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Culture and intimate partner violence: The impact of loss of face, acculturation, and trauma history on Asian American women's in-the-moment behavioral intentions and risk perception

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**Abstract**

Culture and intimate partner violence: The impact of loss of face, acculturation, and trauma history on Asian American women's in-the-moment behavioral intentions and risk perception

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Intimate partner violence (IPV) has been shown to be a significant problem in Asian American communities. Further, victimization may be particularly significant among Asian American college women due to data suggesting that many women experience their first victimization during college. Asian cultural norms regarding the interdependence construct loss of face and the patriarchal construction of family dynamics have been proposed to decrease women's likelihood to disclose, terminate the relationship, and access help in response to IPV. In addition to cultural level factors, individual level factors have also been shown to significantly impact women's responses to IPV. Childhood abuse (CA) and IPV have been shown to increase women's risk for IPV victimization. Given the significance of the cultural and individual level influences on women's responses to IPV, this dissertation examined these associations through 3 empirical studies. To understand women's responses in acute IPV situations, we used an escalating

hypothetical IPV scenario to activate acute visceral states to assess in-the-moment responses.

The first study was a qualitative examination of Asian American college women's responses to the IPV scenario. We explored women's behavioral intentions, their perception of the perpetrator, and their attributions of the cause of violence in the scenario. The second study tested three models examining cultural predictors of Asian American college women's in-the-moment responses to the IPV scenario. The associations among loss of face, acculturation, three behavioral intentions (soothe, escape, and escalation/resistance), current and future risk perception, and the likelihood of staying in the relationship were examined. The third study tested three models examining trauma history as predictors of Asian American college women's in-the-moment responses to the IPV scenario. We examined the associations among CA, IPV, posttraumatic stress symptoms, three behavioral intentions (soothe, escape, and escalation/resistance), current and future risk perception, and the likelihood of staying in the relationship. This dissertation provides a number of significant contributions to the field of IPV. Since extant research has mostly examined the dichotomy of staying or leaving behaviors in regards to IPV, this was the first project to examine multiple in-the-moment behavioral intentions and risk perception. Further, this was the first project to examine the effects of cultural factors on in-the-moment risk perception and behavioral intentions among Asian Americans. Our findings extend previous research and provide further knowledge to aid in the development of culturally sensitive prevention and intervention programs for Asian Americans.

## **DEDICATION**

I would like to dedicate this dissertation to my mom My Truong whose unconditional love, support, and sacrifices have allowed me to pursue my dreams.

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## Overview

Intimate partner violence (IPV) has been shown to be a significant problem in Asian American communities. According to national surveys, rates of victimization among Asian American women are as high as 50%, indicating that this group is particularly at risk for IPV (Black et al., 2011; Tjaden & Thoennes, 2000). These high prevalence rates are likely even higher given research indicating that Asian American women are less likely to disclose of IPV and access resources compared to other racial/ethnic groups (Shim & Hwang, 2005). As such, women in this population may not only be at risk for IPV victimization but they may also be at risk for repeated, long-term abuse and negative consequences from the abuse.

The social-ecological model proposes that responses to IPV, including disclosure, termination of the abusive relationship, and help seeking, are impacted by the dynamic interplay between factors spanning from the individual level (e.g. trauma history) to the societal level (e.g., cultural norms; Krug et al., 2002). Among Asian Americans, cultural norms regarding the interdependence construct loss of face (i.e., losing social integrity that is linked to family honor) and the patriarchal construction of family dynamics have been proposed to significantly impact women's responses to IPV. Although IPV is not encouraged in Asian American cultures, when it does occur, it is often viewed as justified and women often feel discouraged from disclosing, terminating the relationship, and accessing help due to the threat of disrupting social harmony, bringing shame to the family, and losing face (Rani & Bonu, 2009; Shiu-Thorton, Senturia, & Sullivan, 2005).

In addition to cultural level factors, individual level factors have also been shown to significantly impact women's responses to IPV. Extant research has indicated that having a history of childhood abuse (CA) and IPV places women at increased risk for IPV victimization

(Gover, Park, Tomsich, & Jennings, 2011b). It has been proposed that trauma history may lead to trauma symptoms, which in turn may impair women's cognitive processing of danger cues and self-defense efforts during an IPV situation (Marx, Heidt, & Gold, 2005). Thus, women with a trauma history may perceive less risk in a dangerous IPV situation and may have intentions to engage in behaviors that would put them at more risk (Messman-Moore & Brown, 2006).

Given the significance of the above mentioned cultural and individual level influences on women's responses to IPV, the current project examined these associations through 3 empirical studies. To fully understand how women would respond to an acute IPV situation, it was important to assess behavioral intentions during these moments of stress because one's behavioral intentions and risk perception may differ based on context and emotional states. As such, we used an experimental paradigm utilizing a hypothetical IPV scenario to activate acute visceral states to assess in-the-moment responses to IPV. This paradigm was used in all three studies.

The first study was a qualitative examination of Asian American college women's open-ended responses to an escalating hypothetical IPV scenario. The primary aim of this study was to explore Asian American college women's narratives during an escalating IPV situation in order to gain insight into the different ways in which they would respond to an IPV scenario, their perception of the perpetrator, and their attributions of the cause of violence in the scenario. Results from this study informed key behavioral intentions that were examined in study 2 and 3. The second study examined cultural predictors of Asian American college women's in-the-moment responses to a hypothetical, escalating IPV scenario. The primary aim for this study was to examine the associations among loss of face, acculturation, three behavioral intentions (soothe, escape, and escalation/resistance), current and future risk perception, and likelihood of

staying in the relationship. The third study examined trauma history as predictors of Asian American college women's in-the-moment responses to a hypothetical, escalating IPV scenario. The primary aims for this study were to 1) assess the prevalence of CA and IPV among Asian American college women; 2) examine whether having experienced childhood abuse was predictive of intimate partner violence and psychological symptoms; and 3) examine the associations among CA, IPV, PTSD, three behavioral intentions (soothe, escape, and escalation/resistance), current and future risk perception, and likelihood of staying in the relationship.

Although extant research has shown an association between victimization history, trauma symptoms, and behavioral intentions to escape a threatening situation, no studies to date have examined these relationships among behavioral intentions other than escape (e.g., soothe and escalate/resist). Further, no research to date has examined these associations in light of cultural variables among an Asian American sample. This current study aimed to fill these knowledge gaps in the literature.

Asian American women's in-the-moment responses to an intimate partner violence situation: A qualitative analysis

## **Abstract**

According to the National Violence Against Women Survey, up to 50% of Asian American women reported to have experienced intimate partner violence (IPV) in their lifetime, suggesting that this is a significant problem in the U.S. For Asian Americans, cultural values based on Confucian principles, such as loss of face, have been shown to impact women's responses to IPV. Fear of losing face may influence women to refrain from disclosing their victimization, remain in the abusive relationship, and not access help. Thus, to develop culturally appropriate preventions and interventions for this population, research is needed to understand Asian American women's responses during an IPV situation. The purpose of the current study was to qualitatively explore Asian American college women's (N=299) in-the-moment responses to a progressively threatening IPV scenario. Women responded to three questions regarding their view of the perpetrator, their behavioral intentions about what they would do next, and their reasoning for why the perpetrator got angry. Results indicate that the majority of women attributed the perpetrator's violence to his character and held negative views of him. However, a substantial number of women maintained positive views of the perpetrator and attributed his violence to situational factors as well as the victim's behaviors. Further, results indicate that women chose to engage in three primary behavioral intentions during the scenario: soothing the perpetrator, escaping the situation, and fighting with the perpetrator. Women chose different behavioral intentions based on the different level of violence in the IPV scenario, suggesting that women's responses during an IPV situation are complex and fluctuate depending on context. Finally, results indicate that the majority of women did not report intentions to end the relationship or to seek help suggesting that these women may be particularly at risk for IPV victimization and negative consequences. Cultural implications of findings were discussed.

