A STUDY OF PEER VICTIMIZATION AND PSYCHOSOCIAL MALADJUSTMENT OF INDIAN CHILDREN STUDYING IN WELLINGTON NEW ZEALAND

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Abstract: *The study is based upon previous work done by Hodges and Perry that suggests longitudinal relations between victimization and negative psychosocial outcomes, as well as between psychosocial maladjustment and the consequential experience of peer victimization, may be moderated by social or interpersonal factors. Participants were 30 sixth and seventh graders (20 boys and 10 girls, mean age = 12.23) from two urban middle schools of wellington .They were Indian. All students received parental consent, signed assent forms, and completed several measures over the course of two days at two different time points, 6 months apart. The Peer Nomination Inventory (PNI), and a sociometrist measure were used. The Indian children were asked to identify their same-sex, same-grade peers that displayed particular behaviors. The PNI yielded five scales that were used in the present study: aggression, physical strength (reverse coded to indicate lack of physical strength), withdrawal, anxiety/depression, and victimization. The score ranging from 0 to 100 was determined for each child on each construct by calculating the percentage of peer who nominated the child for each item, and averaging over the items on that scale. The results were found out as expected, interpersonal factors moderated many of the longitudinal associations between the personal factors and victimization. Most notably, victimization predicted increases in internalizing behaviors (anxiety/depression and withdrawal) only under higher levels of peer rejection and number of reciprocated enemies, and lower levels of peer acceptance. Additionally, anxiety/depression predicted increases in victimization over time, again only under high levels of the negative interpersonal factors. These results underscore the importance of recognizing social contextual factors that promote the cyclical relations between peer victimization and psychosocial maladjustment of Indian children who had undertaken this study in wellington New Zealand.*

Keywords: *peer victimization, psychosocial maladjustment, victimization*

INTRODUCTION

The present study builds upon previous research (e.g., Hodges & Perry, 1999) that suggests that longitudinal relations between victimization and negative psychosocial outcomes, as well as between psychosocial maladjustment and the consequential experience of peer victimization, may be moderated by social or interpersonal factors. Participants were30sixth and seventh graders (20 boys and 10 girls, mean age = 12.23) from two urban middle schools of wellington .They were Indian. All students received parental consent, signed assent forms, and completed several measures over the course of two days at two different time points, 6 months apart.

As expected, interpersonal factors moderated many of the longitudinal associations between the personal factors and victimization. Most notably, victimization predicted increases in internalizing behaviors (anxiety/depression and withdrawal) only under higher levels of peer rejection and number of reciprocated enemies, and lower levels of peer acceptance. Additionally, anxiety/depression predicted increases in victimization over time, again only under high levels of the negative interpersonal factors. These results underscore the importance of recognizing social contextual factors that promote the cyclical relations between peer victimization and psychosocial maladjustment.

Olweus (1993) defined the experience of peer victimization as the repeated exposure to negative actions from at least one other person over time, such as unwanted physical contact, verbal abuse, derisive facial expressions or gestures, intentional defiance of the victim's wishes, social exclusion or some other form of intentional infliction of discomfort. Approximately 10% of elementary and middle-school children are victimized in this manner by schoolmates on a regular basis (Olweus, 1978; Perry, Kusel, & Perry, 1988). Furthermore, several studies have demonstrated that victimization is highly stable over time (e.g., Egan & Perry, 1998), suggesting that these children will be at long-term repeated risk for the negative outcomes associated with peer victimization. Commonly found correlates of victimization include anxiety, depression, loneliness, rejection by peers, lack of friends, physical weakness, and externalizing problems, such as disruptiveness, ineffectual aggression, and argumentativeness (e.g., Egan & Perry; Grills &Ollendick, 2002; Hodges, Malone, & Perry, 1997; Olweus, 1078; Perry et al., 1998).

