The Importance of Coping, Threat Appraisal, and Beliefs in Understanding and Responding to Fear of Victimization: Applications to a Male Prisoner Sample

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Abstract The current study explores conceptualizations of victimization by men, focusing on threat appraisal, coping appraisal, and beliefs, and seeking to apply protection motivation theory, the applied fear response model, and social cognition. Five hundred and sixty-six male prisoners, comprising adults and adolescents, completed a measure of victimization and perpetration (DIPC-SCALED) and of fear, appraisal, and beliefs (TAB). It was predicted that increased threat appraisal and ineffective coping appraisal would predict increased fear of victimization, particularly among the mutual perpetrator/victim group. This group was expected to select strategies for managing the threat of victimization, which carried more risk to them (e.g., such as an aggressive reaction) and to present with beliefs supporting the use of aggression as a response to victimization. Fear of victimization was predicted by threat and coping appraisal although the deficit for victims appeared in coping appraisal only. Mutual perpetrator/victims presented with a specific difficulty in appraising their ability to cope with threat. Differences in beliefs supporting an aggressive response to threat were also noted across perpetrator and/or victimization groups. The article concludes by outlining the implications for theory and clinical practice.

Keywords Victimization · Prisons · DIPC · Fear and threat appraisal

The application of theory to forensic research is limited in the area of victimization, with a tendency for published work to be descriptive and/or limited in its integration of theory. There is a need both to apply and develop theoretical models, which can then be used to guide further research, assessment, and intervention. Potentially useful models to apply to a further understanding of victimization include the Applied Fear Response model (AFR: Ireland, 2005), Protection Motivation Theory (PMT: Fry & Prentice-Dunn, 2005; Rogers, 1975, 1983), and the underpinning models of Social Cognition (e.g., Anderson & Bushman, 2002; Huesmann, 1998), all of which will be outlined later.

The importance of exploring victimization as an area of study, both at a theoretical and empirical level is clear. Estimates of victimization between prisoners is high with monthly proportions, of being aggressed toward, reaching around 80% in some studies (e.g., Ireland & Ireland, 2008; Turner & Ireland, 2010). Further studies report that over half of prisoners are fearful of being “bullied” (Chan & Ireland, 2009), with “bullying” a term used interchangeably with the term “victimization” in prisons (Ireland & Ireland, 2008). Indeed within prisons, victimization is conceptualized in broad terms and covers, sexual, physical, theft-related, verbal, psychological, and indirect [subtle] abuse (e.g., Chan & Ireland, 2009; Edgar, O’Donnell, & Martin, 2003; McCorkle, 1993; O’Donnell & Edgar, 1999). Despite high proportions of reported victimization clinicians, developing interventions designed to support and respond to the needs of prisoners, have limited empirical literature to draw upon (Edgar et al., 2003; McCorkle, 1993). This is particularly the case for men, with the victimization literature focusing on women. Current interventions also tend to focus on modifying perpetration behaviors, as opposed to responding to victimization (Ireland, 2002), failing to account for differences between
victim groups (Ireland & Ireland, 2008). Developing our understanding of how victimization and the threat of this are appraised by prisoners, particularly men, is vital if we are to enhance our supportive interventions.

Accounting for the threat of victimization is as important as accounting for actual victimization. This is where the concept of fear of victimization becomes crucial (McCorkle, 1993; O’Donnell & Edgar, 1999). Studies have indicated that among prisoners, it is the fear of being aggressed toward as opposed to the actual experience of this which can drive a negative emotional or behavioral response (e.g., McCorkle, 1993). Despite this, the study of fear of victimization among prisoners is limited. This is surprising when accounting for the criminological literature and its focus on topics such as fear of crime (e.g., Farrall, Jackson, & Gray, 2009; Hale, 1996; Jackson & Stafford, 2009; Stafford, Chandola, & Marmot, 2007).

Such literature reflects on the behavioral and emotional impacts of fear, and its negative impact on quality of life and well-being (Farrall et al., 2009; Hale, 1996; Jackson & Stafford, 2009; Stafford et al., 2007).