Intimate partner violence among Asian American populations is a significant problem in the U.S. Intimate partner violence (IPV) is defined as physical, sexual, or psychological harm by a current or former partner or spouse (Saltzman, Fanslow, MacMahon, & Shelley, 2002). The National Intimate Partner and Sexual Violence Survey showed that about 20% of Asian American women in the U.S. have been a victim of rape, physical violence, and/or stalking by an intimate partner (Black et al., 2011). According to the National Violence Against Women Survey, up to 50% of Asian American women reported to have experienced physical assault in their lifetime (Tjaden & Thoennes, 2000). Further, the proportion of Asian Americans reporting victimization has been shown to be significantly lower than the proportion of Asian Americans reporting perpetration, suggesting that underreporting of victimization may be an issue for this population and that rates of victimization may be higher than what has been reported in national surveys (Chang, Shen, & Takeuchi, 2009).

Rates of IPV among Asian American youths and college students have also been found to be significant. Approximately 57% of Asian American youths have been shown to report some form of emotional-psychological abuse in their relationship (Choi-Misailidis, Hishinuma, Nishimura, & Chesney-Lind, 2008). Among Asian American college students, rates of psychological abuse by an intimate partner have been shown to be as high as 37% and rates of sexual abuse have been shown to be as high as 15% (Porter & Williams, 2011). Given the high rates of IPV among college students (Miller, 2011) and the high rates of Asian Americans in colleges (U.S. Census Bureau, 2010), Asian American college students may be at particularly high risk for IPV.

### **The Social-Ecological Model of Intimate Partner Violence**

The social-ecological model asserts that experiences of IPV are impacted by the dynamic interplay between factors operating at the individual, relationship, community, and societal level (Krug et al., 2002). This model has cross-cultural support and has been used as the gold standard by the World Health Organization and the Centers for Disease Control and Prevention to understand risk and responses to IPV victimization (CDC, 2009; Krug et al., 2002). The model also provides different levels in which to intervene, thereby making it a valuable framework to use for prevention and intervention efforts.

The first level of the social-ecological model identifies individual level factors such as biology and personal history that may impact IPV victimization. This level has been supported by research showing that having a history of childhood abuse, IPV, or rape increases women's risk for IPV victimization and impacts how they respond to the experience (Akers & Sellers, 2009). The second level of the model identifies factors related to interpersonal relationships, including peer relationships and family dynamics, which may impact risk and responses to IPV. Research has shown that high marital conflicts and tension with family members may increase an individual's risk for experiencing IPV (Hoffman, Demo, & Edwards, 1994). Further, residing in the same household as the abuser may likely increase the chance for repeated victimization. If the victim also associates with peers who condone violence and approve of IPV, she may be less likely to disclose, terminate the IPV relationship, and/or access resources. Thus, factors within individuals' social relationships have been shown to play a significant role in their IPV risk. The third level of the model identifies characteristics of the community contexts, such as schools, neighborhoods, and workplaces, which are associated with IPV victimization. Research has shown that residing in highly populated, low-income neighborhoods with high prevalence of unemployment, crimes, and drug trafficking is associated with violence victimization (Oyunbileg

et al., 2009). Finally, the last level of the model identifies societal factors such as cultural and social norms as well as health, educational, economic, and social policies that may increase tolerance and support for IPV. Social and cultural norms that have been found to increase risk for IPV include norms that support traditional gender-roles, male dominance over women, using violence to resolve conflicts, and victim-blaming (Hall et al., 2005).

The social-ecological model proposes that women's risk for IPV victimization and their responses to it are impacted by a myriad of factors that spans from the individual to the larger cultural context. This comprehensive framework is advantageous when examining the complexity of IPV victimization among ethnic minority women because it allows for the influence of cultural level factors on individual level decision making.

### **Culture and Intimate Partner Violence**

Many Asian cultures have shared values in Confucian principles that have been proposed to shape Asian American women's experience of IPV. Confucian principles place high values on social hierarchy, with older adult males holding the highest power and authority within a household. Wives are expected to be obedient to their husbands and in-laws, and children are expected to be obedient to their elders (Shim & Nelson-Becker, 2009). These shared patriarchal aspects of many Asian cultures have been shown to increase Asian women's risk for IPV and decrease their likelihood of disclosure and help seeking (Shim & Hwang, 2005). A study examining attitudes toward marital violence among a sample of Chinese, Korean, Vietnamese and Cambodian adults in the U.S. showed that approximately a quarter of the sample endorsed statements indicating male privilege (e.g. a husband should have the right to discipline his wife). Further, about a third of the sample endorsed situation-specific approval of violence (e.g. had sex with another man, made fun of him at a party, nagged him too much, and refused to cook and

clean). Participants also perceived a lack of alternative for the abused woman, with about a fifth of the participants not believing that a wife should move out of the house if the husband hits her, that beating is grounds for divorce, and that a husband should be arrested if he hits his wife (Yoshioka, DiNoia, & Ullah, 2001).

Shared Asian cultural values of interdependence, which focuses on the importance of social harmony with the needs of the family taking precedence over the needs of the individual, have also been found to impact women's experiences with IPV. Having an interdependent orientation encourages individuals to engage in activities that will preserve their social face (i.e., social integrity that is linked to family honor). As such, IPV is not necessarily encouraged in Asian American cultures because it could disrupt social harmony. However, when it does happen, IPV is often justified within the social hierarchy (e.g., women who do not obey husbands may be punished) and kept private to prevent loss of face (i.e., loss of social integrity) and disruption to social harmony. An international study examining attitudes toward wife beating across Asia showed that both men and women expressed a substantial amount of justification for wife beating (Rani & Bonu, 2009). For example, wife beating was justified if she does a poor job preparing food, if she refuses to have sexual relations with her husband, if her husband suspects her of infidelity, if she neglects the children, and if she argues back against her husband.

The justification for IPV in many Asian cultures may normalize abused women's experiences and discourage them from reporting, escaping, or seeking help. As such, many Asian American women who do experience IPV tend to endure it in silence. A qualitative study examining Vietnamese American women's experiences with IPV showed that women perceived IPV as something shameful for the woman victim and that it is a personal and private matter not to be disclosed to the public (Shiu-Thorton, Senturia, & Sullivan, 2005). Further, women in the

study reported a preference for remaining in the relationship and enduring the IPV due to the threat of bringing shame to their family and losing face, of disrupting their children's lives, and of retaliation from the abuser. Another qualitative study with Cambodian American women showed similar behavioral intentions in response to IPV (Bhuyan et al., 2005). Women in this study reported that Khmer women are socialized to be patient and endure abuse from their husbands and that women should endure the abuse because divorce is thought to be detrimental to the family and children. Further, women reported that IPV is often viewed as the woman's fault, thereby public knowledge of this would bring shame to her family, and she would be ostracized by her community. As such, women in the study reported that they would not disclose IPV to anyone outside the family or ask for help from outsiders (e.g. the police).

These studies suggest that Asian cultural values significantly impacts Asian American women's responses to IPV. In particular, Asian American women may be at risk for remaining in dangerous IPV situations due to threats of bringing shame to their family and losing face. As such, more research is needed to understand how this cultural factor impacts women's decision making during an IPV situation, as well and post-event decisions and courses of action.