The few extant longitudinal studies have provided support, although somewhat inconsistently, for the notion that indices such as depression and unpopularity may result from victimization over time (e.g., Khatri, Kupersmidt, & Patterson, 2000; Olweus, 1992), and that some indices such as poor self-concept and aggression may predict increases in victimization over time (e.g., Egan & Perry, 1981; Hanish& Guerra, 2000). Egan and perry also found support for the notion that some of these relations may be cyclical; adjustment difficulties may both give rise to and result from the experience of victimization. Hodges et al. (1997) established that some of the inconsistency that existed in the literature could be explained through a mode rational model, finding that the relations between personal risk factors (such as internalizing behavior and physical weakness) and victimization were maximized when the children had fewer friends and were generally rejected by their peers. The few additional studies that have scrutinized the protective value of friendships have exhibited inconsistent results (Boulton, Truman, Chau, Whitehand, &Amatya, 1999; Hodges, Boivin, Vataro, & Bukowski, 1999; Hodges & Perry, 1000; Rigby, 2000).

In the present study, the investigators sought to clarify these relations and address some of the weaknesses of previous studies by employing a longitudinal model, using a minority sample, and examining cyclical relations. Building on the work of Hodges and Perry (1999), four interpersonal factors (Peer acceptance, peer rejection, number of reciprocated best friends, and number of reciprocated enemies) were evaluated as moderators of the longitudinal relations between victimization and four personal factors (anxiety/depression, withdrawal, aggression, and lack of physical strength), examining these relations both with victimization as the predictor and as the outcome. The hypotheses were as follows:

Victimization was expected to interact with the interpersonal risk factors (peer rejection and number of enemies) such that as the levels of the moderator variables increased, the relation between victimization and each of the three personal factors – representing psychosocial maladjustment – one time would be strengthened (lack of physical strength was not included as an outcome measure).

Victimization was expected to interact with the protective interpersonal factors (peer acceptance and number of best friends) such that as the levels of the moderator variables decreased, the relation between victimization and each of the three personal factors over time would be strengthened.

In the reverse model, the personal risk factors were expected to interact with the interpersonal risk factors such that as the levels of the moderators (interpersonal variables) increased, the relation between each of the four personal factors (including lack of physical strength) and changes in victimization would be strengthened.

Finally, the personal risk variables were expected to interact with the protective interpersonal factors such that as the levels of the moderators variables decreased, the association between the personal factors and victimization over time would be strengthened Method

PARTICIPANTS

Participants were30 sixth and seventh graders (20boys and 10 girls, mean age = 12.23) from two urban middle schools of wellington .They were Indian. All students received parental consent, signed assent forms, and completed several measures over the course of two days at two different time points, 6 months apart.

MEASURES

The instruments administered were a Peer Nomination Inventory (PNI), and a sociometric measure. On the PNI, participants were asked to identify their same-sex, same-grade peers that displayed particular behaviors. The PNI yielded five scales that were used in the present study: aggression, physical strength (reverse coded to indicate lack of physical strength), withdrawal, anxiety/depression, and victimization. A score ranging from 0 to 100 was determined for each child on each construct by calculating the percentage of peer who nominated the child for each item, and averaging over the items on that scale.

On the sociometric measure, the children were asked to nominate three same-sex, same-grade children with whom they most liked to play, as well as three with whom they least liked to play. Additionally, they were asked to list, in order of preference, their three best friends. The peer acceptance score was derived from the percentage of peers who nominated each child as least liked. Number of friends was determined by reciprocation and ranged from 0 to 3. Number of enemies was determined by reciprocation of least-liked nominations and also ranged from 0 to 3.

RESULTS

Model 1: Victimization Predicting Increases in Psychosocial Maladjustment over Time

Three hierarchical multiple regression analyses were performed to evaluate the main effects of victimization on changes in anxiety/depression, withdrawal, and aggression. In each regression, the Time-1 level of the criterion was controlled at Step 1 (thus allowing examination of changes over time), and victimization at Time 1 was then entered at Step 2. Victimization at Time 1 predicted highly significant increases in anxiety/depression (β=.261, p<.001) and withdrawal (β = .330, p< .001). Victimization predicted a small decrease in aggression, but this association was not significant (β = - .103, p = .07).