This research, however, applies to community settings. Prison settings are distinct from community settings, and this needs to be acknowledged. The range of potential fear reactions to victimization within prisons are, for example, controlled to some extent by the specifics of the environment where “flight” responses become difficult to employ, precautionary behaviors are limited, and interpersonal relationships are influenced by a range of beliefs about the need to protect oneself and one’s possessions with violence (McCorkle, 1992). Within prisons, a fear of being aggressed toward can further promote a range of emotional and behavioral responses (McCorkle, 1992, 1993), designed to prevent future victimization. This includes trying to enhance body mass through exercise and the development and concealment of weapons, with these collectively referred to as precautions toward aggression (McCorkle, 1992). Precautionary responses are evidenced even among those prisoners who report no experience of actual victimization (Ireland & Power, 2009). The mere placement, however, of an individual in a high risk environment does not automatically promote a fear reaction. The Safety Paradox is one explanation for this, described as a phenomenon whereby prisoners feel safe in high risk environments, such as prisons, when really they should not feel safe (Wolff & Shi, 2009). Thus, it is not just the likely exposure to a risk, which is important in explaining reactions in prisons.

Thus, simple explanations (e.g., likely exposure = increased fear) fail to sufficiently describe how fear is appraised. This makes exploration of what combinations or additive factors are involved in the appraisal of fear a worthy area of study. Indeed how we construct fear and understand its likely responses becomes crucial. What may represent difficult, challenging, and/or aggressive behavior in a prisoner may be better conceptualized as a carefully appraised and potentially expected fear response underpinned by other factors, such as normative beliefs (i.e., beliefs an individual believes the wider peer group holds).

As we move toward the importance of explaining fear responses, and the incorporation of appraisal, the application of theoretical models become valuable to consider. As noted earlier two particularly pertinent models, are the AFR model (Ireland, 2005) and PMT (Fry & Prentice-Dunn, 2005; Rogers, 1975, 1983). The AFR incorporates the precautionary behaviors, proposed by McCorkle (1992), and describes fear as a motivating factor for a range of behavioral and emotional responses, to actual or threatened victimization. This includes avoidance, disruptive behavior, self-isolation, and pre-emptive aggression. It argues that the mutual perpetrator/victim groups are most likely to engage in pre-emptive aggression. The aggression demonstrated by this group is thus considered primarily fear motivated (Ireland, 2005).

The AFR also accounts for the specifics of the prison environment and postulates that “flight” responses can be immediate or delayed in such environments. Delayed flight responses can represent aggression directed toward the self and/or others, employed sometime after the actual or perceived threat, in order to effect removal from the high risk environment. There has been some support for the AFR with the mutual perpetrator/victim groups, who are likely to be the most fearful of prisoners and most likely to display a range of negative, drug-related, emotional, help-seeking, isolating, and defensive behaviors (Chan & Ireland, 2009; McCorkle, 1992).

What is missing from any testing and/or further development of the AFR model is a role for cognition. The importance of appraisal and beliefs was noted earlier and this is where the AFR model is in need of enhancement. A considered role for cognition is commonly applied outside of the forensic field, with models such as Information Processing (IP: Huesmann, 1998) and the General Aggression Model (GAM: Anderson & Bushman, 2002; Anderson, Gentile, & Buckley, 2007) useful in this regard. Both models form part of the wider concept of Social Cognition. Each delineates a clear role for normative beliefs, attribution, and emotions, as driving features in promoting an individual’s choice to be aggressive. Mutual perpetrator/victims, for example, are thought to choose to aggress toward others, based on a belief that aggression is an effective response to victimization and one that is supported by the wider culture (Ireland, 2002). How this integrates with fear and appraisal has not been examined. Models such as IP and the GAM do focus though on
perpetrators, and have not been applied to an appraisal of threatening situations by victims.

This is what makes PMT (Fry & Prentice-Dunn, 2005; Rogers, 1975, 1983) so useful when trying to understand responses to actual or perceived fear. PMT incorporates a range of cognitive mediating factors, and to some extent environmental factors. The paucity of mention of the environment is a recognized drawback of the model (Boer & Seydel, 1996). Thus, whereas the AFR neglects cognition but not environment, PMT neglects environment but not cognition. Thus, using both the AFR and PMT, and incorporating a role for normative beliefs, to try and examine responses to actual and/or threatened victimization is complimentary.

Protection Motivation Theory distinguishes between adaptive and maladaptive coping with a health threat (Fry & Prentice-Dunn, 2005). It considers this a product of two appraisal processes, threat appraisal, and coping appraisal. Appraising results in either an adaptive (protection motivation) response or a maladaptive response (1) How severe the threatened event is considered to be (threat appraisal—severity); (2) How likely or how vulnerable an individual believes themselves to be (threat appraisal—vulnerability); (3) How successful preventative behavior is (coping appraisal—success); and (4) How confident the individual feels in preventing the risk (coping appraisal—ability). All four components comprise protection motivation. Fear arousal is expected to enhance protection motivation by heightening threat appraisal and driving an adaptive response. If coping appraisal, however, is unsuccessful (e.g., an individual feels that responses are limited and they are unlikely to complete them effectively), then a maladaptive response may ensue (Boer & Seydel, 1996).