### **Theory of Planned Behavior**

The theory of planned behavior (Ajzen & Madden, 1986) proposed that behavioral intentions are necessary precursors to behavioral actions. According to this theory, thoughtful actions and decisions are immediately determined by behavioral intentions. Behavioral intentions are in turn determined by one's attitude toward the behavior, the subjective norm, and one's perceived behavioral control of the situation. A study by Byrne & Arias (2004) showed that this theory accounted for 69% of victimized women's intentions to leave an abusive relationship. The theory of planned behavior suggests that understanding behavioral intentions and their

psychological predictors is crucial to understanding and predicting actual responses to IPV. Further, research has shown that one's behavioral intentions may be significantly impacted by the context of the situation such that one may have strong behavioral intentions to leave an abusive relationship while in the company of supportive friends or at a shelter, and have different behavioral intentions while under extreme emotional stress during the abusive relationship (Griffing et al., 2002). Thus, to fully understand how women will respond to an acute IPV situation, it is important to assess behavioral intentions during these moments of stress by utilizing an in-the-moment scenario paradigm to activate acute visceral states.

### **Present Study**

Although previous research suggests that IPV is prevalent among Asian American populations, and that Asian American college women may be particularly at risk for victimization, there has been no study to date that has examined in-the-moment responses and risk perception during an IPV situation in this population. Therefore, the current study aimed to fill this gap by exploring Asian American college women's in-the-moment qualitative responses to an IPV situation. Due to the obvious ethical and logistical issues in assessing women's responses during a real life IPV situation, the present study used a scenario that simulates a high risk IPV interaction in order to mirror real-life. Participants responded to the scenario as though they were the protagonist and were asked questions about their perception of the perpetrator, of what they would do next, and of the reasoning behind the perpetrator's actions. The purpose of the study was to further understand Asian American women's thought processes, behavioral intentions, and risk perception during an IPV situation in order to detect risk and protective factors and inform prevention and intervention efforts.

### **Method**

## **Participants and Recruitment**

Female participants were recruited through the University of Washington (UW) Psychology Department Subject Pool (PDSP). Signing up for the PDSP was optional for undergraduate students enrolled in Psychology 101, 206, and 210. Participants viewed the study description online via the PDSP website, and those who were interested were given the option of participating in the proposed study. The PDSP online listing described the study as an examination of college students' view on dating relationships. After signing up for the study, they were presented with a link to a website where they completed the study questionnaires. Participants were given course extra credit for being involved in the study. This study was part of a larger longitudinal study assessing intimate partner violence among college students

One thousand four hundred and forty-two participants were recruited for the larger study. For the purpose of the proposed study, only data from Asian American women who reported their lifetime sexual partner to be mostly or only men were examined ( $N = 324$ ). We excluded 25 individuals due to missing qualitative data, which brought the final sample to  $N = 299$ . The mean age for the study sample is 19 years old with 95% of participants between 18-21 years old. Sixty-three percent of the sample was in their first year of college, 18% in their second year, 13% in their third year, and 6% in their fourth or fifth year. Sixty percent of the sample reported not dating anyone exclusively, while 40% reported being in an exclusive relationship.

## **Procedure**

All procedures, including recruitment, assent to participate, data collection, and debriefing, were conducted online. Data was collected using Catalyst Web Q, a widely used online survey software that offered encrypted data transmission using SSL (https) and the ability to disable IP logging, which provided protection for participants' confidentiality and their data.

Participants' name and email address were kept in a separate database, and participants' data was not linked to any identifying information. Participation took approximately 1-2 hours, and participants received 2 hours of research credit participation for their course. Participants first read an information statement that described the purpose, procedure, risks, and benefits of the study. Once they consented to be in the study, participants were directed to complete background questionnaires. After the background questionnaires, participants were prompted to read and respond to a story describing an intimate partner violence scenario. After finishing the study, participants were given a debriefing form with contact information of the investigators as well as other referral information for mental health assessment and/or treatment.

## **Measures**

**Intimate partner violence scenario.** Only participants who reported their lifetime sexual partner to be mostly or only men were given the IPV scenario. Participants were asked to project themselves into the story as the protagonist and respond to questions throughout the story as though the events were actually happening to them. The scenario was written in second person to maximize the likelihood of bringing about real-life reporting responses. The scenario depicted an IPV situation between the protagonist and a hypothetical male partner (Eric) with whom she's been dating for more than 2 months. Eric's race was not specified so that the participants could project their usual dating partner's race onto him. The scenario started with the protagonist and Eric going to a party together. When they first arrived at the party, Eric got drinks for both of them. The content of the drinks was not specified in the story, and drinking was not mentioned again in the scenario. During the party, Eric got very jealous and angry that the protagonist was exchanging phone numbers with a male classmate (Shaun) to get class notes. Eric then pushed Shaun, who stumbled and fell. The protagonist and Eric left the party and came to Eric's house.

Eric's behavior escalated to yelling at the protagonist and calling her names. In the next part of the story, Eric shoved the protagonist against the wall and held her there while screaming at her. The story ended with the protagonist feeling scared of Eric. She asked him to calm down and let her go, and he did.

Participants were prompted to answer questions at four time points during the story. They were asked two open-ended questions during all four question breaks: "*What would you be thinking at this point, if this happened to you, about Eric as a person?*" and "*What would you probably do next if this happened to you?*" They answered an additional open-ended question at question break 4: "*Why do you think Eric got angry?*" Participants also answered questions about different behavioral intentions, perception of current and future risk, and likelihood of them staying in the relationship on a scale of 1 (not at all likely) to 5 (very likely). The current study focused on participants' qualitative responses to the three open-ended questions.

The first question break occurred after Eric pushed the classmate to the ground. The second question break occurred after Eric and the protagonist left the party, and he began yelling and calling her names. The third question break occurred after Eric shoved the protagonist against the wall and held her there while screaming. The last question break occurred after the protagonist expressed fear, and Eric let go of her. To check the realism of the story, we asked participants to rate how realistic they found the story and how easy it was to project themselves into the story and respond like it was happening to them on a scale of 1 (not at all) to 5 (very). Participants in the story reported that the story was realistic ( $M = 3.81$ ,  $SD = 1.07$ ) and that it was easy to project themselves into the story and respond like it was happening to them ( $M = 3.49$ ,  $SD = 1.25$ ).

## **Data Analysis**

Participants' open-ended responses were content analyzed by a team of three researchers (Krippendorff, 2004). The first step of data analysis consisted of three researchers independently reviewing the qualitative responses from the participants and generating a list of categories that summarized the data. We defined the smallest meaningful unit of analysis to be categorized as a single word and the biggest unit of analysis as the complete response of each participant for each question (Schilling, 2006). In the next step, the researchers met and discussed recurring categories and generated a master codebook of a thematic framework. Each researcher was then assigned 101 participants to code based on the thematic framework from the master codebook. As the researchers independently coded their assigned participants, they also formulated, coded, and added new categories to the original thematic framework as indicated by the data. The research team met throughout this process to discuss and incorporate the new categories, revise old categories, and resolve any questions and inconsistencies regarding the master codebook. This inductive process of developing a category system in qualitative content analysis, in which the emergent theory is constantly being verified and modified, produces a framework that's strongly linked to the participants' lived experiences (Schilling, 2006). Once all of the data has been coded once, the researchers then independently reviewed their coded data and recoded their assigned participants using the final version of the thematic framework. Finally, the lead researcher and first author reviewed the coded data from all participants and resolved any inconsistencies in coding.