Next, the four interpersonal factors were evaluated as moderators of the relations between victimization and each of the three outcome variables. For each analysis, an interpersonal factor variable was added at Step 2 (to account for the main effects of each variable on the criterion), and the product term of victimization and the interpersonal variable was entered at Step 3. Because of the inherent difficulty in detecting continuous interactions, an alpha level less than .10 was set for determining significance.

The results of these 12 analyses are summarized in Table 1. The results indicated that both peer acceptance and peer rejection do indeed moderate the relations between victimization and both anxiety/depression and withdrawal over time. Number of friends had no moderating effects, but number of reciprocated did, moderating the relations between victimization and both anxiety/depression and aggression. Peer rejection also moderated the relation between victimization and aggression.

All significant interactions were evaluated according to the procedure recommended by Aiken and West (1991). In this procedure, the relation between the predictor and the criterion variable is estimated at three levels of the moderator variable: 1 SD below the mean, the mean, and 1 SD above the mean, representing low, medium, and high levels of the moderator, respectively. These analyses indicated that as peer acceptance moved from high to low levels, the strength of the relations between victimization and changes in anxiety/depression and withdrawal went from non-significant to highly significant, confirming the notion that peer acceptance can buffer children from some of the harmful longitudinal effects of being victimized. As peer rejection rose from low to high levels, these relations also went from non-significance to strong significance, confirming the notion that peer rejection works as an exacerbating context for the victimization-internalizing problems causal link. Number of enemies similarly worked as an exacerbating factor for victimization

predicting anxiety/depression (but not withdrawal). The results for the aggression outcomes were curious, demonstrating stronger inverse relations between victimization and aggression at high levels of peer rejection and number of enemies, suggesting that in highly negative social contexts, victimized children demonstrate less aggressive behavior over time.

Model 2: Personal Risk Factors Predicting Increases Victimization over Time

First, the main effects of each of the four personal risk factors (anxiety/depression, withdrawal, aggression, and lack of physical strength) on changes in victimization over time were determined. The hierarchical multiple regression approach described above was used again with victimization at Time 2 as the criterion, controlling for victimization at Time 1. Surprisingly, none of the four main effects were significant. Although this was contrary to expectations, findings of significance with respect to the interactions could still shed light on what levels of certain moderators might be necessary in order to find the expected effects.

The four interpersonal factors were again evaluated as moderators of these longitudinal relations by testing interactions between each of the four personal factors and each of the four interpersonal factors in a hierarchical multiple regression equation, controlling for initial levels of victimization, and using victimization at Time 2 as the criterion. In this model, none of the eight interactions involving the two protective interpersonal factors (peer acceptance and number of best friends) were significant.

The results of the remaining eight analyses are summarized in Table 3. Both of the negative interpersonal factors significantly interacted with anxiety/depression (but not withdrawal) to predict changes in victimization. Number of reciprocated enemies interacted significantly with aggression. Lack of physical strength did not interact with any moderators.

The natures of the three significant interactions were again examined by using the Aiken and West (1991) follow-up procedure and are summarized in Table 4. Peer rejection and number of reciprocated enemies again demonstrated exacerbating effects – as both of these variables moved from low to high levels, the relation between anxiety/depression and changes in victimization grew and moved from non-significant to highly significant. Additionally, at higher levels of peer rejection, aggression predicted decreases in victimization.

