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EMOTION AND COPING IN YOUNG VICTIMS OF PEER-AGGRESSION

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OVERVIEW

Peer-aggression and peer-victimization have been the subject of considerable research interest over the past quarter century. There has been a focus on perpetrators of violence and aggression, based upon the belief that clarification of group and individual processes underpinning aggression will lead to effective intervention and prevention strategies. However, while it is unrealistic to hope that we can completely eradicate aggression, only by clarifying why children and young people respond in certain ways when confronted by peer-aggression can we effectively and efficiently help them to help themselves. In this way, young people can be taught resilience and practical coping skills which will help them to deal with peer-aggression when it occurs, and they can also be helped to more effectively manage emotional reactions when involved in ongoing peer-victimization. Transactional coping theory (Lazarus, 1999) provides an excellent framework for clarifying the important pathways leading to individual differences in emotional reactions and the use of coping strategies by children and young people. In the present chapter, we review the research with victims of peer-aggression which has touched on these questions, and follow this with review of relevant studies from the stress and coping literature which shed light on the relationships between appraisals, emotions and coping strategies. We also report results from a study of our own examining these variables in a sample of children and adolescents experiencing peer-aggression, and draw conclusions for theory and practice based upon these.

Peer-aggression and peer-victimization

Peer-aggression refers to the intentional harming of one child or young person by another. Such aggression may take a number of different forms including physical violence (e.g. hitting, kicking, pulling hair, spitting, tripping, etc), verbal assault (e.g. name-calling, shouting, swearing, or threatening), manipulation of relationships (e.g. malicious exclusion, spreading rumors) and property damage or theft. In addition to such 'traditional' methods of harassment, young people are quick to adapt to new technologies and now also use text messages and emails to intimidate and upset peers. These can be particularly pernicious as victims may have no way of escaping such attacks, and can experience victimization outside of the school context. Additionally, mobile phones with video capabilities have created a new form of aggression, labeled 'happy-slapping' by the British media, which involves the recording of an attack and subsequent sharing of the video-capture with others.

Peer-victimization is distinguished from peer-aggression by the repeated nature of the aggression (Kochenderfer & Ladd, 1996) and is a term often used interchangeably with 'bullying' (e.g. Austin & Joseph, 1996; Champion, Vernberg, & Shipman, 2003). Peer-victimization is often distressing (Sharp, 1995) and has been associated with a myriad of negative outcomes including suicidal ideation (Kaltiala-Heino, Rimpela, Marttunen, Rimpela & Rantanen, 1999; Roland, 2002), heightened depression and anxiety (Bond, Carlin, Thomas, Rubin & Patton, 2001; Craig, 1998; Prinstein, Boergers & Vernberg, 2001), low self-esteem (Karatzias, Power & Swanson, 2002; O'Moore & Kirkham, 2001; Solberg, & Olweus, 2003), and loneliness (Eslea, Menesini, Morita, O'Moore, Mora-Merchán, Pereira & Smith, 2004). Such effects have been shown to persist beyond the duration of individual episodes (Kochenderfer & Ladd, 1996; Kochenderfer-Ladd & Wardrop, 2001; Kumpulianen & Räsänen, 2000) and may persist into adult life (Hugh-Jones & Smith, 1999; Hunter, Mora-Merchán & Ortega, 2004).

Thus, from a stress perspective, peer-aggression and peer-victimization represent an excellent opportunity to examine the coping process. They involve situations where there is often a great deal at stake for the young person, including personal self-esteem and standing in the peer-group, possible physical harm (or the threat of), possible damage to friendships and romantic relationships, and/or material losses. Additionally, this is an area which is of equal concern for parents and all those working with young people. Indeed, since 1999, schools throughout the United Kingdom have been required by law to have an anti-bullying policy in place, emphasizing the importance of policies and strategies that are both reactive (punishments, sanctions, the Common Concern Method etc.) and proactive (curricular approaches, developing a 'telling ethos', increasing adult supervision etc.).