## **Results**

### **Participants' View of Eric**

Participants reported three main themes in response to the question, "what would you be thinking at this point, if this happened to you, about Eric as a person?" Participants responded

that Eric's actions conveyed that he was violent and dangerous, that he cared about them, and that his actions did not reflect his personal characteristics (see Table 1). Approximately 71% of the women reported him to be an abusive, dangerous, angry, jealous, and possessive boyfriend after reading the part of the scenario in which he shoved the classmate in public (question break 1). Forty percent of the women reported this after reading that Eric verbally abused them at his house (question break 2), 67% reported this after reading that Eric verbally and physically abused them (question break 3), and 48% reported this after reading that Eric had released them (question break 4). One woman reported, "I would think that Eric is very violent and constantly angry. I think Eric would be easily aggravated and that it would be unsafe to be around him when he is angry" (question break 2). Those who reported that Eric was dangerous specifically mentioned that they were afraid of him and reasoned that his abusive actions in the current situation would predict his abusive actions towards them in the future. "He has major anger problems and that if I continue to stay in this relationship, I would be physically and mentally damaged in the future" (question break 2). Women who reported that Eric was violent and dangerous also reported that he was not a desired partner because they had lost respect for him due to his actions. "I would probably think that he's actually abusive and controlling and that he is definitely no longer attractive in my eyes" (question break 3).

After reading the part in the scenario in which Eric shoved the classmate, approximately 6% of the women reported that Eric got angry because he really cared about the protagonist and that his protectiveness was a reflection of his love for her. "I would wonder why Eric is so violent. Maybe he cares and likes me so much that he's worried that someone else is trying to hit on me even if they were not. Honestly, part of me wouldn't mind it because I think this shows how much Eric cares" (question break 1). Thirteen percent of the women reported this after

reading that Eric had released them. One woman reported, “(Eric’s) emotions got the better of him, and that he was not actually the abusive person that I witnessed a second ago” (question break 4). Another woman reported, “I would be thinking that he has a major anger issue, but the fact that he finally lets go is a good sign, that maybe deep down he does care. I now know how to handle this situation” (question break 4). It is important to note that the women only reported these positive characteristics about Eric during question breaks 1 and 4, which were the least violent parts of the scenario.

Approximately 19% of the women believed that Eric’s actions did not convey his personal character after reading the part of the scenario in which he shoved the classmate. Eleven percent of the women reported this after reading that he verbally abused them, 11% reported this after reading that he verbally and physically abused them, and 19% reported this after reading that he had released them. They reported that his actions were out of character for him and also presented excuses for the way he was acting such as he was drunk, tired, bored, and not himself. One woman reported, “I would feel bad for making Eric uncomfortable (for) being (at) a party and being bored and ignored” (question break 1). Another woman reported, “This sort of event did happen to me before but it was more like after 7-8 months that I finally noticed how crazy & psycho my boyfriend at the time was. I know for sure, I was probably thinking, maybe he was just tired and cranky from the party” (question break 1).

### **Participants’ Behavioral Intentions**

Participants’ responses to the question, “what would you probably do next if this happened to you?” reflected five themes: soothe Eric, leave the situation, confront Eric, end the relationship, and get help (see Table 2). Approximately 52% of the women reported that they would soothe Eric after reading that he had shoved the classmate. This included calming him

down, reassuring him, explaining the situation to him, and leaving with him. One woman reported that she would, “assure Eric that (she) only want him and nobody else. And probably just leave without giving (her) number to Shaun” (question break 1). Another woman reported, “I would get help and get someone to pull Eric away and take Eric home, probably taking a walk with him first so he'd get some fresh air. I'd apologize to Shaun later. If I could I might stay with Eric the whole night just to show that I still like him and want to be with him” (question break 1). The percentage of women who reported that they would soothe Eric decreased to 18% after they read that he had verbally abused them at his house. This number decreased even more to 7% after the women read that Eric had verbally and physically abused them. “I would probably apologize to Eric for making him upset but also tell him to let me go” (question break 3). However, more women reported soothing Eric (17%) after they read that he had released them. “I would try to calmly talk to him about what just happened, and try to comfort him and reassure him that nothing has gone on behind his back” (question break 4).

Approximately 18% of the women reported that they would leave the situation without Eric after reading that he had shoved the classmate. “I would find a friend and ask for a ride home and tell Eric to go home and don't do anything stupid” (question break 1). Many more women (57%) reported that they would leave the situation after they read that he had verbally abused them at his house, and almost as many (56%) reported leaving after reading that he had verbally and physically abused them. One woman responded, “Run out of the house if I can, to protect myself from any potential danger that can occur” (question break 3). After reading that Eric had released them, 69% of the women reported that they would leave. “Leave and never be alone around him, avoid him if possible” (question break 4).

Approximately 25% of the women reported that they would verbally and physically fight, resist, and confront Eric after reading that he had shoved the classmate. Many women reported that they would yell, kick, fight, and break away from Eric in response to his actions. “I would immediately (once we are alone) question him in a harsh way as to why he had to act like that. I would tell him how ridiculous he was being and warn him that it should not happen again” (question break 1). Ten percent of the women reported fighting with Eric after reading that he had verbally abused them, 28% reported fighting with Eric after reading that he had verbally and physically abused them, and only 3% reported fighting with Eric after reading that he had released them. Some women reported fighting with Eric when he wasn’t actively attacking them. One woman reported that she would, “yell at Eric for his actions, apologize to Shaun, tell Shaun I’ll talk to him later, drag Eric home and yell at him for what he did.” Others reported that they would fight back as a way to defend themselves against his attacks. One of these women reported, “(I’ll) try to talk him into release, but if unresponsive, I would headbutt him in the head, knee his head/stomach, kick his groin, grab the car keys, and run away (probably leaving my shoes behind)” (question break 3).

After reading that Eric had shoved the classmate, only 3% of the women reported that they would get help, which primarily involved getting a ride home from a friend. Eight percent of the women reported getting help after reading that Eric had verbally abused them. Many of the women reported accessing multiple sources for help. “I would talk to my parents and the counselor. Hopefully, they would contact the police” (question break 2). Twenty-six percent of the women reported to get help after reading that Eric had verbally and physically abused them. One woman reported, “Call for help. Report him to the authorities for domestic violence and get a restraining order” (question break 3). After reading that Eric had let go of them after holding

them against the wall, 10% of the women reported that they will get help. “Try to leave. If he won't let me go, I'll call the Police or some adult authority (parents, etc)” (question break 4).

Overall, more than 75% of the women reported that they would get help from friends or family, 20% reported that they would get help from the police, and 3% reported that they would get help from a counselor.

Some women reported that they would end the relationship in response to Eric's violent actions. Approximately 17% of the women reported that they would end the relationship after reading that Eric had shoved the classmate. Some women specified that they would end the relationship right away whereas others said that they would end the relationship at a later time. “I would try to calm him down, and pull him out of the party. I would try talking to him, and tell him that our relationship is over. Then I would go back inside, as embarrassing as that would be, and stay with them, to be safe” (question break 1). Those who chose to end the relationship at a later time reported that they did not want to aggravate Eric more by breaking up with him when he was violent and would wait until he calmed down to break up with him to insure their safety. About 27% of the women reported that they would end the relationship after Eric verbally abused them. One woman reported, “I would tell Eric that our relationship is over because if he cannot trust me, then there is no point in us being together.” Another woman reported, “Tell him coldly that I am breaking up with him. Then walk out of the house as fast as I can” (question break 2). Fourteen percent of the women reported that they would end the relationship after reading that Eric had verbally and physically abused them. Finally, 36% of the women reported that they would end the relationship after reading that Eric had released them. One woman reported, “Go home and decide to break up with him the next day. Doing it right away might not be the best idea anymore if he decides to over react and try to hurt me” (question break 4).

