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*Violence Against Women*. 2004 May ; 10(5): 450–478. doi:10.1177/1077801204264367.**Women's Situational Coping With Acquaintance Sexual Assault:  
Applying an Appraisal-Based Model****PAULA S. NURIUS,**

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**Abstract**

Drawing on theories of appraisal-based coping, the present study applied structural modeling to examine relationships among personal goal orientations, primary and secondary appraisals of acquaintance sexual assault, and women's emotional and behavioral responses to it. Based on 415 college women's reports of a sexual assault experience, the model shows both direct and indirect effects. Assertive, diplomatic, and immobilized responding were each predicted by a unique profile of appraisals and orientations; personal goal orientations and primary appraisals were completely mediated by secondary appraisals. Ways that these findings can facilitate self-protective coping in an acquaintance sexual assault situation, leading to the development of effective, well-tailored self-defense and resistance programs, are discussed.

**Keywords**

rape; resistance; self-defense; sexual assault

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*Although acquaintance sexual violence* is not restricted to college women, they constitute a high-risk group (Brenner, McMahon, Warren, & Douglas, 1999; Bureau of Justice Statistics, 1994). An important determinant of acquaintance sexual assault prevention is the ability to perceive risk early in the encounter and respond effectively to it (Rozee, Bateman, & Gilmore, 1991; Rozee & Koss, 2001). This article applies a situational coping analysis to college women's perception of risk and responses to sexual assault by male acquaintances. The coping analysis takes into account situational coping processes that mediate self-protective action as well as social context factors that relate to these coping processes.

Women's behavioral responses to sexual assault can take many forms. However, prior research has categorized them as direct or assertive responding and indirect or verbal negotiation (Norris, Nurius, & Dimeff, 1996; Nurius, Norris, Young, Graham, & Gaylord, 2000). These are not mutually exclusive categories. Women typically "match" their own level of responding to the amount of force displayed by the assailant (Ullman, 1997). In

addition, some women become immobilized when faced with a significant threat to safety (Galliano, Noble, Travis, & Puechl, 1993). This study assessed elements of all three of these types of responses.

Our goal in focusing on women's recognition of risk and response to sexual assault by male acquaintances is to learn more about factors that either facilitate or impede self-protective coping and to use this knowledge to assist women in augmenting their self-protection. This attention to risk reduction and rape resistance as components of a prevention agenda is consistent with program recommendations targeting women (Gidycz, Rich, & Marioni, 2002) as well as the bulk of findings that active resistance is associated with escaping rape, experiencing less blame and negative sequelae, and not increasing the risk of injury (for overviews, see Furby, Fischhoff, & Morgan, 1990; Rozee & Koss, 2001; Ullman, 1997).

Toward this aim, we work from a conceptual model (Nurius, 2000; Nurius & Norris, 1996) that applies a cognitive analysis to women's interpretation of and responses to sexual assault threat by male acquaintances. We use structural equation modeling to link women's cognitive interpretation of events leading to a sexual assault and their behavioral responding. The underlying premise for this approach is that behavioral responses to sexual assault are shaped by contextual factors and mediated by the cognitive and emotional processing of their current circumstances (Lazarus & Folkman, 1984; Smith, Haynes, Lazarus, & Pope, 1993). Specifically, cognitive appraisals of an event are the interpretive process through which individuals evaluate information from other people and aspects of the situation. Primary appraisals are concerned with whether an event is interpreted as neutral, beneficial, or harmful. For example, in the case of sexual assault, a woman must determine whether a man's actions indicate something positive, such as an interest in sharing quiet time with her, or potentially negative, such as isolating her from potential witnesses. Within this analysis, threat detection is a threshold step. A woman must make the primary appraisal that something is amiss to activate subsequent coping.

This is a crucial step in the appraisal process, as recognizing situational risk cues is the first step to mounting an effective defense (Rozee et al., 1991). Acquaintance sexual assault usually occurs within normative life circumstances such as dating that are not considered inherently risky. Situations evolve that are ambiguous rather than clearly positive or negative. Norris, Nurius, and Graham (1999) found that, to activate reactions of guardedness, higher levels of ambiguous situational risk cues, such as alcohol consumption and physical isolation, need to be present relative to clearer risk cues, such as physical pressure and persistence in obtaining sexual intercourse. In the present study, we examine women's appraisals of ambiguous situational information, such as the assailant's verbal attempts to influence the woman's emotions, as well as appraisals of clear risk information, such as the assailant's invasive behavior.

After a woman has made the appraisal that her safety has been threatened, we posit that she will undergo a set of secondary appraisals related to the nature of the threat and its meaning to her. These include evaluating who is responsible for the turn of events, the possible outcomes of various courses of action, and her potential to bring about desired outcomes. A woman must consider multiple interpretations of the situation, such as "he is seeking private

time with me” versus “he is trying to isolate me,” and weigh both the benefits, namely avoiding sexual assault, and potentially negative aspects of active resistance. The latter includes threats to the relationship, such as concern about misinterpreting the man’s actions, his rejection of her, and being blamed for the situation, as well as threats to her general social standing. Prior research has found evidence that reactions such as embarrassment and concerns about the negative impact on her relationship with the assailant are negatively correlated with women’s self-reported likelihood of using verbally and physically assertive resistance strategies, whereas feelings of anger and confidence in her personal power are positively related to use of these strategies (Norris, Nurius, & Dimeff, 1996; Nurius et al., 2000). In the present study, we focused on secondary appraisals common to coping research (Lazarus, 2000; Smith et al., 1993) applied here to acquaintance sexual aggression. Specifically, this included outcome concerns such as being negatively judged by the man, seeing herself as responsible for the situation, having power to influence the situation, and her resentment about being wronged.

