Parada et al., 2005). 3500 high school students in NSW, Australia were assessed in relation to these constructs at three time points during one school year. Results presented include: cross-sectional analysis of the relation between bullying and self-concept; and longitudinal structural equation models of this relation over time. Implications based on the findings for intervention are also discussed.

Bullying is a growing and significant problem in many schools around the world (Smith et al., 1999). It is estimated that at any one time at least 1 in 6 students are bullied on weekly basis at school (Rigby & Slee, 1999). Similar figures have been found in schools in Canada, Scandinavia, Ireland and England (Peter K. Smith et al., 1999). Bullying is a deliberate act designed to inflict physical and psychological harm. It involves an intentional hurtful action directed toward another person or persons, by one or more persons, and involves a complex interplay of dominance and social status (Sutton, Smith, & Swettenham, 1999). Bullying incorporates a wide range of aggressive and social behaviours such as name calling, extortion, physical violence, slander, group exclusion, damage to property, and verbal intimidation (Smith & Sharp, 1994). Bullying is typically repetitive in nature whereby bullies continue to bully victims for extended periods of time (Rigby, 1996). At least three forms of bullying are usually recognised in the literature: verbal, physical and social exclusion (e.g. Crick et al., 2001; Kaukiainen et al., 1999; Rigby & Slee, 1999; Salmivalli, Kaukiainen, & Lagerspetz, 2000). A substantial body of evidence has documented the array of detrimental long-term negative effects, of bullying on victims and perpetrators (see Hawker and Boulton (2000) for a review) which includes links between bullying behaviours at school and future criminality, poor mental health and diminished school performance.

The role of self-concept in bullies and victims might provide some insights into why students engage in bullying and why they remain victims. Self-concept can be defined as cognitive evaluations that an individual has about themselves, their thoughts, beliefs and attitudes (Hattie, 1992). Thus the self-concept is a system of either positive or negative self-evaluations and identification and is thought to
motivate and structure behaviour and aspirations. Staub (1999) proposed that bullies might not have the socially valued means to gain a positive self-concept through competence and good performance at school. Therefore they organise their self-esteem around strength, power and physical superiority over others. Harming others may become a way of reaffirming self-identity and of compensating for frustration in other areas, such that students engage in behaviours to protect and enhance their self-concept (Parada, Marsh, & Yeung, 1999).

To date there have been a number of studies which looked at self-concept in relation to being bullied. A consistent negative correlation has been found between being bullied and global self-concept (Neary & Joseph, 1994; Rigby & Cox, 1996; Rigby & Slee, 1993; Stanley & Arora, 1998). Studies which have looked at specific aspects of self-concept, such as social self-concept, have generally found that targets tend to have negative self-views regarding the extent that they see themselves as being socially competent or well accepted by their peers (Callaghan & Stephen, 1995; Hawker & Boulton, 2000). This offers evidence supporting a downward spiral for targets of bullying which may help to perpetuate their target status. Investigating this spiral further, Egan and Perry (1998) tested two hypotheses in relation to self-regard and being bullied. First, whether low self-regard contributed over time to being bullied by peers. Second, whether high or low self-regard had any protective function in children with personal characteristics such as physical weakness, anxiousness and poor social skills. Their results supported the view that low self-concept leads to being bullied over time. Also, among children with undesirable social characteristics, children with high self-concept were less likely to become caught up in being bullied over time.