Research on the coping processes of young people experiencing peer-aggression and peer-victimization

A growing literature documents the coping strategies used by young people experiencing peer-victimization (e.g. Andreou, 2001; Bijttebier & Vertommen, 1998; Olafsen & Viemerö, 2000). However, these are descriptive accounts which either outline the types of coping strategies used by children and adolescents when experiencing peer-victimization, or compare victims' and non-victims' strategies for coping with stress more generally. Neither of these strategies clarifies *why* victims cope in specific ways, or how we might influence their use of coping strategy. Only one study that we are aware of has examined the relationship between appraisals and coping strategy use. Hunter and Boyle (2004) found that threat appraisals (i.e. perceived negative effects of bullying) of bullied pupils aged nine to 14 years old did not influence coping strategy use. Perceived control was unrelated to seeking social support, avoiding the problem and trying to solve the problem, but was negatively related to use of wishful thinking (a ruminative strategy). This raised questions about the relevance of central aspects of the appraisal process within the peer-victimization framework (although ambiguity of challenge appraisals did influence social support, problem focused and wishful thinking coping). However, it may also reflect the use of insufficiently sensitive measurement instruments in that study (i.e. single-item, categorical measures of appraisal).

A related problem may be that studies often focus on the analysis of coping strategy scales rather than individual coping strategies. This latter approach, examining specific appraisals, emotional reactions, and coping strategies, is rarely used in research examining coping processes, yet maximizes both the practical and theoretical utility of the results and has been recommended by previous authors as a necessary future strategy for clarify coping processes (Kochenderfer-Ladd & Skinner, 2002). Hence, rather than measuring coping strategies using relatively broad and descriptive measures of coping such as the Self-Report Coping Measure (Causey & Dubow, 1992) we chose to examine specific coping strategies that participants in previous research in this area have reported using (e.g. "*Hit them*", "*Ignore them, so they'll stop*"). Such an approach has several benefits, including:

- Increased salience and direct relevance of the coping items for the young people experiencing aggression;

- Avoidance of the use of coping scales derived via factor analytic techniques. Such techniques have been criticized as inappropriate for the domain of coping strategy use, due to the fact that successful use of one strategy in a factor (e.g. "*Asked a teacher for help*") may negate the use of another within the same factor (e.g. "*Asked a friend for help*") rendering traditional measures of psychometric adequacy, such as internal reliability and

test-retest, inappropriate (Compas, Connor-Smith, Saltzman, Thomsen & Wadsworth, 2001; De Ridder, 1997). Furthermore, peer-aggression involves an isolated act of aggression, heightening these problems;

- Clarification of strategy-specific effects. Herrald and Tomaka (2002) report no differences in broad coping strategies used (*seeking social support, active coping, defensive coping*) when different specific emotions were experienced – suggesting that the appropriate unit of analysis when attempting to clarify such links may be individual strategies, not super-ordinate structures of coping such as *problem focused* coping.

As might be expected, in the absence of research on appraisals and coping strategy use of young people experiencing aggression, there is also a lack of studies examining the relationship between the emotions experienced during such an encounter and the strategies used to deal with it. The only account thus far of such relationships is by Hunter and Borg (in press) who examined the relationships between emotions experienced when being victimized and subsequent coping strategies among 6,282 Maltese schoolchildren aged 9 to 14 years old. Pupils were asked whether they felt *angry, vengeful, self-pitying, indifferent,* and *helpless* when experiencing peer-victimization, and were also asked to indicate their behavioral reactions (*did nothing, told my best friend, sought a friend's help, sought my friends' help, sought a teacher's/ teachers' help, sought the headteacher's help, sought parental help,* and *other*). Pupils who reported feeling angry were more likely to report asking for help (from all sources examined). Pupils who reported feeling vengeful showed the same pattern, except for failing to predict *Sought a teacher's help*. Self-pity predicted greater use of all strategies except *Sought my friends' help*. Feeling indifferent predicted more use of each strategy, except *Sought my friends' help* and *Sought parental help*. Finally, pupils who reported feeling helpless were more likely to use each of the strategies examined. Thus, a relationship between emotional reaction and the seeking of social support has been demonstrated for victims of bullying, and it is of theoretical and practical significance to clarify what relationships may exist between emotions and other coping strategies.