The current study aims to apply the theoretical models of PMT, the AFR model, and social cognition to an examination of victimization among prisoners, including a fear of victimization. The following core predictions were made: (1) Fear of being victimized will be predicted by increased threat appraisal and decreased coping appraisal; (2) Mutual perpetrators/victims will report higher levels of fear and threat appraisal in comparison to the other categories (i.e., perpetrators, victims, casual/low frequency); (3) Mutual perpetrators/victims will demonstrate less effective coping appraisals, and select strategies for managing the threat of victimization which carries more risk to them (e.g., such as using aggression as a response), and (4) Mutual perpetrator/victims will be more likely to present with beliefs supporting the use of defensive aggression.

Method

Participants

Five hundred and sixty-six male prisoners participated from two establishments, one housing Category B adult male offenders, and one housing juvenile and young offenders, from a closed establishment. Both were from the South-West region of the UK. A total of 768 questionnaires were distributed, representing a 74% response rate. The final sample comprised 86 juveniles (65% response rate), 107 young offenders (70% response rate), and 373 adults (77% response rate). A description of the sample is indicated in Table 1.

Measures

All prisoners completed the following self-report measures.

Direct and Indirect Prisoner Behavior Checklist-Scaled (DIPC-SCALED). This was used to measure the extent and frequency of victimization and perpetration. The questionnaire contains 111 items, relating to discrete forms of direct and indirect aggression. Items cover physical, psychological/verbal, theft-related, sex related, and indirect aggression. Examples of victimization items include, “I was called names about my race or color.” “I have been kicked by another prisoner,” and “I have been deliberately ignored.” Examples of perpetration items include “I have hit or kicked another prisoner,” “I have called another prisoner names about their offence or charge,” and “I have spread rumors about another prisoner.” Participants are asked to rate the frequency of each behavior in the past month (experienced or engaged in) on a scale of 0–4 [0 = never, 1 = rarely, 2 = sometimes, 3 = often, 4 = always]. The DIPC (Ireland & Ireland, 2008) has been validated on men, women, adults, and adolescents within prisons. There is a dichotomous and scaled version. As a behavioral measure, it has been used extensively within prisons (e.g., Archer, 2007; Archer & Southall, 2009; Lawrence & Welfare, 2008; South & Wood, 2006).

Threat Appraisal for Behavior Measure (TAB). The TAB (Ireland, 2009) presents participants, with a list of items felt to be likely behavioral responses to aggression. These include aggression directed towards others, self-injurious behavior, avoidance, role-playing, and help-seeking behaviors. It assesses preferred choices and also normative beliefs (i.e., the expectations of other prisoners with regards to what responses should be effective). All behavioral responses were taken from the AFR model.

1 An establishment containing medium to high risk offenders.
Participants were asked to rate them on a scale of 0 (not helpful) to 4 (very helpful) with regards to their value should they feel at risk of victimization. It also asks prisoners to provide an indication of their overall fear of being victimized. With regards to appraisal, as outlined by PMT, the TAB asks seven questions designed to ascertain how a response is likely to be evaluated with regards to vulnerability, e.g., “How likely is it that you will be bullied by another prisoner,” and then repeats this with regards to physical, verbal, psychological, sexual, theft-related, and indirect bullying. There are three questions designed to assess severity, e.g., “To what extent do you think you are at risk of being harmed physically/psychologically/socially by being bullied in prison,” with six questions focusing on coping appraisal, namely the likely success of potential responses (e.g., “It will make me feel better”), and their ability to implement their chosen response. All questions were rated on a 5-point Likert scale ranging from 0 to 4.

Procedure

Ethical approval for the study was obtained from the University Ethics Committee and from each prison, either via local or area service ethical approval processes. The sample included all prisoners based on the prison wing or house at the time of the study. All completed the questionnaire on their own in their cells. Questionnaires were distributed at the beginning of a lunchtime lock-up period by a research assistant (when cell doors were locked), or during a training afternoon when prisoners were locked in their cells for 2 h. Questionnaires were then collected between 1 and 2 h later. Questionnaires were placed under cell doors and collected in the same way. Participants were asked to insert completed questionnaires into an unmarked, self-seal envelope. It was stressed that participants’ names or prison numbers were not required, and that the questionnaire only required basic descriptive information. Prior to analysis the data were screened with outlier checks conducted.

