

Cognitive appraisals, emotional reactions, and their associations with three forms of peer-victimization

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Victimized students' cognitive appraisals (perceived threat, control) are related to emotional reactions. Furthermore, psychosocial wellbeing is differentially associated with form of victimization (direct vs. indirect), suggesting that emotional reactions to direct and indirect victimization may also differ. The present study therefore evaluated appraisals and emotional reactions within the context of verbal, physical, and indirect victimization experiences, testing a mediational model which considers appraisals to mediate the effect of victimization upon emotional reaction. Participants were 146 students (44% male) aged 10-13 years attending mainstream schools in Scotland (UK). Self-report measures assessed peer-victimization (physical, verbal, indirect), appraisal (control, threat) and emotional reaction (anger, sadness). All forms of victimization were positively associated with both emotions. Threat appraisals were positively associated with all forms of victimization and control appraisals were negatively associated with physical victimization. The relationships between appraisals and emotions varied according to victimization type. The effects of victimization upon emotions were not mediated via appraisals. These results extend our understanding of the relationships between victimization and affect.

Las valoraciones cognitivas, reacciones emocionales y sus asociaciones con tres formas de victimización entre pares. Las evaluaciones cognitivas de los alumnos victimizados (percepción de amenaza y/o control) están relacionadas con las reacciones emocionales. Por otra parte, el bienestar psicosocial varía en función de las formas de victimización (directas e indirectas), lo que sugiere que las reacciones emocionales a la victimización también pueden diferir en función de si ésta es directa o indirecta. El presente estudio analizará las evaluaciones y reacciones emocionales en el contexto de experiencias de victimización verbal, física e indirecta, poniendo a prueba un modelo de mediación que considera la evaluación mediadora en el efecto de la victimización sobre la reacción emocional. Los participantes fueron 146 estudiantes (44% chicos) con edades entre 10-13 años que asistían a escuelas ordinarias en Escocia (Reino Unido). Los autoinformes aplicados evaluaron la victimización entre escolares (física, verbal, indirecta.), evaluación cognitiva (control, amenaza) y la reacción emocional (ira, tristeza). Todas las formas de victimización se asociaron positivamente con las dos emociones. La percepción de amenaza se relacionó positivamente con todas las formas de victimización y la de control se asoció negativamente con la victimización física. Las relaciones entre las evaluaciones y las emociones variaron según el tipo de victimización. Los efectos de la victimización en las emociones no estuvieron mediados por las evaluaciones. Estos resultados amplían la comprensión de las relaciones entre la victimización y el afecto.

Peer-victimization involves repeated exposure to hostile behavior from peers (Kochenderfer-Ladd, 2004) and can be categorized broadly into physical, verbal and relational bullying. Physical bullying includes physically aggressive acts against victims, such as kicking or punching. Verbal bullying is the use of negative comments or name-calling towards a victim, and is more prevalent than physical (Tapper & Boulton, 2005).

Relational bullying involves disrupting victims' relationships with their peers, for example by repeating rumors about them (ibid.).

Different forms of victimization can impact differentially upon psychosocial adjustment (Baldry, 2004; Bijttebier & Vertommen, 1998; del Rey, Elipe, & Ortega, 2012; Heirman & Walrave, 2012; La Greca & Harrison, 2005). Furthermore, risk and protective factors may operate differently for different forms of victimization. Woods, Done and Kalsi (2009) found that while friendship quality moderated the relationship between loneliness and victimization for direct victims, it did not for indirect victims. This highlights the importance of assessing the actions and reactions of victims in response to specific forms of aggression, rather than considering victimization to be a homogenous experience.