Appraisals, emotions and coping strategies

The influence of emotion in the coping processes of children and adolescents has been virtually ignored by empirical research, despite early theoretical discussions (e.g. Folkman & Lazarus, 1988) and related studies with adult participants (Herrald & Tomaka, 2002; Smith & Ellsworth, 1985). This is an important area to advance, as shown by recent attempts to clarify the role of emotion in existing theoretical frameworks not specifically related to coping strategy use (e.g. in social information processing: Lemerise &

Arsenio, 2000) and the growing recognition of their importance in social interactions generally (Halberstadt, Denham & Dunsmore, 2001; Lemerise & Arsenio, 2000; Rothbart, 2004).

Folkman and Moskowitz (2000) note that practical issues are involved when deciding whether coping is conceptualized as determining emotion or vice-versa, and suggest that researchers should be guided by whether they are attempting to predict psychological distress (where the focus would be on coping strategies predicting emotions) or to predict who engages in particular behaviors (where the focus would be on emotions predicting use of coping strategies). In the current research, the aim is to understand why children and adolescents use certain coping strategies when they are victimized, and hence emotion is used here to predict use of coping strategies. In support of this directionality, Kochenderfer-Ladd (2004) found that emotions were more likely to predict coping than vice-versa in her vignette study of how children aged five to 11 years old would feel and react in a situation where someone were nasty to them.

Grych and Fincham (1993) found that children's perceptions of threat and blame were associated with their affective responses to parental marital conflict. Specifically, self-blame led to more distress, shame and helplessness, while appraising the conflict as one likely to escalate or begin to involve the child led to higher levels of distress and helplessness only. Appraisals related to coping efficacy were unrelated to any of the three emotions examined. Although the relationship between emotions and coping was not examined in Grych and Fincham's study, they do report that appraisals of self-blame were positively associated with direct modes of coping ("*I'd tell them to stop fighting*") and negatively related to withdrawal; appraisals suggesting that the child may be drawn into an argument led to indirect coping (e.g. being 'good' in order to resolve conflict). A belief in their ability to make themselves feel better was associated with more direct coping, while belief in their ability to help their parents resolve their problems was positively related to indirect coping.

Among first, third and fifth grade students in North America, Beaver (1997) reported finding that emotion-focused coping was more commonly used in response to fear than anger, while problem-focused coping was more commonly used for anger than fear. Murphy and Eisenberg (2002) examined the peer-conflicts of seven to 10 year old children reported that anger was associated with unfriendly goals, while sadness was associated with friendly goals. Hence, anger led to less socially constructive coping responses. Kochenderfer-Ladd's (2004) vignette study revealed that anger was negatively associated with conflict resolution among older children, and positively related to revenge seeking (though only at one of the two time points examined). Feeling afraid predicted greater conflict resolution (again, only at one time point).

Although not with children, Herrald and Tomaka (2002) carried out one of the only studies examining appraisals, coping reactions and cardiovascular reactivity. They found undergraduates' cognitive, behavioral and physiological data all provided strong support for the specificity of emotion, and that specific patterns of response were associated with shame, anger and pride. The two negative emotions were similar in many respects (e.g. both involved high appraisals of situational demand, situational threat, negative future expectancy, and both were coped with in similar ways) but also differed in important ways (e.g. heart rate, vascular resistance, task performance, core relational theme invoked). The authors concluded by noting that processes involved in specific emotions should be examined rather than the processes associated with more general mood or affect. They also emphasized the need to conduct research within situations which are genuinely emotion-provoking (rather than relying on, for example, weak experimental manipulations of emotion). The current study met both of these criteria.