## **SOCIAL CONTEXT OF COPING WITH SEXUAL ASSAULT THREAT**

Although our conceptual model focuses primarily on cognitive appraisals associated with situational coping, it also takes into account the larger social context within which individuals find themselves. Individuals interpret situations consistent with the context in which they see themselves and the goals and expectancies salient in that context (Austin & Vancouver, 1996; Lazarus, 1994). Recent findings have shown that acquaintance sexual assault frequently occurs in familiar social settings (O’Sullivan, Byers, & Finkelman, 1998). Consistent with our conceptual model, factors that are particularly salient in these settings are likely to influence cognitive and emotional coping with sexual assault.

Personal goals are one set of factors that affect information processing and self-regulation every day. A developmental analysis of personal goals has identified prominent themes at different life stages, reflecting priorities that individuals have when anticipating and pursuing many activities of daily life (Cantor, 1994; Emmons, 1991). Central personal goals for late adolescence and young adults in Western cultures include establishing an independent identity and pursuing intimacy (Cantor & Fleeson, 1994; Cantor & Sanderson, 1998). These goals are developmental priorities for college students and predict coping in contexts such as achieving academic success and personal independence (Zirkel, 1992; Zirkel & Cantor, 1990), regulating risky sexual behavior (Sanderson & Cantor, 1995), and resolving conflict in pursuit of intimacy (Cantor, Acker, & Cook-Flannagan, 1992).

Alcohol consumption is another important consideration in the larger social context of acquaintance sexual assault. Women’s drinking habits in general and at the time of a sexual assault have been linked to an increased likelihood of completed rape (for reviews, see Abbey, Zawacki, Buck, Clinton, & McAuslan, in press; Testa & Parks, 1996). Correlational evidence (Norris, Nurius, & Graham, 1996) suggests that a higher level of overall alcohol consumption is associated with feeling embarrassed when potentially faced with being sexually assaulted. Women also appear to recognize that alcohol can make it difficult to remove themselves from an assault situation. This recognition of alcohol’s incapacitation effect has also been associated with lower verbal assertiveness and higher indirect

communication in response to a hypothetical sexual assault (Norris, Nurius, & Graham, 1996). In addition, women who drink, compared to non-drinkers, have judged alcohol consumption to be less of a risk factor for sexual assault (Norris et al., 1999). Although this evidence suggests that alcohol consumption is related to both primary and secondary appraisals, a more thorough examination is necessary to understand alcohol's effects on the appraisal process.

## SUMMARY AND HYPOTHESES

In summary, this article applies a theoretical framework, based on an appraisal-based coping paradigm, to modeling women's interpretation of and behavioral responses to acquaintance sexual assault. Use of structural equation modeling allows testing for both direct and mediated relationships in assessing fit of the data to this appraisal-based theory.

With regard to social context variables, we anticipated that the personal goal orientations of achieving intimacy and independent identity would be directly associated with secondary appraisals. Intimacy as a life task biases information processing toward pursuit and maintenance of affiliative relationships. Relative to independent identity, stronger goals toward achieving intimacy were expected to impede self-protection through positive association with concern about the assailant's judgments of her as well as self-blame. On the other hand, independent identity goals were expected to mitigate against these impediments manifested as negative associations with these secondary appraisals. We anticipated independence orientation to be positively associated with secondary appraisals about feeling powerful to influence the situation because this orientation is consistent with protecting one's own interests.

We hypothesized that alcohol consumption would result in a decreased ability to recognize risk cues such as the man's invasive or manipulative behavior. Furthermore, we expected that alcohol consumption would be related to the secondary appraisal process. Specifically, it would be associated with increased self-blame, increased concern about negative judgments by the man, and a decreased sense of being able to influence the situation. Rather than directly explaining behavioral responding to acquaintance sexual assault, we anticipated that alcohol and personal goal orientations would have stronger paths to secondary appraisals and emotions, which in turn would differentially explain behavioral responding.

Regarding the relationship between primary and secondary appraisals, we anticipated significant paths from primary appraisals of assailants' emotional manipulation to the women's secondary appraisals regarding self-blame and concern about the assailants' reactions. We also anticipated that primary appraisals of assailants' invasive behaviors would be associated with secondary appraisals of feeling powerful in the situation and resentment about being wronged. These results were expected because if a woman does not yet have information clearly indicative of a man's assaultive behavior, initial primary appraisals would likely have more to do with possible threat to her social standing than to her safety. However, once a man engages in behavior that clearly puts her at risk of being assaulted, she would more likely feel resentment and engage her coping resources.

With regard to the relationships between secondary appraisals and behavioral responding, we expected different types of relationships for the three types of behavioral responses. We expected to find differing paths from (a) concern about the assailant and self-blame appraisals with behavioral responding relative to paths from (b) appraisals of herself as wronged and powerful to behavioral responding. These differences are reflective of tension between social and safety costs in behavioral responses. The former should be more explanatory of diplomatic responding and the latter factors more explanatory of assertive responding. We anticipated that immobilization would be related to powerlessness and self-blame (cf. Frijda, Kuipers, & ter Schure, 1989; Rozee, 2000).

We reasoned that secondary appraisals related to a woman's social concerns might be initially more salient than those directly related to feelings of safety because acquaintance sexual assault is usually incremental in nature. Therefore, we hypothesized that a better model fit might be obtained by placing secondary appraisals related to concern about the man's judgments and self-blame before feelings of resentment and power. We tested this possibility by contrasting a model reflecting these relationships to one in which all secondary appraisals were entered simultaneously.