Reactions may differ across different forms of victimization because children and young people perceive them very differently. Lazarus' (1999) theory of stress and coping highlights that ability to cope with stressful stimuli is influenced by the individual's cognitive appraisals of that stimuli. Such appraisals are associated with levels of peer-victimization (Catterson & Hunter, 2010; Hunter, Durkin, Heim, Howe, & Bergin, 2010) and with long-term psychological sequelae of bullying (Hunter, Mora-Merchán, & Ortega, 2004). Moreover, appraisals influence the choice of specific coping strategies of bullied children (Hunter & Boyle, 2004; Hunter, Boyle, & Warden, 2006; Wachs, Wolf, & Pan, 2012)), and different coping strategies are used by children when they are faced with different forms of bullying (Kristensen & Smith, 2003).

Many emotional reactions are evidenced when a child is bullied, including embarrassment, worry, fear, stress, anger, self-pity, and vengeful (Hunter & Borg, 2006; Kochenderfer-Ladd, 2004; Monks, Ortega, & Rodríguez-Hidalgo, 2008; Palladino, Nocentini, & Menesini, 2012; Ortega, Elipe, Mora-Merchán, Calamaestra, & Vega, 2009). Hunter et al., (2006) reported that discrete emotional reactions to bullying (anger, fear, sadness) predict the extent to which young people report using specific coping strategies, independently of the effect of appraisals. Furthermore, certain appraisals predicted certain emotional responses, with control negatively related to sadness but unrelated to anger, and threat positively related to anger but unrelated to sadness. Thus, appraisals appear to have both direct effects upon coping strategy choice, and indirect effect via emotional responses. Different types of victimization may therefore have different effects upon victim's emotional response because of variation in the ways in which appraisals act as mediators.

Aims and objectives

The present study assesses the relationships between three types of victimization (verbal, physical, relational) and emotions experienced during victimization. In addition, it tests whether cognitive appraisals (threat and control) mediate the effects of three forms of peer-victimization (physical, verbal, indirect) upon emotional reactions (sadness, anger).

Method

Participants

Participants were 146 students (44% male) aged 10-13 years (mean = 11.50; SD = 1.02). Eight schools in the West of Scotland were approached regarding participation in this study. Of the eight, three schools agreed to participate: two Primary and one High School. One Primary school was a Roman Catholic school, both other schools were non-denominational. In total, 215 students were approached from these three schools, of which 126 agreed to take part (58.6%).

Materials

Peer-victimization. Owens, Daly and Slee's (2005) Peer-Victimization Scale was used to assess victimization. Four items assess physical aggression (e.g. "Being hit"), five items assess verbal aggression (e.g. "Being yelled at") and six items assess

indirect aggression (e.g. "Being left out or excluded from the group"). Participants indicated the frequency of these behaviors over the previous two weeks using a five-point scale ("Never" to "Very Often"). Cronbach's alpha (α) values were .82, .84 and .75 for physical, verbal and indirect aggression respectively, indicating good reliability.

Emotions. Participants were asked to say how they felt in response to each of the three types of bullying (Hunter et al., 2006). Relevant to the current study were the responses "I felt angry" and "I felt sad" with each rated using a four-point scale ("Not at all" to "Very").

Appraisals. Participants reported how likely it was that each of four possible negative outcomes of peer-victimization (e.g. "You will feel bad about yourself") would occur (Hunter et al., 2006). A four-point scale was used to measure perceived likelihood of each negative outcome occurring ("Not likely" to "Very Likely"), $\alpha = .70$. Control appraisals were measured using a seven-item scale (Catterson & Hunter, 2010). Items assessed the extent of perceived control, for example "If other students pick on me, I am able to stop them". Participants indicated the extent to which they believed statements to be true, on a four-point scale ("Hardly ever true" to "Always true"), $\alpha = 0.61$.

Procedure

Ethics approval was granted by the University of Strathclyde School of Psychological and Health Sciences Ethics Committee for the study. All materials were read aloud to younger participants (those in Primary school). Class teachers issued questionnaires, and procedure forms were issued to ensure children in different schools were issued with the questionnaire in the same manner. All measures were presented in a single self-report booklet containing 54 items which took approximately 15 minutes to complete.