To date, it appears that no published studies have modeled these three aspects of the coping process (appraisals, emotions, and coping strategies) among young people experiencing peer-victimization or aggression.

THE PRESENT STUDY

The research presented here aims to examine the relationships between appraisals, emotions, and coping strategies used by children experiencing peer-aggression and peer-victimization. This is important as it allows practitioners and others working with victimized pupils to develop intervention strategies that aim to influence the strategies that pupils use, as well as teaching them what the desired or preferable strategies are. This can increase the likelihood that pupils will be willing and able to enact positive strategies introduced to them. A second aim of the research is to expand the literature detailing how young people deal with common stressful situations, and the role played by emotional reactions and appraisals in the coping process. Potential gender and developmental differences will also be examined in order to assess the extent to which coping processes are invariant across such groupings. Finally, we aim to examine the relationships between specific emotions, appraisals, and specific coping strategies. Such a methodology is rarely used in the research literature on stress and coping as a focus on coping styles or traits is preferred. However, we believe that there is a strong case for a more fine-grained analysis, particularly with our twin objectives of theory development and practical application.

The model we assessed is outlined in Figure 18.1. Appraisals of control and threat have direct effects upon the extent to which any coping strategy is used, and also have direct effects upon the extent to which fear, sadness and anger are experienced. This reflects the primacy afforded cognitive

interpretations of events within the transactional coping framework as drivers of situational reactions and behaviors (Lazarus, 1999). Hence, how young people interpret a situation can be expected to influence how they emotionally react and what they subsequently do.

Figure 18-1. Hypothesized relationships between appraisal, coping and emotion variables.
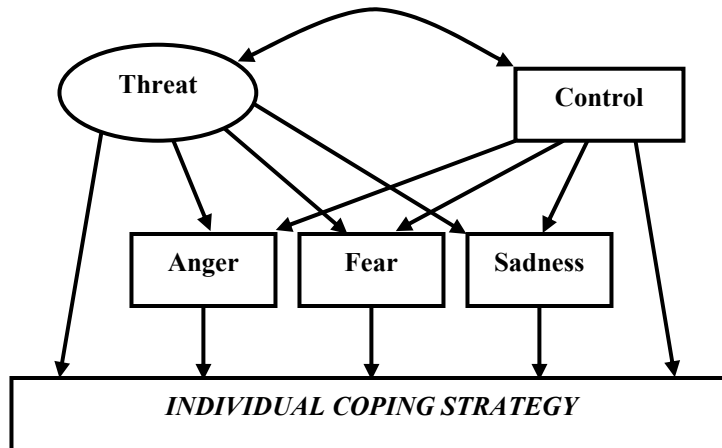
It is further expected that fear, sadness and anger will have direct effects upon the extent to which any given coping strategy is used. This element of the structural equation model serves to highlight the importance of emotions for driving, organizing and regulating young people's social behavior (Murphy & Eisenberg, 2002). It was also expected that threat and control would be correlated, and that the error terms associated with the three emotion items would also covary.

Taking such an approach, and recalling the literature reviewed earlier, there are a number of specific relationships *that may be expected* between appraisals, emotions and coping strategies. First, perceived control is expected to be positively associated with problem focused strategies such as standing up to an aggressor, ignoring aggressors in order to stop them being nasty, or hitting them. Control should also be negatively associated with emotion focused strategies such as keeping one's feelings to oneself, and rumination. In relation to emotional experience, it is expected that higher levels of control

will lead to lower levels of reported anger, sadness and fear. Threat appraisals are expected to be positively associated with all strategies and all three emotional reactions.