Marsh, Parada, Yeung and Healey (2001) found that aggressive school troublemakers (getting into physical fights, getting into trouble, being seen as a troublemaker, and being punished for getting into trouble) and Victim (being threatened with harm, not feeling safe) factors were related to three components of self-concept (General, Same Sex Relations, and Opposite Sex Relations, adapted from the SDQ II) based on the large, North American representative National Education Longitudinal Study. Longitudinal structural equation models for the same students in 8th, 10th and 12th Grades showed that the Troublemaker and Victim constructs were reasonably stable over time and positively correlated. This offers further support for the finding that many students are both troublemakers and victims. Whereas, the Aggressive Troublemaker factor was also correlated somewhat negatively with self-concepts, the Troublemaker factor had small positive effects on subsequent self-concept. This suggests that low self-concept may trigger trouble-making behaviour in a possibly successful attempt to enhance subsequent self-concept. Bullies in particular may achieve a personal sense of power and may receive social reinforcement from their peers for engaging in bullying behaviours that result in the intimidation of their victims. Although boys had higher Troublemaker and Victim scores than girls, the effects of these constructs on subsequent self-concept were similar for boys and girls. Victims also tended to have negative social self-concepts in terms of seeing themselves as socially competent or accepted by their peers. A downward spiral existed for targets whereby being bullied led to lower self-concepts and perpetuated their target status within the group or school. It seems therefore that the effect of being bullied on self-concept is clearly a negative one. Whilst bullying may serve to increase the self-concept of bullies, being bullied decreases the self-concept of targets.
There are some empirical findings to support the suggestion that bullies have positive perceptions of themselves. Findings suggest that more aggressive individuals can have either high or low self-concepts. For example, Salmivalli (1998) reported adolescent bullies had high social and physical self-concepts, but more negative self-perceptions in other areas (e.g., academic; also see Salmivalli, 2001). These results suggest that bullies’ social and physical self-concepts may be being reinforced by engaging in bullying whilst other aspects of self-concept remain low. In this same study, targets had low scores in most self-concept domains. There was, however, a group of bullied students who still reported high self-concept in the areas of family-related and behavioural self-concept. Rigby and Slee (1993), assessed self-esteem using a unidimensional measure, level of happiness, and liking for school in a sample of 464 male and 413 female students aged 12 to 18 years in an Australian school. Generally low levels of self-esteem were found among children who reported being more victimized than others, and high self-esteem among children practicing more prosocial behaviour. The tendency to bully others was correlated negatively with happiness and liking school, but no relationship was found between this variable and self-esteem. Hence evidence suggests that the role of self-concept in relation to bullying and being bullied is a complex phenomenon that could be further disentangled by taking into consideration the multidimensionality of self-concept.

In summary, research suggests that being a target is negatively correlated with self-concept and may lead to further declines in self-concept. Less clear is the causal role of a high self-concept in protecting students from being bullied. The nature and role of self-concept for bullies is even more complex and less well understood. Juvonen and Graham (2004) state “bullies perceive themselves in a positive light … displaying overly positive self-views” (p.233). However, there is little consistent support for the direction of the correlation between self-concept and bullying, which might vary depending on the particular component of self-concept. There is some support for the suggestion that low self-concept is a trigger for the use of bullying to enhance self-concept or that bullying may become a way of reaffirming self-identity and to compensate for frustration in other areas. There is, however, limited research into the causal role of self-concept and bullying. Available studies have generally been cross-sectional, examining relations among variables at a single point in time. Research has also relied upon constructs derived from large-scale surveys not specifically designed to measure bullying or from psychometrically weak measures of bully and victim constructs. More generally, previous research has been plagued with a lack of theory, a lack of appropriate measures with demonstrated reliability and construct validity, weak research designs, and weak statistical analyses.

The present investigation is part of an ongoing research program designed to decrease bullying in schools. Participants are drawn from urban non-government schools located in Western Sydney. Instruments used for this study included the Adolescent Peer Relations Instrument: Bully/Target (APRI:BT, Parada, 2000) a multidimensional measure of bullying and victimisation for adolescents and a new short version of Self-Description Questionnaire II the SDQII-Short (Marsh, Ellis, Parada, Richards, & Heubeck, 2005) a multidimensional measure of adolescent self-concept. The teachers of each school administered surveys on three occasions during a single school year (beginning, middle and end of school year). Teachers received training on the administration of instrumentation. Parental consent was obtained for
all students undertaking the survey. This investigation comprises two separate analyses. First the concurrent relationship between bullying and being bullied and multiple dimensions of self-concept is examined, followed by an examination of the causal relationship between bullying and victimisation and self-concept.