DISCUSSION

This investigation found support for the hypothesis that the cyclical relation between peer victimization and psychosocial maladjustment is moderated by social contextual factors. Consistent with Hawker and Boulton's (2000) meta-analytic finding that depression is the maladjustment index most strongly related to victimization, the results were particularly compelling for the internalizing personal factors, anxiety/depression and withdrawal. Moreover, victimized children who were also socially isolated (rejected and/or simply not accepted) were most likely to suffer the ill effects of victimization over time, whereas victimized children who were accepted by the peer group or were not overtly rejected by others were no more likely to exhibit negative consequences than nonvictimized children. In the reverse model, although the hypotheses were not as widely supported, findings similarly indicated that anxious and depressed children are increasingly targeted for victimization over time but primarily when rejected by their peers and when they had more reciprocated enemies.

The results of the analyses involving aggression were somewhat counterintuitive. Whereas some prior studies have suggested that externalizing problems have a positive association with victimization (e.g., Hanish& Guerra, 2000; Perry et al., 1988), the present study found that under high levels of negative interpersonal factors, victimization predicted decreases in aggression over time, and aggression predicted decreases in victimization over time. Perhaps rejected-aggressive children may be victimized less over time because bullies find them to be more difficult to push around than would be a less aggressive and more docile victim.

No main effects or significant interactions were found involving the lack of physical strength variable, despite findings in the literature suggesting that physical weakness is a risk factor for victimization (e.g. Hodges et al., 1997; Olweus, 1978). This failure to replicate previous findings may be due to the fact that we utilized a reversed coding of a scale designed to measure physical strength. Those scoring low likely included many children who were simply not known by their peers for having exceptional physical strength, but did not necessarily fit the mold of the physically weak target of victimization that the literature generally refers to. Finally, although peer rejection and peer acceptance were robustly demonstrated to moderate longitudinal relations with victimization in this study, number of friends did not moderate any relations, further adding to the small base of inconsistent literature involving

the presence of friends and its relation to the experience of victimization. More appropriate moderators may be not just the presence of friends, but the characteristics of those friends. For example, a child may have three reciprocated best friends, all three of whom are timid, withdrawn, physically weak children who offer no defense for the child against potential bullies, nor do they offer quality social support to help ameliorate the negative effects of being victimized. However, a single strong, well-liked, socially adept best friend may help buffer these effects in both directions. The personal risk factors of a child's best friends, as well as their social contexts (interpersonal factors) should be examined as further potential moderators of the relations between victimization and psychosocial maladjustment. To date, only two studies (Hodges et al., 1997; Hodges et al., 1999) have examined such interactions at all, with inconsistent, yet promising results. Such investigation represents the most crucial future direction for this area of research.

Table 1

Results of Regression Equations Evaluating the Interactions between Victimization and Interpersonal Factors to Predict Changes in the Personal Factors over Time

		Main Effects (Step 2)		Interaction (Step 3)		
Interaction		β	P	B	P	$\triangle R^2$
Predicting changes in anxiety/depression over time.						
Vic. X Peer Acceptance	Vic:	.240	P<.001	-.181	P<.01	.022
	Peer Acc.:		N.S			
Vic. X Peer Rejection	Vic:	.222	P<.001	.216	P<.01	.031
	Peer Rej.:		N.S			
Vic. X # of Friends	Vic:	.247	P<.01		N.S.	
	# Friends:	-.110	P<.05			
Vic. X # of Enemies	Vic:	.254	P<.001	.182	P<.01	.020
	# Enemies:		N.S			
Predicting changes in withdrawal over time.						
Vic. X Peer Acceptance	Vic:	.294	P<.001	-.177	P<.01	.021
	Peer Acc.:	-.116	P<.05			
Vic. X Peer Rejection	Vic:	.282	P<.001	-.106	P<.10	.007
	Peer Rej.:		N.S			
Vic. X # of Friends	Vic:	.315	P<.001		N.S.	
	# Friends:		N.S.			
Vic. X # of Enemies	Vic:	.322	P<.001		N.S.	
	# Enemies:		N.S			
Predicting changes in aggression over time.						
Vic. X Peer Acceptance	Vic:		N.S.		N.S.	
	Peer Acc.:		N.S.			
Vic. X Peer Rejection	Vic:	.207	P<.01	-.113	P<.10	.008
	Peer Rej.:	.196	P<.01			
Vic. X # of Friends	Vic:		N.S.		N.S.	
	# Friends:		N.S.			
Vic. X # of Enemies	Vic:	-.135	P<.05	-.129	P<.10	.010
	# Enemies:	.167	P<.01			