Results

DIPC-SCALED: Behaviors Indicative of Perpetration and Victimization

Overall 59% of the sample reported at least one item indicative of perpetration in the past month. Indirect perpetration was more frequently reported with 55% of the sample reporting this compared to 32% endorsing direct perpetration items. Seventy-nine percent of the sample reported at least one item suggesting they had been victimized in the past month. Indirect forms of victimization were reported more frequently, with 72% reporting this

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(3) Bullying is a term used interchangeably with victimization in prisons, and is described as a broad term that captures the many different types of abusive activity that can occur (see Ireland & Ireland, 2008).

3 There were no multivariate outliers detected. Univariate outliers had their scores reduced to make them less extreme, specifically to ensure that they fitted more closely to the tail-end of the distribution.
compared to 58% reporting direct victimization. With regards to the frequency of behavior the mean scores overall and across each type of aggression are indicated in Table 2.

**Categories Involved in Perpetration and/or Victimization.** The current study used median split analysis\(^4\) to classify the sample into one of four categories, to allow for the continuous variable to be used categorically. Those scoring above the median on perpetration items were coded as “above median perpetrators.” Those scoring above the median on victimization items were coded as “above median victims” and those above the median on perpetration and victimization as “above median perpetrator/victims.” Those reporting either no perpetration or victimization or whose frequency of behaviors was either at or below the median were classified as “casual/low frequency involvement.” This followed the classification system employed in Ireland and Ireland (2008). This resulted in 17.7% (n = 100) of the sample classified as above median perpetrators, 17.3% (n = 98) as above median victims, 30.7% (n = 174) as above median perpetrator/victims, and 34.3% (n = 194) as low frequency/causal involvement.

**TAB: Threat Appraisal Behavior Measure**

When asked directly how fearful they were of being aggressed toward by another prisoner, 35.2% of the sample reported some degree of fear. There was a significant difference across victimization categories (F(3,561) = 18.17, p < .001). With regards to significant mean differences, post hoc Scheffé indicated that above median perpetrators reported less fear than above median victims, and above median perpetrator/victims (CI: −1.56 to −0.65 and CI: −1.05 to −0.25, respectively), with above median victims and above median perpetrator/victims also reporting more fear than the remaining categories of causal/low frequency involvement (CI: 0.39 to 1.19 and CI: 0.003 to 0.67, respectively). Above median victims reported more fear than above median perpetrator/victims (CI: 0.04 to 0.85). The TAB also explored threat and coping appraisal with these components presented in Table 3.

**TAB: Protection Motivation Theory—Threat Appraisal.** With regards to overall perceived vulnerability (threat appraisal—vulnerability), there were significant differences across victimization category (F(3,493) = 22.01, p < .001), with post hoc Scheffé indicating significant mean differences, with above median perpetrators reporting less vulnerability than above median victims and above median perpetrator/victims (CI: −7.00 to −2.61 and CI: −5.23 to −1.43, respectively). Above median victims also reported more vulnerability when compared to the casual/low frequency category (CI: 2.50 to 6.38), with this latter category also reporting less vulnerability than above median perpetrator/victims (CI: −4.56 to −1.37). There were no other significant differences.

With regards to overall perceived severity (threat appraisal—severity), there were significant differences across victimization category (F(3,556) = 24.05, p < .001) with post hoc Scheffé indicating significant mean differences, with above median perpetrators reporting less perceived severity than above median victims and above median perpetrator/victims (CI: −3.92 to −1.47 and CI: −3.35 to −1.21, respectively). Above median victims, and perpetrator/victims also reported increased severity of risk in comparison to the casual/low frequency group (CI: 1.20 to 3.35 and CI: .96 to 2.75, respectively).