## **Participants' Reasoning for Eric's Behavior**

At the end of the story, participants were asked, "why do you think Eric got angry?" Five themes emerged from their responses regarding the reasons behind Eric's anger: nature of the relationship, characteristics of Eric, Eric's past history, situational influence, and her behavior (see Table 3). Nine percent of the women reported that Eric got angry because of the nature of their relationship. These women believed that Eric's love for them, commitment to the relationship, and fear that he would lose the relationship prompted his anger. One woman reported, "He loves me and only wants me to himself, he doesn't want to lose me." Another woman wrote, "He definitely has strong feelings for his girlfriend and that's why he got so jealous."

Sixty-five percent of the women believed that Eric got angry because of his personal characteristics. They believed that the anger was an expression of his insecure, jealous, possessive and violent personality. One woman responded that, "Eric has jealousy issues. Eric is too controlling. He wants to control our relationship, and have it be on (his) terms. He wants to make sure that I'm following his plan, and his instructions. Eric is probably also very insecure."

Three percent of the women reported that Eric got angry because of his past history. They believed that experiences of being cheated on in the past, his upbringing, and attachment issues from his childhood have socialized him to react more aggressively. One woman wrote, "Perhaps he was jealous that I was flirting with another guy. Maybe he's had past experiences where a girl has cheated on him or maybe he didn't get enough attention as a child. Maybe me talking with another guy conjured up images of these bad memories and he got angry." Another woman wrote, "Maybe he's had some issues with girls in the past doing the things that he has accused me

for and is actually just scared and doesn't know how to express it. And being a "guy" he probably just took it out through his anger.”

Many women attributed his anger to situational influences. Forty-seven percent of the women reported that characteristics of the situation such as him being tired, drunk, uncomfortable with social interactions, not having fun, being at a party with their friends and not his, and seeing them talk to another guy contributed to him being angry. “Eric was probably really angry because he did not have a lot of fun at the party because it was a group of my friends and not his. Also because of that, I had more fun than he did, which also may have made him angry. Eric was already probably in a bad mood by the time Shaun came around. Eric blew up because it seemed that I was flirting with Shaun by giving him my number.” Many of the women reported that alcohol influenced Eric to get angry. They reported that he got angry because he was drunk, that alcohol impacted his emotions and made him react in ways that were out of character, and that alcohol fuelled his existing anger in the situation. One woman reported, “He was drunk, which took control of his emotions, but also had some insecurity about himself.” Another woman reported, “I think Eric was sufficiently intoxicated enough to become irrationally angry and beyond reason. I also assume that there was some element of jealousy that was involved, meaning that he might simply be more protective/possessive than I originally perceived him to be and the alcohol exaggerated this element that night.”

Finally, 18% of the women reported that they did something to make Eric angry. One woman reported, “I was talking to another guy when I should have been with him at the party.” Another woman reported, “(Eric got angry) because I forgot about him while having fun talking to another guy. And Shaun caught us on the way out and wanted my phone number.”

## **Discussion**

The purpose of the study was to explore Asian American college women's in-the-moment responses to an IPV situation through examining their narratives during a hypothetical scenario. Participants responded to three questions regarding their view of Eric, their behavioral intentions about what they would do next in the story, and their reasoning for why Eric got angry.

Participants' view of Eric fit into three themes: violent and dangerous, caring, and out of character. The majority of the women in our study viewed Eric as violent and dangerous, which may be a protective factor. These women may have perceived themselves as being at risk for harm, and thus may engage in self-protective behaviors such as leaving the situation. However, a substantial number of women in our study maintained a positive view of Eric even after experiencing the worst of his violent actions and attributed his actions to environmental factors. Not attributing Eric's abusive behavior to his character may be risky because these women may view this behavior as an isolated incident that was caused by environmental factors. As such, they may not view him as dangerous, may not engage in self-protective behaviors, and may remain longer in the dangerous situation and relationship. This is consistent with extant research showing that women who held negative, partner-blaming attributions after experiencing an IPV were more likely to leave abusive relationships compared to those who justified their partner's behaviors and held self-blaming attributions (see Rhatigan, Street, & Axsom, 2006 for review). Thus, the responses from Asian American women in our sample showed that although many of them may be protected by their negative view of Eric, there's a substantial number of women who held positive views of Eric, and as such, may be at particular risk for IPV.

Participants' responses to what they would do next in the story reflected five themes: soothe Eric, leave the situation, confront Eric, get help and end the relationship. Approximately

half of the women reported that they would soothe Eric by calming him down, reassuring him, explaining the situation to him, and leaving with him after reading that he had shoved the classmate. As Eric became more violent in the story the participants reported less soothe behavioral intentions. However, their soothe behavioral intentions increased after they read that Eric had released them. We speculate that the participants were more likely to soothe in the beginning of the scenario because this was their first exposure to Eric's violent behavior, they were in public, and he was mainly violent toward another person. Thus, participants may have viewed this environment to be safe enough to soothe and contain the situation. However, the soothing decreased when the violence escalated, was directed at them, and they were in private. Perhaps during the height of the violence, participants may not have viewed soothing as the most effective response to keep them safe and may be choosing to employ other behaviors such as escaping and fighting back. At the end of the scenario, more participants reported soothe behavioral intentions because it may have seemed like the soothing tactic that they had employed earlier was successful in getting him to release them. Even if they felt like they were still in danger, there may have been a sense of self-efficacy and control of the situation. Further, the violence of the situation had decreased by the end of the scenario, such that he was not verbally or physically attacking them, thereby making soothing behavioral intentions appeared more appropriate.

Interestingly, many more women endorsed leaving at the end of the scenario, in which the perpetrator had released them, rather than at the most violent part of the story, in which the perpetrator was verbally and physically abusive. This suggests that a possible reason that may have prevented some of these women from leaving when Eric was most violent was fear that he would hurt them more if they tried to leave. Thus, they may have tried to wait for a safer

opportunity to leave. The high percentage of women who reported that they would leave at the end of the story suggests that the women viewed this part in the scenario as safe enough to leave.

More participants reported to fight with Eric during the least violent and most violent part of the scenario compared to other parts of the scenario. The women may have felt safe to confront Eric for his actions after reading that he had shoved Shaun because Eric's direct violence was focused on someone else and they were in a public setting. Women who reported confronting and fighting intentions during this part of the scenario indicated that they would do so out of anger. However, those who reported confronting and fighting intentions with Eric after he became verbally and physically violent indicated that they would do so out of fear and in self-defense.

Our findings showed that the majority of women reported that they would soothe Eric, escape the situation, or confront and fight with Eric. The number of women endorsing each behavioral intention varied across the four question breaks. More women reported that they would soothe and confront Eric rather than escape the situation at the beginning of the scenario. However, during the height of violence in the scenario, more women reported that they would escape or confront Eric rather than soothe him. Finally, during the end of the scenario, more women reported that they would escape the situation and soothe Eric rather than fight him. Thus, it appears that women chose different behavioral intentions based on the different level of violence in the IPV scenario. Our findings suggest that women's behavioral intentions may not be static across different time points during an IPV situation. Women may choose to engage in a combination of different behaviors during an IPV situation and these combinations of behaviors may either decrease or increase their risk for victimization or re-victimization. This has important implications for prevention and intervention efforts such that knowing which

behavioral intentions are effective based on the context of the situation may help women figure out the most effective ways to respond to an IPV. Thus, more research is needed to examine the change in women's behavioral intentions across time and how intentions at each time points predict women's risk perception and likelihood of staying in a violent relationship.