## METHOD

### PARTICIPANTS

Four hundred fifteen college women recruited from two public colleges in the same northwest metropolitan area participated. To capture the spectrum of colleges, a community college and a university encompassing undergraduate and graduate programs were selected. Women were required to be at least 18 years old at the time of participation and at least 16 years old when sexually assaulted, with a lag of no more than 5 years in the time between having been assaulted and participating in the study. To be eligible for inclusion, they had to have experienced some form of physical coercion to have unwanted sex, attempted rape, or rape by a male acquaintance not their husband or a partner with whom they were living. Each participant received \$25.00.

Participants' mean age was 21.7 years at the time of the study. Approximately 26% were freshmen, 20% sophomores, 17% juniors, 23% seniors, and 14% postbaccalaureate. Seventy-three percent were European American, 11% multiracial, 8% Asian/Pacific Islander, 2% African American, 3% Latina, and the remaining 3% Native American or "other." The sample included approximately the same proportion of women from each college relative to their respective student populations.

Participants were recruited primarily by sending letters to a random sample of women at both schools and by follow-up phone calls 2 to 3 days later. In addition, notices about the study were posted in dorms, sororities, campus bulletin boards, and the campus newspaper. Interested women who learned of the study through these methods or word of mouth could contact the research office as well. The entire sample was collected within 4 months after the start of recruitment.

## PROCEDURE

After screening on the study criteria, each woman was scheduled for an individual, 2-hour appointment with a female research assistant. After giving informed consent, the participant was left alone to complete a three-part questionnaire. The first part consisted of questions related to the woman's life circumstances just before the assault and the exact circumstances leading up to it (e.g., life task orientation, primary appraisals of the male's behaviors), beginning with a written narrative that served as a memory aid to reconstruct the event. The second part assessed the specifics of the assault itself (e.g., secondary appraisals, emotions, behaviors) and also began by asking the woman to write a narrative about the assault. The third part consisted of a number of background questionnaires. After each section, the woman called the assistant to obtain the next part of the questionnaire. This allowed the assistant to check on the participant's emotional state. At the end of the session, the assistant spent as much time as was necessary with the participant before paying her. Participants received a list of campus and community resources concerning sexual assault services and were encouraged to call one of the investigators if necessary.

## MEASURES

Measures were presented in a fixed order and self-administered. All measures draw from previously published research either on sexual aggression or from research on appraisals and responses to personally relevant threats, adapted to be applicable to acquaintance sexual aggression. All items were assessed on a 0 to 4 scale (higher scores reflected more of the indicated constructs), except for the alcohol construct (item descriptions below). Means and standard deviations for measured variables are shown in Table 1.

**Personal goal orientations**—Items for independence and intimacy orientation were taken from the Social Goals Scale (Sanderson & Cantor, 1995), which was designed to assess one's life task orientation for maintaining a sense of independent identity and developing intimate relationships. Six items were chosen as construct indicators on the basis described above, three to indicate intimacy and three to indicate independence. Independence is measured by: maintain . . . "a strong sense of independence," "my own identity," "a focus on my other life goals"; intimacy: tried to . . . "date men with whom I might fall in love," "consider my boyfriend my best friend," "date men who would make my life more comfortable and stable."

**Alcohol use**—This construct consists of two items and a scale. The items included the woman's estimate of how many drinks she had had prior to the assault and how intoxicated she felt at the time. One "drink" was defined for the woman as 12 ounces of beer, 4 ounces of wine, or 1 ounce of liquor. The second item, degree of intoxication, was rated on a 5-point, Likert-type scale from 0 (*not at all*) to 4 (*a great deal*). The Drinking Habits Scale (Cahalan, Cisin, & Crossley, 1969) combines both frequency and amount of consumption. Eleven categories of typical consumption frequency at the time of participation in the study ranged from 3 or more times a day to never having consumed alcohol. Five items assessed categories of typical amount consumed: 1 to 2, 3 to 4, 5 to 7, 8 to 11, and 12 or more from *never to nearly every time*. Combining these indicators results in five categories of consumption: abstainer, infrequent, light, moderate, and heavy drinkers.



**Primary appraisals**—This measured the extent to which male behaviors that indicated coercive behavior occurred and, if so, the extent to which the woman felt uncomfortable. (Item content and format were drawn from Christopher, Owens, & Stecker, 1993; Craig, 1990; Cue, George, & Norris, 1996; Malamuth, Sockloskie, Koss, & Tanaka, 1991; Muehlenhard & Linton, 1987; Norris & Nurius, 1997; Rapaport & Burkhart, 1984). Building on prior research (Norris et al., 1999; Nurius et al., 2000), factors distinguishing more ambiguous (emotionally manipulative behavior) from clearer (invasive assailant behavior) threat cues were included. Indicators for invasive assailant behavior were: “he invaded my space,” “he wouldn’t accept no for an answer,” and “he touched me when I didn’t want to be touched.” Indicators for the construct of manipulative behavior were: “he said really nice things about how much he needed me,” “he complained about being hurt before by women,” and “he wanted me to reveal personal things about myself.”