**TAB: Protection Motivation Theory—Coping Appraisal.** With regards to coping appraisal, an ANOVA was completed between groups, in relation to the expected success of their chosen response to aggression. With regards to overall perceived success of their chosen behavior (coping appraisal—success), there was a significant difference across victimization category (F(3,510) = 14.3, p < .001), with post hoc Scheffé indicating significant mean differences. Above median perpetrators felt that their response to victimization would be successful, more so than above median victims (CI: 1.19 to 6.23), above median perpetrator/victims (CI: −0.02 to 4.41), and the casual/low frequency

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\(^4\) Median splits also serve to restrict power, limiting the potential for finding inflated effects. This has been described as a criticism of their use but is a positive reason for implementation when you wish to be very stringent. It was felt appropriate to take this approach with the current data-set owing to the large number of variables increasing the potential for measurement error (i.e., inflated supportive findings). A stringent approach was thus adopted. Thus current study is also supplemented by a regression model.
Table 3 TAB measure overall and across adults, young offenders, and juveniles with regards to the Protection Motivation Theory components

<table>
<thead>
<tr>
<th>TAB: perceived vulnerability (threat appraisal)</th>
<th>Overall Mean (SD) [n]</th>
<th>Adult Mean (SD) [n]</th>
<th>Young offender Mean (SD) [n]</th>
<th>Juvenile Mean (SD) [n]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likelihood of being bullied by other prisoners</td>
<td>.65 (1.02) [520]</td>
<td>.68 (1.03) [337]</td>
<td>.51 (.94) [101]</td>
<td>.70 (1.09) [82]</td>
</tr>
<tr>
<td>Likelihood of being bullied physically</td>
<td>.52 (.91) [549]</td>
<td>.51 (.91) [358]</td>
<td>.52 (86) [107]</td>
<td>.59 (98) [84]</td>
</tr>
<tr>
<td>Likelihood of being bullied verbally</td>
<td>.96 (1.20) [554]</td>
<td>.92 (1.14) [363]</td>
<td>.90 (1.14) [107]</td>
<td>1.21 (1.51) [84]</td>
</tr>
<tr>
<td>Likelihood of being bullied psychologically</td>
<td>.66 (1.09) [548]</td>
<td>.69 (1.07) [359]</td>
<td>.64 (1.15) [107]</td>
<td>.53 (1.13) [82]</td>
</tr>
<tr>
<td>Likelihood of being bullied sexually</td>
<td>.11 (.50) [545]</td>
<td>.64 (.99) [356]</td>
<td>.07 (.43) [105]</td>
<td>.04 (.30) [84]</td>
</tr>
<tr>
<td>Likelihood of experiencing theft-related bullying</td>
<td>.41 (.87) [548]</td>
<td>.42 (.86) [357]</td>
<td>.39 (.90) [107]</td>
<td>.40 (.88) [84]</td>
</tr>
<tr>
<td>Likelihood of being bullied indirectly</td>
<td>.67 (1.02) [547]</td>
<td>.64 (.99) [356]</td>
<td>.90 (1.23) [107]</td>
<td>.47 (82) [84]</td>
</tr>
<tr>
<td>Overall perceived vulnerability (i.e., physically to indirectly)</td>
<td>3.25 (4.52) [494]</td>
<td>3.25 (4.51) [348]</td>
<td>3.81 (5.36) [99]</td>
<td>3.83 (5.54) [79]</td>
</tr>
</tbody>
</table>

TAB: perceived severity (threat appraisal)

| Risk of being harmed physically | .84 (1.17) [561]       | .88 (1.20) [370]    | .71 (1.05) [107]            | .83 (1.24) [84]     |
| Risk of being harmed psychologically | .82 (1.20) [560]     | .91 (1.21) [371]    | .67 (1.09) [107]            | .61 (1.19) [82]     |
| Risk of being harmed socially       | .72 (1.15) [560]      | .77 (1.14) [369]    | .59 (1.05) [107]            | .69 (1.33) [84]     |
| Overall severity of potential harm   | 2.38 (3.22) [557]     | 2.55 (3.22) [368]   | 1.98 (2.90) [107]           | 2.14 (3.58) [82]    |

TAB: range of successful responses (coping appraisal)

| Response would make me feel better          | 1.95 (1.69) [543]     | 1.96 (1.73) [358]   | 1.92 (1.58) [107]           | 2.00 (1.70) [78]    |
| Response would protect me from the prisoner(s) | 2.09 (1.81) [539]    | 2.14 (1.87) [354]   | 2.05 (1.68) [107]           | 1.92 (1.69) [78]    |
| Response would stop the bullying            | 2.00 (1.62) [539]     | 2.05 (1.57) [354]   | 1.83 (1.68) [107]           | 2.00 (1.76) [78]    |
| Response would make me look better in front of other prisoners | 1.28 (1.44) [530] | 1.11 (1.34) [345] | 1.36 (1.34) [107] | 1.94 (1.79) [78] |
| Response would make sure I do what is expected of me by other prisoners | 1.02 (1.37) [532] | .94 (1.30) [353] | 1.20 (1.47) [103] | 1.13 (1.50) [76] |
| Overall perceived likely success of chosen behavior | 8.29 (6.23) [511] | 8.11 (5.88) [332] | 8.40 (6.66) [103] | 8.92 (7.15) [76] |