In relation to emotional reaction, it is expected that fear will be positively associated with both emotion focused strategies and conflict resolution strategies (such as assertively telling an aggressor to stop). Anger is likely to lead to less constructive and less relationship-building strategies, and so more use of aggressive retaliation is expected. In addition, given the association of anger with revenge seeking, we expect anger to predict more use of the strategy "*Tricked the bully*". Sadness has been related to the pursuit of friendly goals, and so it is expected that sadness will be positively associated with the two relationship-oriented coping strategies "*Tried to make friends with them*", and "*Made new friends*".

METHOD

Participants were 830 children and young people attending six Secondary and 10 Primary schools in Aberdeenshire and North Lanarkshire, Scotland. All the pupils were taking part in a longitudinal study of peer-victimization and coping extending over two years. Of these pupils, 317 were in Primary 6 (P6; mean age at beginning of study = 8.95, S.D. = 0.27, range = 8 – 10; 49% boys), 306 were in Secondary 2 (S2; mean age at beginning of study = 11.93, S.D. = 0.27, range = 11 – 13; 49% boys), and 205 were in Secondary 3 (S3; mean age at beginning of study = 13.01, S.D. = 0.24, range = 12 – 14; 48% boys).

All participants completed self-report questionnaires assessing their recent experience of peer-aggression; their threat and control appraisals; their coping strategy use; their emotional reactions to aggression.

To assess the pupils' experiences of peer-aggression, they were asked to indicate whether they had experienced any of nine types of aggression during the preceding two weeks. Items reflected verbal, direct and indirect forms of aggression: "*someone called you names*", "*you were threatened by someone*", "*your belongings were stolen/damaged*", "*you were left out of games or groups*", "*you were hit or kicked*", "*nasty stories were spread about you*", "*you were forced to do something you did <u>not</u> want to do*" and "*other*". The frequency with which aggression was experienced was also assessed (see Hunter, Boyle & Warden, 2004, for more detail).

In assessing emotional reactions to aggression, pupils were asked to rate the extent to which they experienced three separate emotions at the time of the aggression. The items "*I felt angry*", "*I felt scared*" and "*I felt sad*" were each rated on a four point scale ("Not at all", "A little", "Quite" and "Very").

Control was assessed using a single item "*How easy is it for you to stop other kids being nasty to you?*" This was based on previous work with victims

of bullying (Hunter & Boyle, 2002, 2004) supporting the use of single-item measures of control. Responses were recorded on a four point Likert scale (1 = "*very difficult*", 4 = "*very easy*"). Threat was assessed using a scale consisting of four items based on Hunter and Boyle's (2004) threat appraisal categories derived from open-ended questioning of children about negative consequences of bullying. For example, items included "*You will feel bad about yourself*" and "*Your friends won't like you anymore*". These items were presented as possible responses to the question "*When other kids are nasty to you, what do you think might happen?*" and each was answered on a four point Likert scale (1 = "*not likely*", 4 = "*very likely*"). Cronbach's alpha for the scale was .63.

Coping strategies were assessed from a list of 16 items: "*Told someone (Who? Please circle - friend/ parent/ teacher)*", "*Threatened to tell someone (Who? Please circle - friend/ parent/ teacher)*", "*Stood up to them, told them to stop*", "*Tried to make friends with them*", "*Tricked the bully", "Wished you could change something (how you felt/ what happened)", "Hit them*", "*Threatened to hit them*", "*Stayed away from places they might be*", "*Ignored them, so they would stop*", "*Kept your feelings to yourself*", "*Made new friends*", "*Did something to take your mind off the bullying*", "*Told them how you felt*", "*Skipped school*", "*Other (please give example)*". The response key was "*Never*", "*Once or twice*", "*Most of the time*" or "*Everytime*" except for the items relating to making new friends and attempting to establish a friendship with the aggressor, both of which had "*Yes/ No*" response options.

All pupils took part in their class groupings. Questionnaires completed by the pupils were not anonymous, due to the longitudinal nature of the broader research context within which the current data were collected.

RESULTS

Of the 830 participants, 374 (45.1%) indicated experiencing aggression during the preceding two weeks. Of the 374 pupils, 175 (21.1% of total *n*) reported experiencing peer-victimization (i.e. repeated aggression).