For the purposes of examining the relations between the 11 SDQII-S factors and six APRI-BT factors (three verbal, social and physical bullying and victim of bullying scales) a single Confirmatory Factor Analysis (CFA) was carried out in which all of the SDQII-S and APRI-BT factors were included, with their corresponding indicators, on data collected on the first occasion - beginning of the school year. The total sample for Study One consisted of 3512 students in Years 7 to 11. To examine the effects of prior self-concept and bullying on subsequent self-concept and bullying, a Longitudinal Structural Equation Model (LSEM) was used to evaluate a reciprocal effects model containing global bully and victim factors and one of the self-concept factors. A total of 11 such models were evaluated (one per scale of the SDQII-S). The second study used data from all three occasions (beginning, middle and end) of the school year from students for whom there were at least two waves of data available. CFA and LSEM were conducted with LISREL. There were little missing data. A growing body of research has emphasized potential problems with traditional pairwise, listwise, and mean substitution approaches to missing data (Graham & Hofer, 2000; Little & Rubin, 1987) therefore Expectation Maximization Algorithm in SPSS 11.5, the most widely recommended approach to imputation for missing data, was used to impute missing values (only within a wave) prior to analysis. Following, are the results for each of the studies.

Table 1 contains the results of the initial analysis. Eleven self-concept scales were based on responses to 51 items from the short version of the SDQ II (Physical, Appearance, Opposite Sex Relations, Same Sex Relations, Parent Relations, Honesty/Trustworthiness, Emotion Stability, Academic-Math, Academic-Verb, Academic-School). Based on previous research, it was expected that the Victim factors would be consistently and negatively correlated with multiple dimensions of self-concept. These expectations were clearly supported. Previous research did not provide such clearly defined expectations in terms of expected correlations between the Bully factors and the multiple dimensions of self-concept. Although most of these correlations were negative, the correlations were close to zero for the two physical scales, for the two peer relationship scales and for the Emotional Stability scale. Interestingly, however, Global Self Esteem is negatively correlated with both Bully and Victim factors and the sizes of these negative correlations are very similar. Hence, neither bullies nor victims seem to have particularly good self-concepts.

Despite the generally negative correlations of self-concept with both the bully and victim factors, there are some clear distinctions in the patterns of relations. Particularly notable and consistent with the Marsh, et al. (2001) study of US students, the Bully factors are positively correlated with Opposite Sex Relationships self-concept. Bullies perceive themselves to get on well with members of the opposite sex. For victims, the most negative area of self-concept is Same Sex Relationships – more negative than other areas of self-concept for victims and more negative than
Table 1
Factor Correlations Relating Bully and Target Factors to other Constructs

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Note. Correlations were based on a large CFA conducted on responses to items collected at Time 1 and are presented as fully standardised estimates. Items were only allowed to load on their perspective scales. No correlated uniquenesses were allowed, \( n = 3012 \). For present purposes the focus is on relations with the 3 Bully scales and the 3 Target scales with the 11 SDQ-II Factors that are the focus of this study.

* \( p < .05 \), ** \( P < .01 \).

experienced by bullies. Victims also fare worse than Bullies in terms of Emotional Stability self-concept. For bullies, the most negative area of self-concept is Honesty/Trustworthiness. This suggests that bullies are cognizant of the fact that they are not doing the right thing when they bully other people. More generally, bullies fare worse than victims with moderate to strong negative correlations between bullying factors and Honesty/Trustworthiness, Parent Relationships, Verbal, and School self-concepts. In summary, bullies and victims both have self-concepts that are below average in most areas. Again, although there are qualitative differences between bullies and victims, the results suggest that there are many similarities between bullies and victims in relation to their self-concept.