TAB: ability to employ response successfully (coping appraisal)

| Perceived ability to use chosen behavior successfully | 2.71 (1.31) [503] | 2.61 (1.32) [340] | 2.80 (1.29) [95] | 3.05 (1.26) [68] |

The model was significant ($R^2 = .55$. $SE = .82$, $df = 5$, $F = 126.1$, $p < .001$) with three variables predicting fear. These were increased perceived vulnerability to harm ($\beta = .33$, $p < .001$, CI: 0.05 to 0.09), increased perceived severity of harm ($\beta = .44$, $p < .001$, CI: 0.13 to 0.21), and a lower perceived ability to employ the chosen means of coping with the threat ($\beta = -.09$, $p < .02$, CI: -0.15 to -0.02).

With regards to those prisoners reporting victimization, two identical regressions were completed—one for the above median victim group and another for the above median perpetrator/victim group. With regards to above median victims, the model was significant ($R = .82$, $R^2 = .68$. $SE = .94$, $df = 4$, $F = 31.2$, $p < .001$), with the only significant predictor representing increased vulnerability to victimization ($\beta = .88$, $p < .001$, CI: 0.12 to 0.25). With regards to above median perpetrator/victims, the model was also significant ($R = .77$, $R^2 = .59$. $SE = .82$, $df = 4$, $F = 45.1$, $p < .001$), with fear for perpetrator/victims predicted by increased perceived vulnerability to harm ($\beta = .05$, $p < .02$, CI: 0.006 to 0.09), increased perceived severity of harm ($\beta = .21$, $p < .001$, CI: 0.03 to 0.09), increased perceived ability to employ the chosen means of coping with the threat ($\beta = .09$, $p < .02$, CI: 0.13 to 0.21), and a lower perceived ability to use the chosen means of coping with the threat ($\beta = -.09$, $p < .02$, CI: -0.15 to -0.02).

category (CI: 2.66 to 7.03). Thus, victim groups were perceiving less success.

With regards to perceived ability to employ the choice successfully (coping appraisal—ability), an ANOVA indicated a significant difference across victimization category ($F(3,502) = 4.21$, $p < .001$) with post hoc Scheffé indicating significant mean differences, with above median perpetrators, reported a greater ability to employ their means of coping with threat than the overall sample (CI: 0.09 to 1.19 for above median victims; CI: 0.03 to 0.96 for above median perpetrator/victims; CI: 0.02 to 0.96 for casual/low frequency). Victim groups were perceiving less ability overall.

**Predicting Fear of Victimization**

A regression analysis using the simultaneous linear regression method was completed exploring the predictors of overall fear. The predictors were threat appraisal (overall vulnerability and severity) and coping appraisal (success and ability). The model was significant ($R = .74$, $R^2 = .55$. $SE = .82$, $df = 5$, $F = 126.1$, $p < .001$) with three variables predicting fear. These were increased perceived vulnerability to harm ($\beta = .33$, $p < .001$, CI: 0.05 to 0.09), increased perceived severity of harm ($\beta = .44$, $p < .001$, CI: 0.13 to 0.21), and a lower perceived ability to employ the chosen means of coping with the threat ($\beta = -.09$, $p < .02$, CI: -0.15 to -0.02).

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CI: 0.14 to 0.04), and a lower perceived ability to employ the chosen means of coping with the threat ($\beta = -13$, $p < .05$, CI: −0.25 to 0.005).

**Applied Fear Response Model Components: Beliefs**

The TAB also explores components of the AFR model, specifically general and normative beliefs, associated with responding to victimization. Table 4 presents these responses. With regards to individual beliefs, a multivariate analysis was completed to examine beliefs concerning the helpfulness of various behaviors, as responses to the threat of victimization (see Table 4). Due to there being more than one dependent variable a MANOVA was completed. This indicated a significant main effect across victimization category on overall beliefs ($F(13, 487) = 90.8, p < .0001$). This main effect was thus followed up with a series of univariate tests, which indicated differences across nearly all belief responses (all $F(3,499) \leq 3.63$; all CIs from $-1.89$ to $1.89$). To summarize, above median perpetrators were more likely to endorse the following beliefs as helpful responses to the threat of aggression: “being aggressive towards the prisoner(s) trying to bully me” and “becoming aggressive towards staff.” Above median perpetrator/victims were more likely to endorse “being aggressive towards another prisoner,” “putting on an act by pretending to be tougher than you are,” “seeking help from another prisoner,” and “avoiding contact with other prisoners.” Median pure victims were less likely to endorse “being aggressive towards the prisoner(s) trying to bully me” and more likely to endorse the items “self-harming,” “staying in my cell when I could be out,” “avoiding contact with other prisoners,” and “just giving up and doing what the bully(s) want.”