The structural equation model depicted in Figure 1 was tested using AMOS5.0. Several features were present in the model that was assessed that are not immediately evident in Figure 1, including (i) four observed indicator items for the threat latent variable; (ii) error terms associated with each of the four threat indicators; (iii) residual error terms associated with each of the three emotion indicators, which were allowed to correlate; (iv) a residual error term associated with the individual coping strategy item. Data from all pupils reporting peer-aggression (*n* = 374) were used in these analyses.

The initial analysis used, the coping strategy "*Hit them*" as an index to assess the fit of the model. Fit indices are reported in table 1 and were relatively poor. Modification indices provided by AMOS were consulted in

order to examine if there were clear problems with the model that could be remedied within the context of the current theoretical framework. These suggested that there existed problems with the threat item "*You will feel bad about yourself*" as links were suggested between this item and the sadness item, as well as between this item's error term and both the error term for sadness and the item for control. Hence, this item appeared to be reducing the fit of model and was removed. The revised model displayed good levels of fit across all the indices examined (see Table 18.1), and the lower AIC also indicated a better fitting model.

Table 18-1. Fit Indices for Structural Equation Models.

Fit index	Structural Model tested	
	1	2
Chi square	$\chi^2 = 42.35$, df 17, $p < 0.01$	$\chi^2 = 16.27$, df 10, $p = 0.09$
RMSEA	.063 (.040 to .087)	.041 (.000 to .076)
CMIN/DF ratio	2.49	1.63
IFI	0.947	0.984
TLI	0.882	0.953
CFI	0.944	0.983
AIC	116.35	84.27

Note. Numbers in parentheses are RMSEA 90% confidence intervals. IFI = incremental fit index. TLI = Tucker-Lewis coefficient. CFI = comparative fit index. AIK = Akaike information criterion.

This second model was then assessed for levels of fit across all 16 coping strategies. Good levels of fit, comparable to those obtained with the strategy "*Hit them*" and within the recommended ranges outlined above, were obtained across all but two strategies: "*Tricked the bully*" (TLI = 0.924, below the minimum of 0.95) and "*Tried to make friends with them*" (TLI = 0.893, below the minimum of 0.95, and RMSEA = 0.052, marginally above the recommended maximum of 0.05). Given that the overall profile for these two strategies were otherwise acceptable, no modifications were made to these models.

In order to check for developmental (Primary vs. Secondary School) or gender differences in the structural relations among appraisal, emotion and coping variables, multiple-groups analyses were conducted. In each analysis, two competing models were compared to see which represented the better fit to the data: the first where all structural coefficients among appraisal, emotion

and coping strategy variables were allowed to vary across groups, and the second where these coefficients were constrained across groups. These analyses revealed no statistically significant differences in the path weights according to whether gender or school-stage.

Table 18-2. Standardized Regression Weights From Emotions and Appraisals to Individual Coping Strategies

Coping Strategy	Threat	Control	Anger	Fear	Sadness
Told someone	.00	.03	.22***	.08	.09
Threatened to tell someone	.12	.01	.07	.06	.15*
Stood up to them, told them to stop	-.03	.23***	.12*	-.11*	.02
Tricked the bully	.14	.20**	.12*	-.04	-.12*
Wished you could change something (how you felt/ what happened)	.19**	-.07	.08	.04	.32***
Hit them	.21**	.26***	.15**	-.13*	-.08
Threatened to hit them	.20**	.16**	.14**	-.06	-.08
Stayed away from places they might be	.17*	-.12*	.13*	.10	.10
Ignored them, so they would stop	.11	-.03	.07	-.08	.04
Kept your feelings to yourself	.10	-.14*	.04	-.07	.07
Did something to take your mind off the bullying	.08	.13*	.00	-.06	.16*
Told them how you felt	-.04	.03	-.07	.09	.22***
Skipped school	.50***	.19**	.00	.06	.06
Tried to make friends with them	-.06	.12*	-.07	.07	.24***
Made new friends	.08	.10	-.02	-.04	.12[a]

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; [a] $p = 0.056$.