Data analysis strategy

Mediation analyses proceeded in two stages. First, we conducted six separate hierarchical linear regression analyses. Age and gender were entered at Step 1 in all analyses in order to control for their effects. At Step 2, a particular type of victimization was entered (Physical, Verbal, or Indirect). At Step 3, the appraisals of Threat and Control were entered. These analyses allowed us to examine: the effect of each type of victimization on each associated emotional reaction; the effect of both types of appraisal on the emotional responses to each type of victimization; whether the effect of victimization on associated emotional reactions reduced when appraisals were taken into consideration. A large drop in the standardized beta from victimization to emotional reaction when moving from Step 2 to Step 3 may imply mediation. We also conducted six further hierarchical linear regression analyses to assess whether each type of victimization predicted each of the two appraisals. These regressions were the same as those above except that they omitted Step 3, and the outcome variable was either Control or Threat. In all analyses, only participants who had experienced the relevant form of aggression were included and multivariate outliers had been removed.

To assess the significance of potential indirect effects we planned to use the Mediate macro (Hayes & Preacher, 2011) for SPSS which provides estimates of the total, direct, and indirect effects. The macro provides 95% bootstrap percentile confidence

intervals which are based on 5000 bootstrap samples. These CIs can be used to infer whether the indirect effect is significant: If it includes zero then it is not significant.

Results

Data were screened before analyses commenced. This revealed a number of variables to be positively skewed; Tables 1a to 1c show the skew and kurtosis associated with all untransformed variables. Following Hair Jr, Anderson, Tatham, and Black (1998), we transformed variables with skewness larger than 1. Under these conditions, Threat technically only required transformation with respect to the Physical and Verbal victimization analyses but the transformed variable was used for analyses relevant to all three types of victimization to ensure comparability across analyses. Log transformations addressed the skew relating to Physical Victimization (post-transformation skew= -.02, SE= .27), Verbal Victimization (post-transformation skew= .11, SE= .26), Indirect Victimization (post-transformation skew= .22, SE= .26), and Threat (post-transformation skew for whole sample= .14, SE= .24). We assessed all relevant combinations of variables for multivariate normality using AMOS19.0, identifying between zero and three multivariate outliers (i.e., those with a significant Mahalanobis d^2) depending on the relevant set of predictors. Relevant multivariate outliers were removed from each analysis.

Correlations between the main study variables are shown in Tables 1a-c. Both emotions were strongly associated with Victimization. Control was only associated with Physical Victimization while Threat was associated with Indirect and Verbal victimization.

	2	3	4	5	6	Skew (SE= .27)	Kurtosis (SE= .54)
1. PV	-.22*	.21	-.35**	.30**	.36**	1.64	2.76
2. Control	-	-.17	-.11	-.35**	-.28*	-0.12	-0.03
3. Threat		-	.19	.34**	.25*	1.10	0.81
4. Anger			-	.17	.13	0.27	-1.09
5. Sadness				-	.68***	0.90	-0.65
6. Fear					-	1.84	2.04

Note: n= 77. * $p < .05$; ** $p < .01$; *** $p < .001$

	2	3	4	5	6	Skew (SE= .26)	Kurtosis (SE= .51)
1. VV	-.15	.37***	.42***	.42***	.39***	1.34	1.07
2. Control	-	-.14	-.10	-.29**	-.29**	-0.12	-0.33
3. Threat		-	.18	.24*	.25*	1.19	1.12
4. Anger			-	.30**	.39***	0.27	-1.13
5. Sadness				-	.54***	0.56	-0.96
6. Fear					-	1.49	0.90

Note: n= 87. * $p < .05$; ** $p < .01$; *** $p < .001$

	2	3	4	5	6	Skew (SE= .26)	Kurtosis (SE= .51)
1. IV	-.05	.30**	.49***	.37***	.59***	1.70	2.75
2. Control	-	-.38***	.01	-.36**	-.30**	0.05	-0.40
3. Threat		-	.20	.28**	.42***	0.93	0.69
4. Anger			-	.34**	.42***	0.18	-1.27
5. Sadness				-	.61***	0.64	-0.93
6. Fear					-	1.88	2.25

Note: n= 86. * $p < .05$; ** $p < .01$; *** $p < .001$

Physical victimization

Shown in Tables 2 and 3 are the standardized betas (β) for the models relating to both emotions. Age does not predict either sadness or anger, though there was an indication that boys reported less sadness than girls. Physical Victimization was positively and strongly associated with both emotions; neither form of appraisal predicted emotional reactions.