With regards to expectations (normative beliefs), a multivariate analysis was completed to examine the believed expectations of other prisoners, if they felt at risk of being aggressed toward (see Table 4). Due to there being more than one dependent variable, a MANOVA was completed. This indicated a significant main effect across victimization category on overall expectations ($F(13,508) = 120.5, p < .0001$). This main effect was thus followed up with a series of univariate tests, which indicated differences across nearly all expectations (all $F(3,499) \leq 2.56$, all CIs from $-1.56$ to $1.56$). Above median perpetrators were more likely to endorse the following as a response to victimization expected by the wider prisoner group, “to be aggressive towards the prisoners trying to bully you” and least likely to endorse “to stay in my cell when I could be out” and “to avoid contact with other prisoners.” Above median perpetrator/victims were more likely to endorse “to be aggressive towards the prisoners trying to bully you,” “to be aggressive towards another prisoner,” “to avoid contact with other prisoners,” “to be aggressive towards the staff,” “to put on an act by pretending to be tougher than you are,” “to seek help from other prisoners,” “to try to reason with the prisoner(s) likely to bully you,” and “to just ignore it.” Above median pure victims were more likely to endorse “to stay in my cell when I could be out,” “to avoid contact with other prisoners,” and “to self-harm.”

**Discussion**

Levels of self-reported victimization among male prisoners were high. This was in keeping with estimates noted in previous research (e.g., Ireland & Ireland, 2008). The proportion of prisoners classified into the various victimization categories, was also similar to previous research, with the mutual perpetrator/victim category the largest (Ireland & Ireland, 2008; Turner & Ireland, 2010).

With regards to the predictors of fear of victimization, the prediction was supported in that both components of threat appraisal—vulnerability and severity—were related to increased fear levels, with a lower perceived ability to employ the chosen means of coping (coping appraisal—ability) also a predictor. This is consistent with PMT (Boer & Seydel, 1996; Rogers, 1975, 1983), suggesting that this theory has useful application to forensic samples, and in understanding victimization more broadly. For practitioners, demonstration of application of this theory is invaluable since it suggests that what is motivating fear is threat appraisal and an individuals’ perceived inability to successfully employ their chosen means of coping. The perceived success of their range of potential coping choices was not a predictor, suggesting that victims are able to generate solutions. Rather it appears that they feel unable to implement their chosen strategy effectively. Raising an individual’s confidence in employing their chosen strategy and enhancing their ability could be expected therefore to reduce feelings of fear.

Across victim groups, these findings applied to the mutual perpetrator/victim group but not to the pure victim group whose fear was predicted only by increased perception of vulnerability. Thus, for pure victims, it was only one specific component of PMT threat appraisal that was important. For the “pure victim” group, it suggests that clinicians need to focus on moderating their fear levels by raising their ability to engage in coping appraisal and thereby reducing their perception of vulnerability.

It is also worth noting at this point the support for the prediction that perpetrator/victims would report higher levels of fear and threat appraisal than other victims (Chan & Ireland, 2009; Ireland, 2005). Perpetrator/victims and victims did report higher levels of fear although the former
group did not appraise threat to the same extent as the victim group. Thus, the prediction was only partially supported. Perpetrator/victims did not perceive themselves to be as vulnerable. There were, however, clear differences, with regards to coping appraisal, with perpetrator/victims not engaging in effective coping appraisal. Indeed the finding that this group would demonstrate less effective coping appraisals than the remaining sample supported the prediction, and offered further support for PMT (Boer & Seydel, 1996; Rogers, 1975, 1983). The finding that this group was also more likely to choose higher-risk responses, namely aggression, was also consistent with the prediction and the AFR Model (Ireland, 2005).

Interestingly above median perpetrators appeared distinct from the other groups, with regards to fear and their appraisal of this. They were the least fearful group and, consistent with PMT, perceived less vulnerability, less severity of harm, perceived more successful responses to threat and were confident in their ability to employ their chosen response. Thus, their positive evaluation of both threat and coping appraisal could explain their lower levels of fear according to PMT. Collectively, this suggests that this is a skilled group of prisoners.