The standardized regression weights from appraisals to emotions were constant across coping strategies. These indicated that as threat increased, so

too did anger (standardized regression weight = .17, $p < 0.05$), and fear (.21, $p < 0.01$), but that threat was not a significant predictor of sadness. As perceived control increased, sadness decreased (-.37, $p < 0.001$) as did fear (-.15, $p < 0.01$). Perceived control was not a significant predictor of pupils' reported levels of anger.

DISCUSSION

In this study, a number of variables related to the coping processes of children and adolescents experiencing peer-aggression were examined simultaneously. Direct relationships between appraisals and specific coping strategies were examined, as were direct relationships between emotional reactions and specific coping strategies, and indirect effects of appraisals on coping strategies via emotional reactions. Structural equation modeling confirmed the adequacy of the theoretical account of the relationships between these coping variables, as depicted in Figure 18.1. Specifically: (i) appraisals predict the extent to which young people report using specific coping strategies; (ii) appraisals predict the extent to which young people report experiencing discrete emotions; (iii) discrete emotional reactions predict the extent to which young people report using specific coping strategies. No developmental differences in such processes were discovered, and only one gender difference emerged (related to the coping strategy "*Cried*").

These results support Herrald and Tomaka's (2002) assertion that in order to adequately assess the influence of specific emotional reactions on coping strategy use it is necessary to examine specific coping strategies rather than broader coping styles or other typologies of coping strategy use (such as the *problem focused / emotion focused coping* dichotomy). Relationships between emotions and coping strategies may be masked when using broader typologies, and the approach used here is recommended for future research.

It was expected that control would be associated with active (including aggressive), problem-focused strategies. This was supported, with significant positive associations between control and "*Stood up to them, told them to stop*", "*Hit them*", "*Threatened to hit them*", "*Tricked the bully*" and "*Tried to make friends with them*". This suggests that control is not an appraisal that should be encouraged and emphasized without further concern for associated variables (see below) given that it is positively associated with active strategies which are both adaptive and maladaptive. It was also expected that control would be negatively associated with emotion focused strategies, and this was partially supported. Control was significantly negatively associated with "*Kept your feelings to yourself*" and to the avoidant strategy "*Stayed away from places they might be*", but was positively associated with another avoidant strategy "*Skipped school*" and the distraction strategy "*Did something to take your mind off the bullying*". Control was unrelated to the rumination strategy "*Wished you could change something*". Thus it seems that

while control is associated with several positive aspects of coping it is also related to aggressive and truanting responses.

When trying to use such findings for intervention, a parallel examination of the influence of threat upon coping strategy use offers possible solutions regarding how to proceed. Threat was expected to be positively associated with all types of coping yet the observed relationships were between threat and aggressive responses, threat and rumination, and between threat and truanting. Hence, it may be beneficial for those designing interventions which aim to encourage pupils' positive, active engagement with problems to both focus on increasing control and simultaneously reducing threat. A child who feels in control but who also feels that the situation is one which is likely to have many negative consequences may be more likely to be aggressive than one who has learned to put fears about negative consequences into some perspective and who can reduce those.

Also relevant to the goal of increasing the likelihood of pupils engaging in non-aggressive, constructive strategies is the relationship between appraisals and emotional reactions. Threat, as expected, was positively related to anger and fear, though contrary to expectation did not predict sadness. Control was negatively related to fear and sadness, also supported our expectations, but contrary to expectations did not predict anger. Hence, it appears that it is possible to increase control without increasing levels of anger, while decreasing levels of threat can help reduce levels of anger – and anger is associated with aggressive responding (see Table 18.2). Given the relationships between anger and aggressive responding, anger management skills may also be positive aspects of intervention for schools to incorporate when dealing with pupils experiencing peer-aggression. Additionally, as we had expected, anger was positively associated with seeking revenge ("*Tricked the bully*").