Physical Victimization was not a significant predictor of Threat, $F(1,71) = 0.83, p = .365, R^2 = .011, \beta = .11$, but did significantly predict Control, $F(1,71) = 7.05, p = .010, R^2 = .089, \beta = -.31^*$.

Step	Predictors	Step 1 β	Step 2 β	Step 3 β
1	Gender ^a	-.21	-.34**	.28**
	Age	-.20	-.18	-.15
$F(2,72) = 3.83, p = .026, R^2 = .096$				
2	Physical Victimization	N/A	.45***	.37**
	Threat	N/A	N/A	.16
$F(1,71) = 18.87, p < .001, \Delta R^2 = .190$				
3	Control	N/A	N/A	-.20
	Threat	N/A	N/A	.16
$F(2,69) = 3.47, p = .037, \Delta R^2 = .065$				

Note: n= 75. ^aGender coded (0= female, 1= male). * $p < .05$, ** $p < .01$, *** $p < .001$

Step	Predictors	Step 1 β	Step 2 β	Step 3 β
1	Gender ^a	.23	.15	.17
	Age	-.17	-.16	-.16
$F(2,72) = 2.70, p = .074, R^2 = .070$				
2	Physical Victimization	N/A	.32**	.31*
	Threat	N/A	N/A	.11
$F(1,71) = 7.94, p = .006, \Delta R^2 = .094$				
3	Control	N/A	N/A	.03
	Threat	N/A	N/A	.11
$F(2,69) = 0.51, p = .601, \Delta R^2 = .012$				

Note: n= 75. ^aGender coded (0= female, 1= male). * $p < .05$; ** $p < .01$

All significant relationships within the context of Physical Victimization are illustrated in Figure 1.

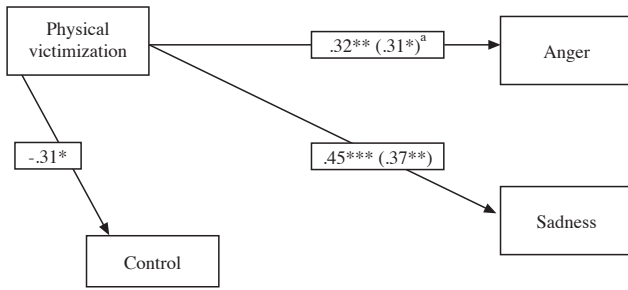


Figure 1. Path diagram showing significant relationships between Physical Victimization, appraisals, and emotions
^a Where two standardized betas are reported, the value in parentheses reflects the path weight following inclusion of the appraisal variables in the regression analysis
 * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

No tests of mediation were conducted in the case of Physical Victimization because there were no significant indirect pathways from victimization to either emotion.

Verbal victimization

Shown in Tables 4 and 5 are the results for the models relating to both emotions in the Verbal Victimization context. Age was not associated with either sadness or anger, but boys reported being less sad. Verbal Victimization was positively associated with both emotions, and control was negatively associated with sadness but unrelated to anger. Threat was unrelated to either emotion.

Verbal Victimization was a significant predictor of Threat, $F(1,83) = 4.18, p = .044, R^2 = .047, \beta = .22^*$, but not of Control, $F(1,83) = 1.89, p = .173, R^2 = .021, \beta = -.15$. All significant relationships within the context of Verbal Victimization are illustrated in Figure 2.

No tests of indirect effects were conducted in the case of Verbal Victimization there were no significant indirect pathways from victimization to either emotion.