What is the causal pattern of effects relating bullying and being a victim to multiple dimensions of self-concept? Earlier results (see Table 1) indicate that both bullies and victims tend to have lower levels of self-concepts. For victims the pattern of lower self-concepts is reasonably consistent across different areas of self-concept, although their self-concepts are particularly low for Same Sex Relationship Emotional Stability self-concepts. For bullies the pattern is more varied across different areas of self-concept with about average self-concepts in terms of physical, peer relationships, and Emotional Stability self-concepts. Interestingly, however, Global Self Esteem is negatively related to both bully and victim factors to about the same extent. Although these correlations have important implications for understanding the nature of bullies and victims, they are not particularly useful in disentangling the causal ordering of these constructs. Next causal ordering models are tested with longitudinal data to disentangle the pattern of causal effects relation bully, victim, and self-concept – whether bullying and being a victim are causes, cause self-concept changes or are consequences of them, or both (i.e., the effects are reciprocal).
For each model the responses to one of the 11 self-concept factors was added. (Figure 1) on each of three occasions. A “full-forward” structural equation path model was evaluated in which all the T1 constructs (Bully, Victim, self-concept) were posited to influence all T2 and T3 constructs, and all T2 constructs were posited to influence all T3 constructs. Figure 1 shows only one of these 11 models (for general self-concept), but the design of each of the 11 models was similar. All 11 models were well-defined in that factor loadings were substantial and the goodness of fit statistics were very good (e.g., TLI's were all greater than .95). The main focus is on the pattern of total effects relating T1 constructs to those at T2 and T3, and relating T2 construct to those T3 (see summaries in Table 2).

Figure 1. Causal Order Models of Relations Between Bully and Victim Factors. 
Note: Separate path models like that in Figure 3 were evaluated for each of the 11 self-concept factors and the global bully and victim factors. Please note that the lighter parameter estimates are for illustration purposes and do not represent the actual number of indicators evaluated, but serve to illustrate the relation between the latent factors in the model.

Effects of Bullying on Self-concept. Does being a bully lead to higher or lower levels of self-concept? The T1 Bully factor was generally negatively correlated with T1 self-concept (except for Opposite Sex self-concept, Physical Appearance, and Emotional Stability where some of the relations were positive; see Table 2). The results of the causal modelling provide a reasonably consistent pattern of small effects of prior bullying on subsequent self-concept across all 11 components of self-concept. The effects of prior levels of bullying were typically negative or non-significant for different areas of self-concepts. Thus, higher prior levels of bullying led to lower subsequent levels of Esteem, Same Sex, Parent Relations, Honesty/Trustworthiness, Math, Verbal, and School self-concepts, however, the effects of prior Bully factors were all nonsignificant for Opposite Sex, Physical, and Appearance self-concepts. The only exception to this pattern of results was the very small positive effect of T1 Bully on T2 Emotional self-concept (the effects of T1 and T2 Bully on T3 Emotional self-concept were not statistically significant). In summary, being a bully tended to have small effects on subsequent levels of self-concept and the direction of these effects was generally unfavourable (lower levels of self-concept). There was no support for the suggestion that bullies are able to enhance their self-concept through bullying other students.
### Table 4: Tests of Causal Ordering: Total Effects Of T1, T2 and T3 constructs

**Opposite Sex Self-Concept**

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Note. 12 structural equation (causal ordering) models were evaluated relating Bullying and Victim responses at Times 1, 2 and 3 to responses to each of the self-concept scales and to depression. Shown are the total effects of each T1 and T2 construct on subsequent T2 and T3 constructs that are the main focus of this investigation. * p < .005.
Effects of Self-concept Being a Bully. What are the effects of prior levels of self-concept on changes in bullying behaviours? At T1, Bully factors tended to be negatively correlated with multiple dimensions of self-concept. Across the 11 causal models, the effects of prior self-concept on subsequent Bully factors were mostly small or statistically non-significant. The statistically significant effects of prior self-concept on subsequent bullying were negative for six scales (Parent Relationships, Honesty/Trustworthiness, Appearance, School, Verbal, and Esteem) but were positive for three other self-concept factors (Opposite Sex, Physical, and Emotional). The largest effects were the negative effects of Parent Relationships and Honesty/Trustworthiness on subsequent bullying. Hence, particularly for these self-concept factors, students with higher levels of self-concept were less likely to be bullies, so that self-concept acted as a deterrent to subsequent bullying behaviours.