**Secondary appraisals**—Secondary coping appraisals pertaining to outcome concerns regarding relationship to the assailant (his negative judgments of her), self as responsible for the situation (self-blame), personal power in the moment, and self as wronged (resentment) were adapted from Carver and Scheier (1994), Nurius et al. (2000), and Smith et al. (1993). Self-blame was measured by three items: the extent to which she felt others would consider her responsible for what took place, how much she considered herself responsible for what took place, and how guilty she felt at the time of the assault. Relationship outcome concern was measured by three items regarding worry about the impact on her relationship to the assailant: “I didn’t want to hurt his feelings,” “I liked him and didn’t want to ruin things between us,” and “I didn’t want him to get mad at me or be upset with me.” Perceived personal power in the situation was measured by feeling confident, powerless (reverse coded to indicate not powerless), and powerful. Resentment was measured by feeling angry, annoyed, and disrespected, reflecting the woman’s interpretation of situational injustice against her. Collectively, these constructs represent the inherent tension with acquaintance sexual aggression in coping with both social relationship and safety outcomes.

**Behavioral responses**—There were three behavioral response patterns, adapted from resistance scales used in prior research (e.g., Atkeson, Calhoun, & Morris, 1989; Norris, Nurius, & Dimeff, 1996; Nurius et al., 2000): assertive, diplomatic, and immobilized. Three items measured assertive response: “raised my voice and used strong language” (e.g., “hey, listen, I really mean it”), “became physically defensive” (e.g., hitting, kicking, scratching), and “ran away or attempted to run away from him.” Diplomatic response was measured by three items: “told him that I liked him or found him attractive but that I wasn’t ready for this,” “made an excuse as to why I didn’t want to have sex,” and “tried to get him to do things I was comfortable with, like kissing or hugging, but not sex.” Immobility was measured by three items: “I was so overwhelmed that I felt almost paralyzed and was unresponsive to what he was doing,” “tried to stiffen my body as a way of showing my lack of interest,” and “struggled at first but stopped when I thought it was hopeless.”

## RESULTS

We used structural equation modeling as the primary tool for analysis because it allowed us to model paths among the theoretically based coping components while capitalizing on the

technique's ability to minimize measurement error by modeling latent constructs (Kline, 1998).

Before selecting indicators for each of the latent constructs, item descriptives and distributions were examined for normality and were found to be adequate for the planned analyses. To determine whether item clusters corresponded to the relevant theoretical constructs in our proposed model and were consistent with prior research (Nurius et al., 2000), factor analyses using principal components analysis with varimax rotation were undertaken. Theoretically consistent factors were achieved, and these were used to form the latent constructs of this study. To determine sets of optimal indicators that efficiently and accurately represented the proposed latent constructs, we followed the recommended methods of selecting items that have the benefit of face validity relative to theorized constructs, evidence of high factor loadings, and moderate correlations that maximize selection diversity among the related items (Little, Lindenberger, & Nesselroade, 1999). Consistent with guidelines for indicator selection (Little et al., 1999), we selected three items for each latent construct to prevent under-identification of the model (Kline, 1998).

The M-PLUS Program (Muthen & Muthen, 1998) was used for all modeling analyses. The recommended steps for SEM analyses of model specification, identification, estimation, testing of fit, and respecification were used as guidelines for this analysis (Schumacker & Lomax, 1996). Confirmatory factor analyses (CFA) were run as a first step to determine the adequacy of factor loadings, model fit, and the pattern of intercorrelations among the latent factors. We then specified paths among the social context variables (personal goal orientations and alcohol use), primary appraisals, secondary appraisals, and behavioral response variables to test the fit of a structural model of appraisal-based coping to these data. Overall model fit was assessed by examining the Residual Mean Squared Error Approximation (RMSEA) Index, with values around 0.05 indicating adequate fit (Browne & Cudeck 1993), and the Comparative Fit Index (CFI) (Bentler, 1990), with values higher than .90 indicating adequate fit (Newcomb, 1990, 1994). Relative to other indices of fit, RMSEA is increasingly gaining use as the index of choice due to its overall balance and stability (see Hu & Bentler, 1999 for elaboration).

## CFA MODEL

A confirmatory factor analysis was run on the 12 latent constructs: independence, intimacy, her alcohol use, controlling appraisals, manipulation appraisals, her appraisals of self-blame, outcome concern about the relationship, personal power, resentment, assertive response, diplomatic response, and immobility. In this analysis, the indicators are only allowed to be loaded on their latent factor, with the factor loading of the first indicator to the factor constrained to be 1 in order to identify the metric of the latent variables. All factor intercorrelations were freed. After listwise deletion, the total sample size is  $N = 370$ .

The CFA model fit the data well,  $\chi^2(528, N = 370) = 894.04$  and  $RMSEA = .043$  (90% confidence interval is 0.038 to 0.048). All factor loadings were significant, in the expected direction, and with relatively large magnitude (see Table 2). The factor intercorrelations are shown in Table 3.



## STRUCTURAL MODEL

In the first structural model tested, we allowed correlations among the independent and intimacy personal goal orientation factors, alcohol use, and primary appraisals to freely vary and allowed for both direct and indirect paths from these factors to each of the secondary appraisals (the four secondary appraisals are simultaneous mediators) and behavioral response factors. This model did not fit the data sufficiently well, with  $\chi^2 = 948.93$ ,  $df = 534$ , CFI = .89, and RMSEA = .046 (90% confidence interval is .041 to .051).