Indirect victimization

Tables 6 and 7 display the results for the models relating to Indirect Victimization. Indirect Victimization was positively

Table 4
Regression analysis predicting sadness in a verbal victimization context

Step	Predictors	Step 1 β	Step 2 β	Step 3 β
1	Gender ^a	-.28**	-.30**	-.32**
	Age	-.06	-.11	-.07
$F(2,84) = 3.86, p = .025, R^2 = .084$				
2	Verbal Victimization	N/A	.46***	.41***
$F(1,83) = 24.24, p < .001, \Delta R^2 = .207$				
3	Threat	N/A	N/A	.07
	Control	N/A	N/A	-.25**
$F(2,81) = 4.30, p = .017, \Delta R^2 = .068$				
Note: $n = 87$. ^a Gender coded (0= female, 1= male). ** = $p < 0.01$; *** = $p < 0.001$				

associated with both emotions, and control was negatively associated with sadness but unrelated to anger. Threat was unrelated to either emotion.

Indirect Victimization was not a significant predictor of Threat, $F(1,79) = 3.88, p = .052, R^2 = .046, \beta = .22$, or Control, $F(1,79) = 0.04, p = .840, R^2 = .001, \beta = -.02$. All significant relationships within the context of Indirect Victimization are illustrated in Figure 3.

No tests of indirect effects were conducted in the case of Indirect Victimization because there were no significant indirect pathways from victimization to either emotion.

Table 5
Regression analysis predicting anger in a verbal victimization context

Step	Predictors	Step 1 β	Step 2 β	Step 3 β
1	Gender ^a	.05	.03	.04
	Age	.05	.01	.01
$F(2,82) = 0.22, p = .800, R^2 = .005$				
2	Verbal Victimization	N/A	.43***	.41***
$F(1,81) = 17.83, p < .001, \Delta R^2 = .179$				
3	Threat	N/A	N/A	.06
	Control	N/A	N/A	-.02
$F(2,79) = 0.19, p = .827, \Delta R^2 = .004$				
Note: $n = 85$. ^a Gender coded (0= female, 1= male). * = $p < 0.05$; ** = $p < 0.01$; *** = $p < 0.001$				

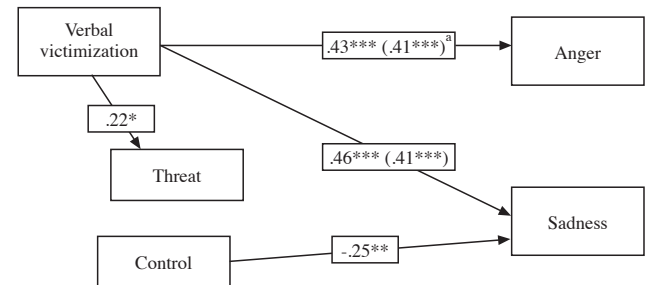


Figure 2. Path diagram showing significant relationships between Verbal Victimization, appraisals, and emotions
^a Where two standardized betas are reported, the value in parentheses reflects the path weight following inclusion of the appraisal variables in the regression analysis
 * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 6
Regression analysis predicting sadness in an indirect victimization context

Step	Predictors	Step 1 β	Step 2 β	Step 3 β
1	Gender ^a	-.30**	-.22*	-.24*
	Age	-.16	-.16	-.11
$F(2,80) = 5.97, p = .004, R^2 = .130$				
2	Indirect Victimization	N/A	.34**	.32**
$F(1,79) = 10.95, p = .001, \Delta R^2 = .106$				
3	Threat	N/A	N/A	.03
	Control	N/A	N/A	-.33**
$F(2,77) = 6.84, p = .002, \Delta R^2 = .115$				
Note: $n = 83$. ^a Gender coded (0= female, 1= male). * = $p < 0.05$; ** = $p < 0.01$				

Table 7
Regression analysis predicting anger in an indirect victimization context