Overall, the number of women who reported that they would seek help is very low, indicating that women in this sample may not access help when they need it, putting them at greater risk for negative psychological and physical consequences. This finding is consistent with extant research showing substantial barriers preventing Asian Americans from disclosing IPV and accessing help (Bhuyan et al., 2005). Asian American female victims of IPV compared to White, Black, and Latino victims have been found access less mental health services (Cho & Kim, 2012). Our findings also revealed that the majority of the women reported that they would utilize informal sources of help such as friends and family. Intentions to access help from formal sources such as the police and counselors were endorsed by fewer women. This finding is consistent with previous research indicating that many women victims of IPV prefer to seek help from informal sources (Kaukinen, 2002). For Asian American victims in particular, cultural concerns about bringing shame to the family provide strong motivations to keep IPV private, and as such, disclosing and accessing help from friends and family would be preferable than getting help from the justice system (Yamawaki, 2007).

Across the four question breaks, the majority of the participants did not report that they would end the relationship. This suggests that perhaps the level of violence depicted in this scenario was not a "deal breaker" for most of the women. Only about a third of the participants reported to end the relationship at the end of the scenario. Because the perpetrator did not end up hitting the victim at the end of the scenario, perhaps participants may still give him the benefit of

the doubt. This finding has significant implications for predicting risks for Asian American women in abusive relationships. Since IPV increases in severity and violence each time that it occurs, remaining in these types of relationships even when the violence has not reached its apex is risky because the next incident may be much worse (McMillan & Kruttschnitt, 2004). An alternative explanation is that the women may be afraid of what Eric would do if they ended the relationship. This is consistent with previous research indicating that some victims of abuse stay with their perpetrator out of fear of retaliation (see Anderson & Saunders, 2003 for review; Shiu-Thorton, Senturia, & Sullivan, 2005). In our sample, a small percentage of women reported that they would wait to break up with Eric at another time because they were afraid that he would hurt them if they did. These women reported intentions to escape the relationship; however, they would wait until he calmed down to break up with him to insure safety for themselves. Perhaps, consistent with Asian cultural beliefs, these women may have been choosing a response that would minimize the impact of the break-up on their social face. Thus, ending the relationship while Eric was calm may decrease the likelihood that he would make a scene or the likelihood that he would injure her and she would have had to explain her injuries to her social network or seek medical help.

Participants reported five themes that reflected their belief as to why Eric got angry in the scenario. They reported that the nature of the relationship, characteristics of Eric, Eric's past history, situational influences, and their behavior are main causes of Eric's anger. Many women attributed Eric's behavior to a violent and abusive characteristic. Viewing Eric's behavior as a character trait may have been protective for these women because they may have been more likely to see him as risky and dangerous and may have been more aware of the possibility that he

would be violent again. As such, they may have been less likely to stay in the dangerous situation with him and in the relationship.

However, some women believed that Eric's anger and violent behaviors were caused by his love for them, commitment to the relationship and fear of losing them. This belief is risky because it not only absolved Eric of any responsibility for his actions, but it may have also primed women to condone more violent behaviors in the future. Further, many women attributed Eric's anger to factors outside of Eric's control such as the nature of the relationship, Eric's past history, situational influences, and their behavior. Attributing Eric's anger and actions to situational factors as opposed to his character may have led them to believe that this was an isolated incident brought on by situational factors, thereby decreasing their risk perception, increasing the likelihood of them staying in the relationship, and increasing their risk for revictimization. Further, the women who reported that their actions caused his anger may have blamed themselves for his violent behavior. This belief is risky because it may have justified Eric's actions, placed guilt on the women, and increased their chances of remaining in the relationship. This finding regarding self-blame in response to IPV is particularly significant for Asian American populations. Shame and self-blame has been found to be a main deterrent for Asian American women to access resources (Shen, 2011) and to be associated with a host of negative mental health outcomes including PTSD. (Leskela, Dieperink, & Thuras, 2002).

Many women reported that alcohol influenced Eric to get angry. Some reported that the alcohol caused him to get angry and act in ways that were out of character while others reported that the alcohol exacerbated his anger. Most of these women reported that he was drunk or sufficiently intoxicated to not be in control of his emotions. This finding is consistent with extant research showing that both men and women expected men to become more aggressive after

drinking (Abbey, McAuslan, Ross, & Zawacki, 1999). Interestingly, the scenario in the current study did not specify that the characters were drinking alcoholic drinks nor did it specify the frequency and quantity of what they were drinking. Thus, the participants automatically made the assumption that Eric was intoxicated based on the context of a party in the scenario. The association between party and drinking was so strong that participants automatically assumed that Eric was not only drinking alcohol, but was drinking enough to be intoxicated. This is consistent with extant research showing that college students were more likely to overestimate peer drinking norms in contexts of a party environment in comparison to private settings (Lewis et al., 2011). The implication of this alcohol finding is not clear. Perhaps, in our study, overestimation of Eric's drinking may have impacted participants' behavioral intentions and risk perception. Participants may have seen Eric as less of a threat if they viewed him as acting violent because he was drunk rather than because he was abusive, and may have been more likely to stay in the relationship. However, participants may have viewed him as more dangerous due to his drunkenness because his actions were less under his control, and thus, may have been less likely to stay in the relationship. Both of these explanations are plausible and thus, more research is needed to elucidate this finding.

The present study includes a number of limitations that are important to consider. Reliance on participants' self-report in the present study may have been subject to social desirability bias given the sensitive topic of intimate partner violence and trauma history. However, since all study procedures were done online, participants had the ability to respond to the questions on their own computer and in a private setting if they so choose. Another limitation of the study is that the study only included Asian American college women. Thus, findings from this may not be generalizable to the broader population of Asian Americans. However, because

Asian American college women have been shown to be at risk for intimate partner victimization (Porter & Williams, 2011), and because little research has been done on this topic with this population, it is important to focus research related to behavioral intentions and perception of IPV in this sample. Another limitation of the study is the categorization of Asian Americans into one group instead of examining subgroups of Asian Americans. Asian Americans are heterogeneous in terms of ethnicities, culture, customs, acculturation levels, socioeconomic status, and languages, thus having one group of Asian Americans would limit the nuances of the findings. However, there are shared cultural values among Asian American cultures, and as such, there is merit in examining the impact of these shared values on behaviors in this population. Finally, participants' responses to the scenario may not predict real life behaviors, thereby limiting the applicability and generalizability of our findings to actual behaviors during an IPV situation. However, paradigms utilizing scenarios are frequently used in intimate partner violence research and have been shown to predict actual behaviors (Flowe, Ebbesen, & Putcha-Bhagavatula, 2007; Mason, Riger, & Foley, 2004; Messman-Moore & Brown, 2006). Further, due to ethnical limitations, researchers cannot study actual in-the-moment intentions, risk perception, and behaviors during an intimate partner violence scenario. Thus, using a scenario paradigm is the closest to studying in-the-moment intentions, perceptions, and behaviors.

Despite these limitations, the current study contributes to the IPV literature in several significant ways. This was the first research study to examine in-the-moment risk perception and behavioral intentions among Asian American women. Further, the qualitative nature of this study gave us insight into Asian American college women's thought processes during an IPV scenario through their own narratives. Given the extant research indicating that Asian Americans are at risk for IPV (Tjaden & Thoennes, 2000), it is important to examine risk and protective factors

specific to this population. Understanding Asian American college women's reaction to a violent situation will provide the necessary information for the field of victimization research to develop culturally appropriate education, prevention, and intervention for IPV in this population.