Because acquaintance sexual assault often occurs in situations that start out as typical social situations with familiar males and then escalate into sexual violence, we reasoned that secondary appraisals reflecting social concerns about the assailant's judgments of her and her sense of responsibility would initially be more salient, followed by appraisals reflecting her resentment and assessment of power in the situation. This was supported in the finding that a structural model that sequenced the first set of secondary appraisals to precede the second set had a significantly better fit than one in which all secondary appraisals were simultaneous. This second model fit the data quite well,  $\chi^2(530, N = 370) = 912.10$ , CFI = .90, and RMSEA = .044 (90% confidence interval is .039 to .049). Comparing this sequenced model with the first parallel process one, we have a significant improvement (chi-square difference of 36.83, with difference of  $df = 4$  achieves  $p < .05$ ) in the model fit.

With the sequenced model, we tested for paths between the secondary appraisals and the behavioral responses. For the significant paths, the coefficients generally were moderate to high. The  $R^2$ s for each of the behavioral responses were .30, .42, and .57, respectively, for assertive response, diplomatic response, and immobility. The  $R^2$ s for each of the mediating variables were .25, .16, .21, and .18, respectively, for concern about the assailant's judgment, self-blame, self as powerful, and resentment. We expected that effects of the social context variables (personal goal orientation and alcohol use) and primary appraisals would be mediated by the secondary appraisals, and the model confirmed this expectation (i.e., no significant paths were found from the social context factors and primary appraisals directly to behavioral responses) with two exceptions: alcohol use and appraisals of assailant manipulation have a direct effect on diplomatic responding. We expected personal goal orientation and alcohol factors to be associated with primary appraisals and primary appraisals with one another. The data partly confirmed this, with the exception that social context factors were not significantly associated with more explicit threat signs of the assailants' invasive behaviors, and independence orientation was not associated with either threat appraisal.

Figure 1 shows the significant paths. Paths from personal goals reflected anticipated relationships. Independence orientation explained lower concern about the man's judgments and lower self-blame and positively explained the woman seeing herself as powerful in the situation. Intimacy orientation explained more concern about the man's judgments and more self-blame. Intimacy orientation also explained higher resentment. Alcohol explained more self-blame, as expected. Contrary to expectations, alcohol explained lower concern about the assailant's judgments and had a direct path explaining diplomatic responding. As anticipated, the two primary appraisals explained secondary appraisals differently. Threat

appraisals of the assailant's manipulative behavior significantly explained greater concern about his judgments (as well as greater diplomatic responding), whereas appraisals of his controlling behavior explained greater resentment. Expected evidence of tension between social and safety issues was also found in greater concern about his judgment negatively explaining resentment and greater self-blame negatively explaining seeing herself as powerful in the situation. However, greater concern about his judgment was positively associated with seeing herself as powerful.

Our hypothesis that the three behavioral responses would have different profiles of appraisals leading to them was also generally supported. For example, although self-blame significantly explained all forms of behavioral responding, the path was positive to diplomatic responding and immobility but negative to assertive responding; that is, reduced self-blame explained more assertive coping behaviors. Similarly, appraisals regarding the man's negative judgments of her explained higher levels of diplomatic responding but lower levels of assertive behavior. Greater resentment had significant paths to all three forms of responding but with a stronger path to assertive resistance, a medium magnitude to diplomatic responding, and a smaller magnitude to immobility. Appraisals of being powerful in the situation explained less immobility, as expected, and a moderately positive path to diplomatic responding but did not significantly explain assertive behavior.

## DISCUSSION

In this sample of college women sexually assaulted by male acquaintances, findings provide support for a coping analysis that considers women's situational appraisals and social context factors in explaining different forms of resistance behavior. Specifically, secondary appraisals regarding self-blame, relationship outcome concerns, personal power, and resentment about being wronged largely mediate effects from primary risk appraisals and contextual factors (intimacy and independent identity orientations and alcohol use) to behavioral resistance. The set of paths within this structural model suggest that women cope with two types of concerns—relationship and safety—when faced with sexual aggression by a male acquaintance. Coping with these two concerns can affect the type of resistance that a woman employs in such situations.

As anticipated, an independent identity orientation had a contrasting set of paths more supportive of safety self-protection. Specifically, independence orientation directly explained less self-blame and less concern with the assailant's judgments of her and a greater sense of personal power. Although Table 3 shows a significant bivariate correlation between independence orientation and resentment, the model suggests that this is mediated through attitudes that lessen the impact of concern about the assailants' judgments of her. Given the corrosive effects of self-blame and assailant judgment appraisals on assertive behavioral responding and their positive relationships with diplomatic behaviors and immobility, prevention efforts would do well to promote independence. Paths between independence orientation and primary threat appraisals were not evident in this analysis. This finding suggests the need to include in preventive interventions skills training that focuses on searching for situational information that indicates threat.

Rozee and Koss (2001) discussed the conceptual model we apply as an assess, acknowledge, act (AAA) algorithm to help women anticipate and prepare for self-protection. Assessment skills refer to strategic application of primary appraisals, informed by knowledge such as situational factors correlated with assault, seduction, deception, and disempowerment tactics. Women with salient intimacy goals were more likely to feel uneasy about manipulative behavior by the assailant. However, unless concern about relationship impact can be translated early in the encounter into acknowledgement of rape risk and self-protective readiness, this potential risk-detecting asset is unlikely to be fully realized.

The findings regarding self-blame merit attention in the development of interventions. Prevention programs and assault counseling typically emphasize that the assailant must be held accountable for his own aggressive behavior and the inappropriateness of victim blaming. Our findings indicate that moderate levels of self-blame hold the potential to exert significant influence on behavioral responding, specifically leading to a lower feeling of powerfulness and assertive resistance and to greater immobility and diplomatic behavioral responding. Thus, although attributing responsibility to offenders for their own aggression is a critical societal message, this will not necessarily protect women from the undermining effects of self-blame. Preventive preparation must directly counter self-blame.