Step	Predictors	Step 1 β	Step 2 β	Step 3 β
1	Gender ^a	-.08	.04	.06
	Age	-.29**	-.29**	-.30**
<i>F</i> (2,82)= 4.39, <i>p</i> = .015. <i>R</i> ² = .097				
2	Indirect Victimization	N/A	.47***	.43**
<i>F</i> (1,81)= 23.36, <i>p</i> <.001. ΔR^2 = .202				
3	Threat	N/A	N/A	.16
	Control	N/A	N/A	.06
<i>F</i> (2,79)= 1.35, <i>p</i> = .265. ΔR^2 = .023				

Note: *n*= 85. ^aGender coded (0= female, 1= male). *=*p*<0.05; **=*p*<0.01

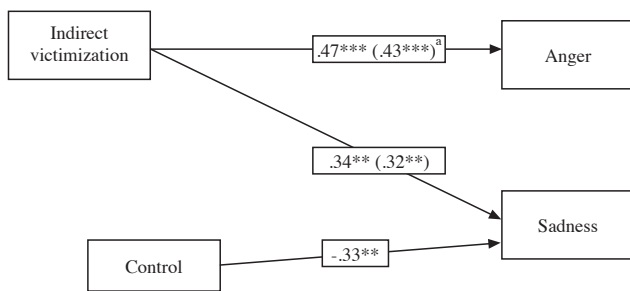


Figure 3. Path diagram showing significant relationships between Indirect Victimization, appraisals, and emotions
^a Where two standardized betas are reported, the value in parentheses reflects the path weight following inclusion of the appraisal variables in the regression analysis
 * *p*<0.05, ** *p*<0.01, *** *p*<0.001

Summary

All three forms of peer-victimization (physical, verbal, and indirect) are positively associated with the emotions of anger and sadness, accounting for between 9% and 21% of the variation in each emotion after controlling for age and gender. When victimization, age, and gender were all controlled for, threat appraisals did not predict either emotion in any victimization context, but control appraisals were significantly and negatively associated with sadness in both the verbal and indirect victimization contexts. There were no significant indirect effects of victimization upon emotions via either control or threat appraisals.

Discussion

This study investigated the relationship between victimization (physical, verbal, and indirect), the emotions of anger and sadness, and the extent to which appraisals of control and threat mediated the relationship between type of victimization and emotion. After controlling for age and gender, threat was associated with verbal victimization, control was associated with physical victimization, and neither appraisal was associated with indirect victimization. Control was related to sadness in verbal and indirect victimization contexts, whilst no significant indirect effects of victimization on emotion, via appraisals, were found.

Victimization and appraisal

Our findings show that threat is only associated with verbal victimization. This indicates, perhaps surprisingly, that the immediate bodily threat associated with physical victimization is not more threatening to victims than the more subtle verbal forms of victimization. High levels of verbal victimization may be perceived by victims as indicative of future escalation of victimization: Items in the Threat scale refer to friends deserting the student and to “more and more people” being nasty in future. Verbal victimization may also be a highly salient threat because of its higher frequency compared to physical attacks (Tapper & Boulton, 2005). Furthermore, Social Rank Theory would view verbal victimization as reflecting threats to a young person’s social attention holding power, leading to powerlessness in social relationships (Hawker & Boulton, 2000). Indeed, in Hawker and Boulton’s analysis, they state that the form of aggression is much less important for the victim than the fact that aggression represents an attack on social dominance. Our findings here offer some support for such a position.

Control appraisals were negatively associated with physical victimization, but did not covary with verbal or indirect victimization. Physically aggressive peers’ greater strength (Smith, Shu, & Madsen, 2001) perhaps reduces possible coping options available for victims thereby reducing perceptions of control.

Victimization and emotional reactions

No indirect effects of victimization upon emotions via appraisals were found. These results imply two things: First, that explanation for children and young people’s experiences of emotions within victimization contexts go beyond perceptions of threat and control (though these are also implicated). Second, exactly why victimization is directly associated with emotional reactions remains unclear. It may be that the appraisals do not mediate effects of victimization upon emotional reactions; alternatively, those appraisals assessed here may not have been the appraisals which are important. For example, blame appraisals may be important (Catterson & Hunter, 2010).