Table 2

Aiken & West (1991) Follow-Ups: Relations between Victimization and Changes in the

Personal Factors over Time at Different Levels of the Interpersonal Moderators

PredictorModerator	Criterion	Level of Moderator	β	P
Victimization X Peer Acceptance →	Anxiety/Depression	High Acceptance: Med Acceptance: Low Acceptance:	-.064 .138 .340	N.S. N.S. P<.001
Victimization X Peer Acceptance →	Withdrawal	High Acceptance: Med Acceptance: Low Acceptance:	-.012 .185 .382	N.S. N.S. P<.001
Victimization X Peer Rejection →	Anxiety/Depression	High Acceptance: Med Acceptance: Low Acceptance:	.253 .120 -.013	P<.001 N.S. N.S.
Victimization X Peer Rejection →	Withdrawal	High Acceptance: Med Acceptance: Low Acceptance:	.298 .232 .167	P<.001 P<.01 N.S.
Victimization X Peer Rejection →	Aggression	High Acceptance: Med Acceptance: Low Acceptance:	-.238 -.169 -.099	P<.001 P<.05 N.S.
Victimization X # of Enemies→	Anxiety/Depression	High Acceptance: Med Acceptance: Low Acceptance:	.299 .124 -.051	P<.001 N.S. N.S.
Victimization X # of Enemies →	Aggression	High Acceptance: Med Acceptance: Low Acceptance:	-.182 -.057 -.067	P<.01 N.S. N.S.

Table 3

Results of Regression Equations Evaluating the Interactions between Personal Risk Factors

and Negative Interpersonal Factors to Predict Changes in Victimization over Time

Interaction		Main Effects (Step 2)		Interaction (Step 3)		
		β	P	B	P	$\triangle R^2$
Peer rejection as the moderator.						
Anxiety/Depression X P.R.	Anx/Dep: Peer Rej.:	.133 .242	P<.05 P<.001	.148	P<.01	.020
Withdrawal X P.R.	Withdrawal: Peer Rej.:	 .230	N.S P<.001		N.S.	
Aggression X P.R.	Aggression: Peer Rej:	 .255	N.S. P<.001	-.127	P<.05	- .014
Lack of Phys. Strength X P.R.	Lack of P.S.: Peer Raj:	 .236	N.S P<.001		 N.S.	
Number of reciprocated enemies as the moderator.						
Anxiety/Dep. X # Enemies	Anx/Dep: # Enemies:	.106 .129	P<.05P<.01	.144	P<.05	.014
Withdrawal X # of Enemies	Withdrawal: # Enemies:	 .121	N.S. P<.05		N.S.	
Aggression X # of Enemies	Aggression: # Enemies:	 .115	N.S. P<.05		N.S.	
Lack of Phys. Strength X # Ene.	Lack of P.S: # Enemies:	 .123	N.S. P<.05		N.S.	

Table 4

Aiken & West (1991) Follow-ups: Relations between Personal Risk Factors and Changes in Victimization over Time at Different Levels of the Interpersonal Moderators

PredictorModerator	Criterion	Level of Moderator	β	P
Anxiety/Depression X Peer Acceptance→	Victimization	High Acceptance: Med Acceptance: Low Acceptance:	.257 .121 -.014	P<.001 P<.05 N.S.
Aggression X Peer Rejection →	Victimization	High Acceptance: Med Acceptance: Low Acceptance:	-.192 -.034 .092	P<.05 N.S. N.S.
Anxiety/Depression X # of Enemies →	Victimization	High Acceptance: Med Acceptance: Low Acceptance:	.212 .036 -.139	P<.01 N.S. N.S.