Support for hypotheses concerning alcohol's effects on primary and secondary appraisals illustrated the complexity of alcohol as a risk factor. Although alcohol, as expected, was negatively associated with perception of the assailant's manipulative behavior, it was not related to perception of his invasiveness of the woman's limits. Indeed, feeling threatened by more explicitly invasive behaviors was not significantly associated with any of the social context factors in contrast to appraisals of assailants' more ambiguous manipulative behavior.

As expected, alcohol was related to a woman's increased self-blame for the assault. This is not surprising because women are often blamed for their alcohol-related sexual victimization (Richardson & Campbell, 1982) and can internalize these feelings. This again argues for directly addressing self-blame—in this case, that alcohol use is a risk factor through its effects but is not a basis for blaming victims for the assaults perpetrated against them. The negative relationship between alcohol and concern about the man's judgments of her was counter to that expected. Other paths in the model aid the interpretation of this result. Greater personal investment in relationship intimacy goals was associated with both increased sensitivity to emotionally manipulative behavior and concern about the assailant's judgments. However, both intimacy orientation and manipulation appraisals were negatively associated with her alcohol use. These background paths suggest that those more invested in relationship intimacy were less likely to be drinking alcohol, and those who were drinking were less likely to be attentive to or swayed by the assailant's opinions.

The unexpected absence of a negative relationship between alcohol and feeling powerful and the presence of a positive path with diplomatic responding may be related. Although previous research (Norris, Nurius, & Graham, 1996) has demonstrated that women recognized alcohol's incapacitating effect as a barrier to responding in a hypothetical situation, the present study demonstrated that alcohol use is associated not with a complete

inability to respond to a sexual assault (immobility) but with an attempt to verbally negotiate her way out of the situation. This suggests a complex picture associated with alcohol use. Alcohol's effects are likely shaped by situational, behavioral, and social psychological factors that are not yet completely understood (Testa & Parks, 1996; Ullman, 2002). Although alcohol carries vulnerabilities, there may be some untapped potential, such as muting concern about assailants' judgments, that may be relevant for resistance training.

Given the preponderance of evidence indicating that forceful verbal and physical forms of resistance are related to more favorable outcomes for victims, factors that foster assertive responding are a particularly important target for prevention programming. Figure 1 shows lower concern about assailants' negative judgments, lower self-blame, and greater resentment to be directly explanatory of assertive resistance, with each of the context and primary appraisal factors mediated through these. Resentment has significant paths to all forms of responding, although with considerably different magnitudes, but it is strongest for assertiveness. Thus, feelings of resentment are critical to active resistance, but assertive action requires curbing factors such as self-blame and relationship sensitivity that may blunt ability to use active resistance.

The configuration of paths to diplomatic behavioral responding is quite different. Unease with emotional manipulation combined with concern about the assailant's judgment of her and self-blame suggest that diplomatic behaviors are at least in part responsive to perceived social threat—for example, stigmatization or rejection. The nonsignificant bivariate correlation between concern about assailant judgments and seeing herself as powerful in the situation indicates that the significant path in Figure 1 is mediating effects of contextual factors and primary appraisals on this appraisal of coping potential. Given this cluster, the positive path from feeling powerful to diplomatic responding and the lack of a path to assertive responding indicates that the women felt confident and able to undertake negotiating behaviors but not more forcefully assertive resistance with a man she knew. Findings that nonforceful verbal behaviors were those used to the greatest extent by sexual assault victims are consistent with other studies (e.g., Ullman & Knight, 1992). If these forms of responding are successful, the woman gets out with both safety and social needs intact. Although we join others in cautioning against absolute prescriptions, the corpus of findings on resistance methods indicates the relative ineffectiveness of pleading, reasoning, or diplomacy with the offender. Although more research is needed for a more nuanced understanding of outcomes associated with response methods under differing contexts, findings thus far argue for prevention training that educates women about effectiveness and that helps prepare them to quickly use decisively self-protective actions (e.g., fleeing, pushing the offender away, screaming, fighting).

Yet a different configuration of factors predicted immobilization: specifically, higher self-blame, lower appraised personal power, and greater resentment, combined with indirect effects that these mediate. Immobilization is particularly worrisome in that it has been found not only to be relatively ineffective toward rape avoidance and injury prevention but is also associated with higher levels of subsequent guilt, self-denigration, self-blame, and concern that others would blame or not believe one (Galliano et al., 1993; Meyer & Taylor, 1986; Mezey & Taylor, 1988) and with lower likelihood of seeking treatment (Stewart et al.,

1987). The high magnitude of the path indicating perceived powerlessness may well reflect realistic appraisals of the limits of the women's capacity to control the assailants' behavior. However, the disproportionate influence of self-blame in predicting both personal power appraisals and immobilization again argues for self-blame as a central target for resistance training. Although women need to be supported in making judgments that they see as right for them and the situation when encountering sexual aggression, the extent to which self-blame may be fueling immobilization can be strategically managed as part of an AAA empowerment program. Support for a good fit model helps address the need for theory-guided programming (Gidycz et al., 2002; Yeater & O'Donohue, 1999). The findings reported here are consistent with coping theory and argue for the use of contextual factors and appraisal-based coping to chart cognitive and affective factors that influence behavioral responding in the face of acquaintance sexual aggression. The findings point to both risk and protective factors that support or impede assertive self-protection. They also suggest the importance of including developmentally relevant factors in understanding the perceptual challenges that women must navigate in pursuing personal goals and simultaneously staying safe from sexual assault. These findings suggest that preventive interventions, such as increasing knowledge about the incidence of acquaintance sexual aggression and self-defense skills, are likely to be insufficient if women's coping appraisals run contrary to accessing and marshalling this knowledge or skill set.