Findings with regards to the beliefs endorsed by victimization groups were also broadly consistent with previous research, illustrating how perpetrators were more...
likely to value aggression as a response to the threat of aggression, with this extending to the mutual perpetrator/victim group (Ireland, 2002; Ireland & Ireland, 2008). Indeed this latter group demonstrated a wider range of what could be described as precautions to likely victimization (McCorkle, 1992), including “role-playing” via the belief that it is helpful to “put on an act by pretending to be tougher than you are.” Such responses are outlined as expected reactions forming part of the AFR model (Ireland, 2005), with evidence that perpetrator/victims are also likely to use avoidant behavior as a means of protecting themselves from threat.

The perpetrator/victim group was quantitatively different from the victim group with regards to beliefs, with these latter groups displaying beliefs more supportive of acquiescing to requests, self-harming, and isolation. These are arguably more passive responses, which again support the core tenets of the AFR model (Ireland, 2005) and also the precautionary behaviors (i.e., self-imposed isolation), described by McCorkle (1992). Thus, there is convergence with regards to the range of responses to likely victimization across perpetrator and/or victim groups, when compared with previous research and theoretical models of understanding.

The normative beliefs reported were also broadly consistent with the behaviors considered to be the most helpful responses to threat which suggests, that the preferred responses are underpinned by normative beliefs (i.e., the expectations of others). This is consistent with social cognition models, such as IP (Huesmann, 1998) and the GAM (Anderson & Bushman, 2002; Anderson et al., 2007). Indeed the current research suggests an equal role for normative beliefs among prisoners reporting victimization, and not just among perpetrators. The prediction that perpetrator/victims would support normative beliefs related to aggression as an expected response to threat was also supported. This is consistent with previous research (Ireland, 2002) and again with the AFR model, which reflects on a role for aggression as an expected response to threat. Clinically, there is a clear indication here of victim groups again using aggression to cope, whether this is aggression directed towards the self or towards others.

The current study is not without its limitations, which need to be acknowledged. First, the study is reliant on self-report and no measure of the honesty of reporting was acquired. Thus, the veracity of self-report cannot be assured. Reports of perpetration in particular may be underestimated due to participants fearing official retribution from prison authorities, for their actions. Although employing file review may have been valuable to supplement or replace self-report, there are problems with this with regards to the obvious constraints this places on anonymity. Such an approach encourages even less engagement and further encourages self-selection, which limits the generalization of findings across populations. The self-report scale employed in the current study has nonetheless been used to measure perpetration and victimization across a range of forensic samples. As indicated here, sizeable proportions of perpetration were reported. There are, however, unavoidable challenges, with using non-psychometric measures, particularly with extreme samples, where non-normality of distribution is not uncommon. The current study dealt with this using outlier analysis (see footnote 3), by applying more stringent levels for significance, and by opting for a large sample. Nonetheless, non-normality is a risk that researchers need to be aware of with studies employing such populations. Finally, the current study was also largely correlational in nature, which unavoidable limits conclusions concerning cause and effect.

Even accounting for these limitations, the current study provides empirical support for the application of theory to understanding the reactions and responses of male prisoners to actual or threatened victimization. In doing so, it examines a largely neglected group in the victimization literature and illustrates the value in applying PMT, the AFR model, and social cognition to understanding responses. All of these approaches have clinical application. For example, it indicates the importance of acknowledging aggression as a potentially preferred response to actual or threatened victimization, and the importance of accounting for the mutual perpetrator/victim group, conceptualizing them more as “victims.” It also highlights the importance of normative beliefs, which can be challenged via therapeutic approaches, and the role of appraisal (both coping and threat appraisal) in exaggerating and moderating fear responses. With regards to this latter point, the value of ensuring that coping appraisal is engaged in by victims is clear. The importance of teaching victims, including perpetrator/victims, means of generating potential adaptive solutions to threat, and raising (or moderating) their perceived ability to employ solutions successfully becomes crucial.

Overall what the current study highlights is the importance of cognition in managing victimization, including threat appraisal, coping appraisal, and normative beliefs. Future research could expand on the findings by employing a range of methodological approaches (e.g., self-report and file review), by utilizing longitudinal design to examine if appraisal alters over time, by detailing changes in psychological distress in accordance to appraisal, and by examining if the application of the theories noted here can be extended to women prisoners.