RESULTS

Model 1: Victimization Predicting Increases in Psychosocial Maladjustment over Time

Three hierarchical multiple regression analyses were performed to evaluate the main effects of victimization on changes in anxiety/depression, withdrawal, and aggression. In each regression, the Time-1 level of the criterion was controlled at Step 1 (thus allowing examination of changes over time), and victimization at Time 1 was then entered at Step 2. Victimization at Time 1 predicted highly significant increases in anxiety/depression (β=.261, p<.001) and withdrawal (β = .330, p< .001). Victimization predicted a small decrease in aggression, but this association was not significant (β = - .103, p = .07).

Next, the four interpersonal factors were evaluated as moderators of the relations between victimization and each of the three outcome variables. For each analysis, an interpersonal factor variable was added at Step 2 (to account for the main effects of each variable on the criterion), and the product term of victimization and the interpersonal variable was entered at Step 3. Because of the inherent difficulty in detecting continuous interactions, an alpha level less than .10 was set for determining significance. The results of these 12 analyses are summarized in Table 1. The results indicated that both peer acceptance and peer rejection do indeed moderate the relations between victimization and both anxiety/depression and withdrawal over time. Number of friends had no moderating effects, but number of reciprocated did, moder5ating the relations between victimization and both

anxiety/depression and aggression. Peer rejection also moderated the relation between victimization and aggression.

All significant interactions were evaluated according to the procedure recommended by Aiken and West (1991). In this procedure, the relation between the predictor and the criterion variable is estimated at three levels of the moderator variable: 1 SD below the mean, the mean, and 1 SD above the mean, representing low, medium, and high levels of the moderator, respectively. These analyses indicated that as peer acceptance moved from high to low levels, the strength of the relations between victimization and changes in anxiety/depression and withdrawal went from non-significant to highly significant, confirming the notion that peer acceptance can buffer children from some of the harmful longitudinal effects of being victimized. As peer rejection rose from low to high levels, these relations also went from non-significance to strong significance, confirming the notion that peer rejection works as an exacerbating context for the victimization-internalizing problems causal link. Number of enemies similarly worked as an exacerbating factor for victimization predicting anxiety/depression (but not withdrawal). The results for the aggression outcomes were curious, demonstrating stronger inverse relations between victimization and aggression at high levels of peer rejection and number of enemies, suggesting that in highly negative social contexts, victimized children demonstrate less aggressive behavior over time.

Model 2: Personal Risk Factors Predicting Increases Victimization over Time

First, the main effects of each of the four personal risk factors (anxiety/depression, withdrawal, aggression, and lack of physical strength) on changes in victimization over time were determined. The hierarchical multiple regression approach described above was used again with victimization at Time 2 as the criterion, controlling for victimization at Time 1. Surprisingly, none of the four main effects were significant. Although this was contrary to expectations, findings of significance with respect to the interactions could still shed light on what levels of certain moderators might be necessary in order to find the expected effects.

The four interpersonal factors were again evaluated as moderators of these longitudinal relations by testing interactions between each of the four personal factors and each of the four interpersonal factors in a hierarchical multiple regression equation, controlling for initial levels of victimization, and using victimization at Time 2 as the criterion. In this model,

none of the eight interactions involving the two protective interpersonal factors (peer acceptance and number of best friends) were significant. The results of the remaining eight analyses are summarized in Table 3. Both of the negative interpersonal factors significantly interacted with anxiety/depression (but not withdrawal) to predict changes in victimization. Number of reciprocated enemies interacted significantly with aggression. Lack of physical strength did not interact with any moderators.

The natures of the three significant interactions were again examined by using the Aiken and West (1991) follow-up procedure and are summarized in Table 4. Peer rejection and number of reciprocated enemies again demonstrated exacerbating effects – as both of these variables moved from low to high levels, the relation between anxiety/depression and changes in victimization grew and moved from non-significant to highly significant. Additionally, at higher levels of peer rejection, aggression predicted decreases in victimization.