We also expected that fear would be positively associated with both emotion focused strategies and with conflict resolution strategies. Such hypotheses were not supported, and in fact fear only negatively predicted "*Hit them*" and "*Stood up to them, told them to stop*". Clearly, pupils who are afraid of another pupil are somewhat reluctant to confront them. Our prediction regarding the association between fear and the use of conflict resolution strategies was made on the basis of Kochenderfer-Ladd's (2004) vignette study, perhaps suggesting that what students think they would do when they are scared does not correspond to what they actually do when scared. This may reflect the similar lack of correspondence that has been reported between trait and situational measures of coping strategy use (Schwartz, Neale, Marco, Shiffman & Stone, 1999) which highlights the highly situated nature of the coping process.

Finally, it was expected that sadness would be related to the pursuit of friendly goals, specifically "*Tried to make friends with them*" and "*Made new

friends". This was true for the most prosocial of these two strategies, "*Tried to make friends with them*", and was marginally significant ($p = 0.056$) for "*Made new friends*". Lazarus (1999) emphasizes that sadness is usually linked to loss, and so these relationships may reflect the fact that pupils can be bullied by others who they consider to be friends (reference). This is likely to lead to efforts to repair the friendship, or to attempt to forge new friendships, and may also partly explain the positive correlation between sadness and "*Told them how you felt*". Sadness was also positively related to the ruminative strategy of "*Wished you could change something*" and to the distraction strategy "*Did something to take your mind off the bullying*". Wishful Thinking coping has been associated with negative psychological adjustment (Coyne, Aldwin, and Lazarus, 1981; Stern and Zevon, 1990) suggesting it is likely to be a maladaptive way of coping with peer-aggression. Distraction techniques may be helpful in the short-term as a way or reducing excessive arousal, but are unlikely to be adaptive in the long-term as solutions to problems are not formulated by avoiding thinking about them.

The structure of coping was invariant across the two age groups examined here, as it was across boys and girls. This suggests that young people may differ in the types of strategies they use across different ages and genders, but that the relationships between threat, control, sadness, anger, fear and those coping strategies is comparable. Hence, other factors are likely to account for differences in reported use of coping strategies, for example the extent to which children and adolescents turn to adults or to friends for support (Compas, 1987) or their social reasoning ability (Blanchard-Fields & Irion, 1988). Future research should aim to incorporate such information when testing models such as that examined here.

CONCLUSIONS

Despite a considerable interest in the appraisals and attributions, the emotions, and the coping strategies of young people, there has been very little research examining all three simultaneously. Here, we have outlined findings from a study addressing this issue which indicate that there are patterns of influence that exist in relation to the use of specific coping strategies that are useful for informing intervention. One such lesson is that it is not sufficient to simply appeal to one or other situation-specific perception (e.g. control) if we hope to influence pupils' coping responses in a particular direction; it is important to consider multiple influences upon coping strategy selection, and to coordinate the ways in which we address these.

The study also has implications for theoretical models of stress and coping processes in children and young people. It appears that, on the measures used in the current study, there are neither gender nor developmental differences in the relationships between appraisals, emotions and coping strategies. This leaves unexplained the issue of why gender and developmental

differences exist when young people report how they cope. If the processes which lead to hitting an aggressive peer are the same for boys and girls, why do boys resort to this coping strategy more often? One answer may be to look at group differences in the predictor variables. For example, boys may perceive higher levels of control than girls at the outset, therefore the relationship between control and aggression is more likely to lead to aggression for boys than girls.

Finally, we would urge further research into the relationships between specific appraisals, emotions and coping strategies. While the lessons drawn may be, to some extent, context dependent, the possibilities for refining and improving intervention in those contexts is promising. This also allows us to create a more in-depth and rounded theoretical understanding of the coping processes of young people experiencing particular stressors.

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