Effects of Being a Victim on Self-concept. Does being a victim lead to higher or lower levels of self-concept and depression? T1 Victim scores were consistently negatively related to all 11 areas of self-concept. (Table 2). These correlations were particularly large for Same Sex Relationships and Emotional Stability. The results of the causal modelling analyses indicated that being a victim tended to have further negative effects – beyond those experienced at T1 – leading to further declines in multiple dimensions of self-concept. Effects of prior Victim factors were significantly negative in 8 of the 11 self-concept models (Esteem, Opposite Sex, Same Sex, Physical, Appearance, Parent Relations, Emotional, Verbal, School). Exceptions to this pattern were for School and Honesty/Trustworthiness where all the effects of prior Victim were non-significant and for Math self-concept where there was a very small positive effect of T1 Victim on T2 Math self-concept (the effects of T1 and T2 Victim on T3 self-concept were not statistically significant). In summary, being a victim tended to lead to further declines in self-concept.

Effects of Self-concept Being a Victim. What are the effects of prior levels of self-concept on subsequently being a victim? Across the 11 causal models, the effects of prior self-concept on subsequent Victim factors were mostly negative or statistically non-significant. For many of the self-concept factors (Parent Relationships, Opposite Sex, Same Sex, Esteem, Emotional, School, Verbal), lower prior levels of self-concept led to higher, subsequent levels of being a victim beyond what could be explained in terms of prior levels of the Victim factor. Interestingly, Physical self-concept provided a pattern of results that was somewhat different from the other self-concept factors. In particular, higher prior levels of T2 Physical self-concept led to increased – not lower – T3 victim scores (although the effects of T1 Physical self-concept on T2 and T3 Victim factors were nonsignificant). These results were, however, consistent with the finding that prior Physical self-concept also had positive effects on subsequent bullying behaviours that in turn had positive effects on being a victim.

This paper hoped to shed further light on the complex relation between self-concept and bullying by disentangling the causal ordering of self-concept, being a bully, and being a victim. Cross-sectional analyses clearly showed that both bullying and being targeted by bullies is associated with lower self-concepts as a whole. Of interest is the finding that this is the case for both bullies and targets. Being a bully
and being a victim tended to lead to lower levels of self-concept over time. However, the negative effects of being a victim tended to be larger and more consistent than the negative effects of being a bully. Hence, being a bully and particularly being a victim were not effective strategies for enhancing self-concept.

Higher levels of self-concept typically lead to lower levels of both being a victim and being a bully. However, this pattern of results was more consistent for the effects of self-concept on being a victim than being a bully. The main exception to this pattern of results was Physical self-concept, which had positive effects on both the Bully and Victim factors. In general, however, students who had more positive feelings about themselves were less likely to be either bullies or victims. Of note here is that those students who had higher levels of parent-relations self-concept and honesty and trustworthiness self-concepts were less likely to engage in either bullying or be targeted by bullies.

The results discussed provide reasonably clear evidence that low self-concepts do lead to being a victim. Thus, positive self-perceptions provide a strategic approach to develop psychological tools and resiliency that serves to protect students from becoming victims and positive self-perceptions also protect students from becoming bullies. The pattern of results provide reasonably clear evidence that there are no benefits to being a bully in terms of increased levels of self-concept as has been previously suggested. However, even if the use of bullying for this purpose is not a successful strategy, it is still possible that it remains a motivation for students to become bullies. For this reason, it is important that the school community of students, teachers, administrators, and parents reinforces the unacceptability of bullying behaviours so that students cannot delude themselves into thinking that such socially inappropriate behaviours can result in enhanced social status and self-perceptions – real or self-perceived. Bullies have particularly low self-concepts on the Honesty/Trustworthy, Parent Relationships, and School scales. This suggests that interventions aimed at building moral values associated with home and school may provide a deterrent to bullying behaviours. Interestingly, these are three of the self-concept scales where victims scored higher than bullies. In contrast, victims had lower self-concepts than bullies particularly on the two peer-relationship scales. This supports interventions designed to improve the social skills particularly of victims.
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**Brad A Papworth** is a teacher at The Kings School, Parramatta, Australia. He has recently completed a Masters of Leadership and Management in Education (Newcastle) with a focus on boy’s education and masculinity in the school setting.

**References**