Overcoming psychological barriers to resistance represents a formidable but crucial challenge for self-defense training (Rozee & Koss, 2001) in addition to challenging victim-blaming attitudes. As with other health and safety threats, general knowledge of risk information or ability to appraise subtle or ambiguous indicators of risk is one step toward prevention. A second step is translation of global knowledge of risk and protection into situation-specific appraisals, emotions, and behaviors (Cue et al., 1996; Nurius & Gaylord, 1998; Thompson, Anderson, Freedman, & Swan, 1996). Within a risk and protection framework, extensions of the current research that augment understanding of stress and coping processes related to acquaintance sexual aggression will assist development of prevention programs that can better enhance self-protective strategies (cf. Durlak, 1998; Pollard, Hawkins, & Arthur, 1999).

There are a number of limitations that should be noted. Although college women have been established as a high-risk population, less work has addressed noncollege women's experiences. Thus, the generalizability of these findings to noncollege women remains to be assessed. Although the profiles of our participants' assault experiences are in keeping with prior reports, we cannot ascertain whether women who elected not to participate may have had different coping responses. Retrospection is the only way to build on actual experience of assault victimization, yet retrospective self-report carries with it uncertainty about the accuracy of memory. The memory of a past event can also be colored by life experiences and interpretations that follow the events. With these concerns in mind, we used probe techniques to stimulate memory of specific accounts through visualization, and these findings are consistent with those of related research using retrospection as well as stimulus material. Although structural equation modeling has much strength as an analytic tool, it also has limitations. As with any structural equation modeling analysis, it is only possible to identify a theoretically and substantively meaningful model that fits the data well; other

plausible models may exist (MacCallum & Austin, 2000). Finally, because our aim was to determine whether coping theory provides a meaningful theoretical foundation for understanding coping processes for women in sexual assault contexts, our sample cannot address the extent to which this theory applies to women who completely avoided or escaped a potential sexual assault. With the finding that appraisal-based coping does offer theoretical guidance, prospective research designs and more thorough investigation of coping sequences in high-risk situations that did not result in completed assault are also needed.

Despite these limitations, this study argues for further research that can build on a coping paradigm not only to more fully model factors that affect victims' momentary coping but also to inform prevention programming efforts that can take these factors and effects into account. To the extent that potential safety threat can be detected early in a situation's development, women may have greater options for ways to exit the situation or purposefully direct their interpretations and manage emotions to better support resistance strategies associated with better outcomes for them. Assertiveness, confidence, anger, and lack of self-blame or social self-consciousness have been found important to how women respond to acquaintance sexual aggression (Cook, 1995; Greene & Navarro, 1998; Nurius et al., 2000). Intervention tools, such as stress inoculation training, may be well suited to gaining awareness of one's coping predispositions and rehearsing situation evaluation and self-regulation strategies to develop habits and comfort with conflicting goals and appraisals. Similarly, self-defense training to prepare women not only to learn effective ways to deal with use of force, but also to be prepared to use them against a man she knows, is an essential skills component of self-protective coping (cf., McCaughey, 1997; Ullman, 2002).

Given that the peak age ranges for sexual assault constitute developmental periods of adolescence and early adulthood (Bureau of Justice Statistics, 1994; Fisher, Cullen, & Turner, 2000), further exploration of ways that developmental factors may affect the coping process, as well as risk and protective factors relative to effective coping, is warranted. Similarly, background variables have been found to affect coping in response to other forms of threat and need further investigation here as well. Prior victimization and attachment history are examples with beginning evidence of risk or protective influences relative to self-protective coping when faced with sexual assault. Differences by class, race, disability, and citizenship status also need to be better understood. Greater distillation of stable impacts of background or contextual factors on the cognitive and affective components of coping should help inform prevention programming that takes these differences into account. That is, prevention outcome research indicates a fairly consistent pattern of less effective outcomes with women with histories of prior victimization, although the mechanisms that account for these effects have not yet been well established.

In conclusion, this research provides initial evidence supporting appraisal-based coping theory as a framework to help unpack women's cognitive and emotional responding when faced with acquaintance sexual aggression. It assists in the translation of global knowledge and skills for capacity building to self-protect in specific situations when the full brunt of conflicting forces is affecting women. Ultimately, none of these efforts should be necessary if men cease targeting women for assault. Until efforts—individual, community, and societal



—achieve this ultimate primary prevention, women are not safe and efforts to strengthen their risk reduction and resistance are needed.

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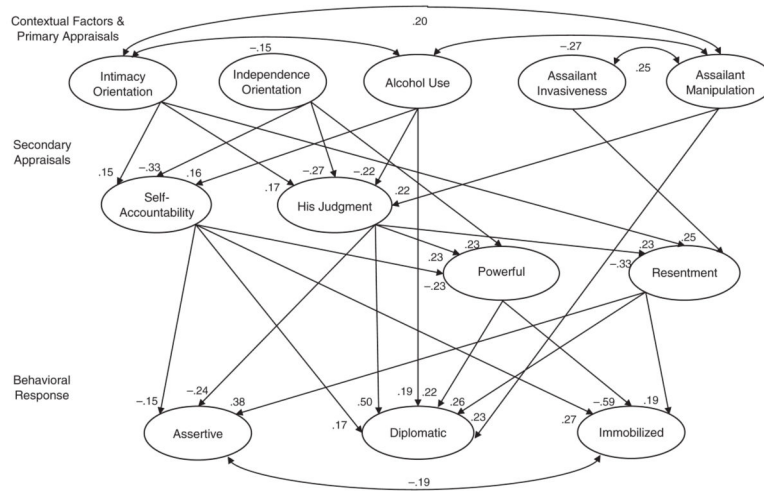
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**Figure 1. Structural Model of Women’s Coping Against Acquaintance Sexual Aggression**  
 NOTE: Chi-square = 912.02. Df = 530. CFI = .90. RMSEA = .044 (.039, .049).