LIMITATIONS AND FUTURE DIRECTIONS

Although the current investigation provides useful insight for understanding peer rejection which has important implications for dealing positively with the issue of Indian school children living in New Zealand but the study is not free from limitation. The study was only limited to with20 boys and 10 girls. Hence, the findings should be more generalized in nature. Moreover, the sample was selected from Wellington City which limits the scope for the generalization of the findings. The focus of the investigation was on studying the relative contribution of aggression outcomes were curious, demonstrating stronger inverse relations between victimization and aggression at high levels of peer rejection and number of enemies, suggesting that in highly negative social contexts, victimized children demonstrate less aggressive behavior over time. However, there are many other variables that might contribute towards aggression which might be studies in the future

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REFERENCES

1. Aiken, L.S., % West, S.G. (1991), Multiple regression: Testing and interpreting interactions. Newbury Park, CA: Sage.

2. Boivin, M., & Hymel, S. (1997). Peer experiences and social self-perceptions: A sequential model. Developmental Psychology, 33, 135-145.

3. Boulton, M.J., Trueman, M., Chau, C., Whitehand, C., &Amatya, K. (1999). Concurrent and longitudinal links between friendship and peer victimization: implications for befriending interventions. Journal of Adolescence, 22, 461-466.

4. Egan, S., & Perry, D. G. (1998). Does low self-regard invite victimization? Developmental Psychology, 34, 299-309.

5. Grills, A. E., &Ollendick, T. H. (2002).Peer victimization, global self-worth, and anxiety in middle school children. Journal of Clinical Child and Adolescent Psychology, 31, 59-68.

6. Hanish, L.D., & Guerra, N. G. (2000). Predictors of peer victimization among urban youth. Social Development, 9, 521-543.

7. Hawker, D. S. J., &Boulton, M. J. (2000). Twenty years' research of peer victimization and psychosocial maladjustment: A meta-analytic review of cross-sectional studies. Journal of Child Psychology and Psychiatry and Allied Disciplines, 41, 441-445.

8. Hodges, E. V. E., Boivin, M., Vitaro, F., & Bukowski, W. M. (1999). The power of friendship: Protection against an escalating cycle of peer victimization. Developmental Psychology, 35, 94-101.

9. Hodges, E. V. E., Malone, M. J., & Perry, D. G. (1997).Individual risk and social risk as interacting determinants of victimization in the peer group. Developmental Psychology, 33,1032-1039.

10. Hodges, E. V. E., &perry, D. G. (1999).Personal and interpersonal antecedents and consequences of victimization by peers. Journal of Personality and Social Psychology, 76, 677-685.

11. Khatri, P., Kupersmidt, J. B., Patterson, C. (2000). Aggression and peer victimization as predictors of self-reported behavioral and emotional adjustment. Aggressive Behavior, 26, 345-358.

12. Olweus, D. (1978). Aggression in the schools: Bullies and whipping boys. Washington, DC: Hemisphere.

13. Olweus, D. (1992). Victimization by peers: Antecedents and long-term outcomes. In K.H.

14. Rubin & J. B. Asendorpf (Eds.), Social withdrawal, inhibition, and shyness in childhood (pp.315-341). Hillsdale, NJ: Erlbaum.

15. Olweus, D. (1993). Bully/victim problems among school children: Long-term consequences and an effective intervention program. In S. Hodgins (Ed.), Mental Disorders and Crime, (pp. 317-349). Newbury Park, CA: Sage.

16. Perry, D. G., Klusel, S. G., & Perry, L. C. (1998). Victims of peer aggression. Developmental Psychology, 24, 807-814.

17. Rigby, K. E. N. (2000). Effects of peer victimization in schools and perceived social support on adolescent well-being. Journal of adolescence, 23(1), 57-68.