All forms of victimization were associated with sadness, perhaps surprisingly, since observations of long-term effects of bullying indicate that only victims of relational bullying have an increased risk of developing depression, loneliness, depressive symptoms, and social anxiety (La Greca & Harrison, 2005; Woods et al., 2009). Though we did not assess depressive symptomatology here, it may be that sadness mediates the effect of indirect victimization upon such feelings but that it does not do so for direct forms of victimization. Future research should examine how types of victimization, emotions, and subsequent psycho-social adjustment interact.

Boys tended to report less sadness than girls. In narrative descriptions of previous negative events, men have also been less likely to report sadness when describing previous negative experiences. Fivush and colleagues argue that social roles regarding sadness are reflected in parent-child interactions, which results in girls forming a more elaborate and relationship-focused self-concept than boys, allowing them to experience, express, and discuss feelings of sadness more freely (Fivush, Berlin, Sales, Mennuti-Washburn, & Cassidy, 2003). Our findings support the possibility that stereotypical thinking and self-perception are established in childhood and early adolescence.

Anger was associated with all three forms of peer-victimization. However, it has been highlighted as a maladaptive response which encourages revenge-seeking rather than conflict resolution strategies (Kochenderfer-Ladd, 2004). Associations between victimization and maladaptive behaviors such as non-violent adolescent delinquency (theft and burglary) have also been shown to be moderated by feelings of anger (Sigfusdottir, Gudjonsson, & Sigurdsson, 2010). Anger management for children experiencing peer-victimization may therefore usefully form part of intervention strategy.

Victimization and appraisals

Despite the absence of significant indirect effects, there were direct relationships between appraisals and emotional reactions, varying according to form of victimization. Hunter et al., (2006) reported that threat was positively associated with anger, though anger was not related to perceived control. Here, we also found that anger was unrelated to perceived control, but additionally that it was unrelated to threat across all three forms of victimization. This indicates that anger is an emotional response to peer-victimization that is independent of threat appraisals. Furthermore, it indicates that the reduction of victims' anger may not be affected by strategies which reduce threat, and so should be dealt with separately.

In addition to anger, threat was also found to be unrelated to sadness, whilst control was found to be significantly negatively associated with sadness in both the verbal and indirect contexts. Sadness is characterized by a feeling that we are victims of circumstance (Smith & Ellsworth, 1985). Children may therefore believe they are in the wrong place at the wrong time when they are victimized verbally or indirectly, possibly perceiving the behavior of such victimizers as opportunistic. This association between sadness and control is particularly interesting as both sadness and control have been found to be related to depression (Peterson & Seligman, 1984). Thus, sadness may mediate the effect of control

on depression in victimization. Future research should endeavor to investigate the possibility of such a mediating effect.

Limitations and conclusions

A reliance on self-report measures raises concerns about shared method variance, though the impact of this may be overstated (Spector, 2006). Furthermore, the nature of emotional reactions and appraisals, as internal and largely un-observable phenomena, necessitated the use of self-report measures. It should also be noted when interpreting these results that the relatively small sample size, and the bias in recruiting participants, may limit generalizability. Future research should recruit participants from a broader geographic area and should attempt to include participants from a variety of social-economic backgrounds.

In conclusion, this study extends our knowledge of the effects of peer-victimization on emotional responses, and the extent to which this is affected by appraisals. All forms of victimization were related to anger and sadness. Control appraisals were only associated with physical victimization but threat appraisals were positively associated with all three forms of victimization. The relationships between appraisals and emotions varied depending on victimization context, but no significant indirect effects of victimization upon emotions via either threat or control appraisals, which suggests that emotional reactions are not mediated via appraisals in this context. These results develop our understanding of the associations between appraisals and emotions in different peer-victimization contexts.

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