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**TABLE 1**

Means and Standard Deviations for All Indicator Variables in Causal Model Predicting Women's Responses to Acquaintance Sexual Aggression

Indicator Variable		Mean	Standard Deviation
Independence orientation	Own identity	2.80	1.16
	My goals	2.91	1.09
	Independence	2.87	1.16
Intimacy orientation	Date men in love	2.28	1.32
	Men best friends	2.32	1.42
	Comfortable, stable	1.92	1.34
Alcohol	Number of drinks	2.67	3.22
	Level of intoxication	1.48	1.67
	Habits	3.59	1.25
Assailant manipulation	Needed me	1.13	1.36
	Hurt by women	0.83	1.26
	Wanted me to reveal	0.74	1.18
Assailant controlling	Invaded my space	2.47	1.49
	Wouldn't take no	2.71	1.58
	Unwanted touching	2.64	1.61
His judgment	Didn't want to hurt him	1.65	1.45
	Fear of ruining relationship	1.64	1.55
	Didn't want to make him mad	1.89	1.53
Self-blame	Others blame me	2.40	1.27
	Blame self	2.44	1.20
	Felt guilty	2.47	1.51
Powerful	Self-confident	0.62	0.89
	Self not powerful	1.08	1.18
	Powerful	0.31	0.68
Resentment	Angry	2.52	1.40
	Annoyed	2.42	1.42
	Disrespected	3.26	1.10
Assertive behavior	Raised my voice	1.23	1.58
	Hit, kicked, scratched him	0.90	1.48
	Ran away or attempted	0.90	1.49
Diplomatic behavior	Told him not ready	1.18	1.54
	Made excuse	1.45	1.66
	Tried to redirect him	1.85	1.64
Immobilized	Felt paralyzed	1.98	1.57
	Stiffened body	2.38	1.56
	Stopped struggling	1.31	1.58



TABLE 2

Confirmatory Factor Analysis Loadings for Causal Model Indicator Variables

Indicator Variable		Standardized Factor Loading	<i>z</i> Statistics
Independence orientation	Own identity	.79	—
	My goals	.67	12.33
	Independence	.86	13.86
Intimacy orientation	Date men in love	.70	—
	Men best friends	.56	7.83
	Comfortable, stable	.71	8.16
Alcohol	Number of drinks	.93	—
	Level of intoxication	.90	14.68
	Habits	.32	5.97
Assailant manipulation	Needed me	.60	—
	Hurt by women	.71	7.47
	Wanted me to reveal	.55	7.09
Assailant controlling	Invaded my space	.74	—
	Wouldn't take no	.71	11.80
	Unwanted touching	.81	12.28
His judgment	Didn't want to hurt him	.64	—
	Fear of ruining relationship	.77	11.40
	Didn't want to make him mad	.81	11.62
Self-blame	Others blame me	.65	—
	Blame self	.81	8.76
	Felt guilty	.40	6.28
Powerful	Self-confident	.72	—
	Self not powerful	.65	9.63
	Powerful	.68	9.88
Resentment	Angry	.85	—
	Annoyed	.45	6.94
	Disrespected	.54	7.77
Assertive behavior	Raised my voice	.70	—
	Hit, kicked, scratched him	.79	10.62
	Ran away/attempted	.61	9.55
Diplomatic behavior	Told him not ready	.60	—
	Made excuse	.53	6.77
	Tried to redirect him	.64	7.34
Immobilized	Felt paralyzed	.63	—
	Stiffened body	.39	5.63
	Stopped struggling	.58	7.34

NOTE: All factor loadings are significant at .05 level.

TABLE 3

Factor Intercorrelations for the CFA Model

Factor	Intimacy 2	Alcohol 3	Manipulation 4	Controlling 5	His Judgment 6	Self-Blame 7	Powerful 8	Resentment 9	Assertive 10	Diplomatic 11	Immobilized 12
1. Independence	-.07	.04	.07	.03	-.27***	-.32***	.22**	.18**	.08	-.08	-.08
2. Intimacy		-.15*	.20*	.03	.25**	.17*	-.01	.10	.03	.19*	.16
3. Alcohol			-.27***	-.10	-.31***	.09	-.01	-.07	-.06	-.04	-.08
4. Manipulation				.25**	.26***	.09	-.12	.05	.12	.33***	.24**
5. Controlling					.00	.02	-.17*	.27***	.19**	.15*	.26**
6. His judgment						.35***	.06	-.30***	-.31***	.49***	.09
7. Self-blame							-.26***	-.20**	-.23**	.26**	.40***
8. Powerful								.02	-.08	.17*	-.64***
9. Resentment									.48***	.09	.17*
10. Assertive										-.16*	-.09
11. Diplomatic											.13
12. Immobilized											

\*  $p < .05$ .

\*\*  $p < .01$ .

\*\*\*  $p < .001$ .