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Table 1

*View of Eric at Different Question Breaks*

Main Themes	Question Break			
	1	2	3	4
Violent and dangerous	71%	41%	67%	49%
Caring	6%	-	-	13%
Out of character	19%	11%	11%	20%

*Note.* Question Break (QB) 1 is when Eric shoves classmate in public. QB2 is when Eric verbally assaults the protagonist in private. QB3 is when Eric verbally and physically assaults the protagonist in private. QB4 is when Eric releases the protagonist in private.

Table 2

*Behavioral Intentions at Different Question Breaks*

Main Themes	Question Break			
	1	2	3	4
Soothe	52%	18%	7%	17%
Leave	19%	58%	56%	69%
Confront	25%	10%	28%	3%
Get Help	3%	8%	27%	10%
End Relationship	18%	27%	14%	37%

*Note.* Question Break (QB) 1 is when Eric shoves classmate in public. QB2 is when Eric verbally assaults the protagonist in private. QB3 is when Eric verbally and physically assaults the protagonist in private. QB4 is when Eric releases the protagonist in private.

Table 3

*Reasoning for Eric's Actions*

Reason	Percent
Nature of relationship	9%
Characteristics of Eric	65%
Eric's past history	3%
Situational influence	47%
Her behavior	18%

*Note.* Question Break (QB) 1 is when Eric shoves classmate in public. QB2 is when Eric verbally assaults the protagonist in private. QB3 is when Eric verbally and physically assaults the protagonist in private. QB4 is when Eric releases the protagonist in private.

Cultural impact on intimate partner violence: An examination of loss of face and acculturation on behavioral intentions and risk perception among Asian American college women

## **Abstract**

Intimate partner violence (IPV) among Asian American women is a significant problem in the U.S., with 20-50% of women reporting to have experienced it in their lifetime. Further, nearly half of IPV victims reported to have experienced their first assault between the ages of 18 and 24, suggesting that Asian American college women may be particularly at risk for IPV. For Asian Americans, cultural values such as loss of face have been shown to impact how women respond to IPV. Due to the fear of losing face, these women have been shown to be less likely to disclose their victimization and to be more likely to remain in the abusive relationship. Thus, the purpose of the current study was to examine the impact of cultural factors on Asian American college women's (N=324) in-the-moment behavioral intention, risk perception, and likelihood to stay in the abusive relationship during a progressively threatening IPV scenario. Three path models were tested, each assessing the relationships among loss of face, acculturation, current and future risk perception, likelihood of staying in the relationship, and one of three behavioral intentions (soothe, escape, and escalation/resistance). Results revealed that higher loss of face predicted more soothe and escalation/resistance behavioral intentions, which in turn predicted lower risk perception and higher likelihood to stay in the relationship. Further, higher acculturation predicted less intention to soothe and more intention to escape, which in turn predicted higher risk perception and lower likelihood to stay in the relationship. Acculturation was also found to be both positively and negatively associated with escalation/resistance behavioral intentions depending on the time and context of the scenario. Our findings indicate that loss of face may be a risk factor whereas acculturation may be both a risk and protective factor impacting Asian American college women's responses to IPV.

## **Prevalence of IPV among Asian/Pacific Islander Americans**

According to the National Intimate Partner and Sexual Violence Survey, about 20% of Asian American women in the U.S. have been a victim of rape, physical violence, and/or stalking by an intimate partner (Black et al., 2011). Intimate partner violence (IPV) is defined as physical, sexual, or psychological harm by a current or former partner or spouse (Saltzman, Fanslow, MacMahon, & Shelley, 2002). Rates for physical violence by an intimate partner in this population were even higher according to the National Violence Against Women Survey, which showed that 50% of Asian American women reported to have experienced physical assault in their lifetime (Tjaden & Thoennes, 2000). Moreover, Chang, Shen, & Takeuchi (2009) showed that the proportion of Asian Americans reporting victimization was significantly lower than the proportion of Asian Americans reporting perpetration, suggesting that underreporting of victimization may be an issue for this population and that actual rates of victimization may be higher than what was reported in national surveys.

Although there have only been a few studies documenting rates of IPV among Asian American youths and college students, these rates have been found to be significant. Choi-Misailidis, Hishinuma, Nishimura, & Chesney-Lind (2008) showed that 57% of Asian American youths reported some form of emotional-psychological abuse in their relationship. A study assessing IPV prevalence among ethnic minority college students showed that psychological abuse was reported by approximately 37% of Asian Americans and sexual abuse was reported by 15% of Asian Americans (Porter & Williams, 2011). Further, given the high rates of IPV among college students (Miller, 2011) and the high rates of Asian Americans in colleges (U.S. Census Bureau, 2010), Asian American college students may be at particularly high risk for IPV.

## **The Social-Ecological Model of Intimate Partner Violence**

The social-ecological model proposes that experiences of IPV are influenced by factors operating at the individual, relationship, community, and societal level (Krug et al., 2002). The first level of the social-ecological model identifies individual level factors such as biology and personal history that may impact IPV victimization. This level has been supported by research showing that having a history of childhood abuse, IPV, or rape increases women's risk for IPV victimization and impact how they respond to the experience (Akers & Sellers, 2009). The second level of the model identifies factors related to interpersonal relationships, including peer relationships and family dynamics, which may impact risk and responses to IPV. Research has shown that high marital conflicts and tension with family members may increase an individual's risk for experiencing IPV (Hoffman, Demo, & Edwards, 1994). Further, residing in the same household as the abuser may likely increase the chance for repeated victimization. If the victim also associates with peers who condone violence and approve of IPV, she may be less likely to disclose, terminate the IPV relationship, and/or access resources. Thus, factors within individuals' social relationships have been shown to play a significant role in their IPV risk. The third level of the model identifies characteristics of the community contexts, such as schools, neighborhoods, and workplaces, which are associated with IPV victimization. Research has shown that residing in highly populated, low-income neighborhoods with high prevalence of unemployment, crimes, and drug trafficking is associated with violence victimization (Oyunbileg et al., 2009). Finally, the last level of the model identifies societal factors, such as cultural and social norms as well as health, educational, economic, and social policies, which may increase tolerance and support for IPV. Social and cultural norms that have been found to increase risk for IPV include norms that support traditional gender-roles, male dominance over women, using violence to resolve conflicts, and victim-blaming (Hall et al., 2005).

According to the social-ecological model, women's risk for IPV victimization and their responses to it are impacted by factors spanning from the individual to the larger cultural context. This comprehensive framework is advantageous when examining the complexity of IPV victimization among ethnic minority women. Pinnewala (2009) adopted this theoretical framework to explain the impact of cultural contexts on Sri Lankan women's responses to IPV. The findings indicate that these women's responses to IPV and help seeking behavior were significantly impacted not only by the personal and institutional resources available to them but also by the culture-specific patriarchal values regarding women's role in the family. The author highlighted the importance of examining societal level factors such as cultural norms in understanding women of color's experiences with IPV. The current study followed in this tradition by examining cultural factors impacting Asian American college women's responses to IPV.

### **Culture and Intimate Partner Violence**

The patriarchal construction of family dynamics in many Asian American cultures has been proposed to shape Asian American women's experience of IPV. According to this social hierarchy, older adult males hold the highest power and authority within a household. Wives are expected to be obedient to their husbands and in-laws, and children are expected to be obedient to their elders (Shim & Nelson-Becker, 2009). These shared patriarchal aspects of many Asian cultures have been shown to increase Asian women's risk for IPV and decrease their likelihood of disclosure and help seeking (Shim & Hwang, 2005). A study examining attitudes toward marital violence among a sample of Asian American adults in the U.S. showed that approximately a quarter of the sample endorsed male privilege, believing that a husband should have the right to discipline his wife. Further, about a third of the sample reported that violence

against women is justified in certain situations such as when she is unfaithful, embarrasses him in public, nags him, or refuses to cook and clean. About a fifth of the participants indicated a lack of alternative for the abused woman by disagreeing that a wife should move out of the house if the husband hits her, that beating is grounds for divorce, and that a husband should be arrested if he hits his wife (Yoshioka, DiNoia, & Ullah, 2001).

Asian women's experiences with IPV have also been found to be impacted by the shared Asian cultural value of interdependence, in which social harmony and familial needs take precedence over the needs of the individual. Individuals with an interdependent orientation are motivated to engage in activities that will preserve their social face (i.e., social integrity that is linked to family honor). As such, IPV is not encouraged in Asian American cultures because it could disrupt social harmony. However, when it does happen, IPV is often justified within the social hierarchy (e.g. women who do not obey husbands may be punished) and kept private to prevent loss of face (loss of social integrity) and disruption to social harmony. An international study examining attitudes toward wife beating across Asia showed that both men and women expressed a substantial amount of justification for wife beating (Rani & Bonu, 2009). Findings showed that wife beating was justified if she does a poor job preparing food, if she refuses to have sexual relations with her husband, if her husband suspects her of infidelity, if she neglects the children, and if she argues back against her husband.

The justification for IPV in many Asian cultures may normalize abused women's experiences and discourage them from reporting, escaping, or seeking help. As such, many Asian American women who do experience IPV tend to endure it in silence. A qualitative study examining Vietnamese American women's experiences with IPV showed that women felt ashamed for being victims of IPV and believed that it is a private matter not to be disclosed to

the public (Shiu-Thorton, Senturia, & Sullivan, 2005). Further, women in the study reported a preference for remaining in the relationship and enduring the IPV due to the threat of bringing shame to their family and losing face, of disrupting their children's lives, and of retaliation from the abuser. Another qualitative study with Cambodian American women showed similar behavioral intentions in response to IPV (Bhuyan et al., 2005). Women in this study reported that Khmer women are socialized to be patient and endure abuse from their husbands and that women should endure the abuse because divorce is thought to be detrimental to the family and children. Further, women reported that IPV is often viewed as the woman's fault, thereby public knowledge of this would bring shame to her family, and she would be ostracized by her community. As such, women in the study reported that they would not disclose IPV to anyone outside the family or ask for help from outsiders (e.g. the police).

These studies suggest that Asian cultural values significantly impacts Asian American women's responses to IPV. In particular, Asian American women may be at risk for remaining in dangerous IPV situations due to threats of bringing shame to their family and losing face. As such, more research is needed to understand how this cultural factor impacts women's decision making during an IPV situation, as well and post-event decisions and courses of action.

### **Purpose**

The purpose of the current study is to examine cultural predictors (loss of face and acculturation) of in-the-moment behavioral intentions and risk perception during an IPV scenario among a sample of Asian American college women. To fully understand how women will respond to an acute IPV situation, it is important to assess behavioral intentions during these moments of stress because one's behavioral intentions and risk perception may differ based on context and emotional states (Griffing et al., 2002). As such, we used an experimental paradigm

utilizing a hypothetical IPV scenario to activate acute visceral states to assess in-the-moment responses to IPV. Extant research examining in-the-moment behavioral intentions and risk perception utilizing vignette paradigms has shown strong associations with real world behaviors (Messman-Moore & Brown, 2006), indicating the important contribution of this work in understanding risk and protective factors for women in IPV situations. However, this research has focused on primarily White populations, and no study to date has examined these associations in light of cultural variables among an Asian American sample. This current study aimed to fill these knowledge gaps in the literature.

In the present study, we tested 3 path models each examining the associations among loss of face, acculturation, current and future risk perception, the likelihood of staying in the relationship, and one of three behavioral intentions (soothe, escape, escalation/resistance). To test the model examining soothe behavioral intentions (see Figure 1), we hypothesized that higher loss of face would be associated with more soothe behavioral intentions. We hypothesized this because those with high loss of face, compared to those with low loss of face, may be more concerned about keeping the situation contained and private, and thus may be more likely to have behavioral intentions to soothe the perpetrator and fix the argument themselves (Bhuyan et al., 2005). We also hypothesized that acculturation would be negatively correlated to loss of face for all three models. Since loss of face is a construct measuring Asian beliefs and values, acculturation to the U.S. culture (i.e. adopting the customs, beliefs, and values of the U.S. culture) would be associated with less identification with this Asian cultural construct. Thus, it was hypothesized that the effects of acculturation on behavioral intentions would be opposite of the effects of loss of face on behavioral intentions. We also hypothesized that higher acculturation would be associated with less soothe behavioral intentions. Finally, we

hypothesized that soothe behavioral intentions at time 3 and 4 would predict current and future risk perception such that those who had higher soothe behavioral intentions would perceive less risk.

To test the model examining escape behavioral intentions (see Figure 3), we hypothesized that higher loss of face would be associated with lower escape behavioral intentions. This was hypothesized because those with high loss of face may have felt that leaving would result in causing a scene from the perpetrator. Further, leaving may have required help from another person, which may have threatened their privacy and resulted in losing face (Bhuyan et al., 2005). We also hypothesized that higher acculturation would be associated with higher escape behavioral intentions. Finally, we hypothesized that escape behavioral intentions at time 3 and 4 would predict current and future risk perception such that those who had higher escape behavioral intention would perceive more risk.

To test the model examining escalation/resistance behavioral intentions (see Figure 5), we hypothesized that higher loss of face would be associated with lower escalation/resistance behavioral intentions. This was hypothesized because actions that may escalate the situation are likely to cause a scene and bring about public attention. Thus those who had high threat of losing face may have inhibited intentions to engage in these actions to keep the situation contained and private (Shiu-Thorton, Senturia, & Sullivan, 2005). Further, we hypothesized that loss of face predicted only time 1 behavioral intentions because this was a point in the story in which the perpetrator and protagonist were in public and had a third party involved. This was an environment in which loss of face may have been the most salient. After time 1 in the story, the protagonist and perpetrator were no longer in public, which may have made loss of face less salient. We also hypothesized that higher acculturation would be associated with more

escalation/resistance behavioral intentions. Further, we hypothesized that escalation/resistance behavioral intentions at time 3 and 4 would predict current and future risk perception such that those who had higher escalation/resistance behavioral intention would perceive less risk. Due to cognitive dissonance theory, people are more likely to behave in ways that are consistent with their beliefs and may change their beliefs to be more consistent with their behaviors (Festinger & Calsmith, 1959). Thus, having the intention to be engaged with the perpetrator either in a soothing manner or in an escalating/resistance manner, in which the victim was maintaining direct contact with the perpetrator, would make participants more likely to perceive less risk. Further, having the intention to escape the situation would make women feel that the situation was more risky. Thus, behavioral intentions may have been salient cues influencing women's risk perception. Further, risk perception was assessed at time point 4 instead of time point 1 because this was when the full scenario was revealed. Thus women had all of the information about the scenario to make a determination of their current and future risk. This was also the most important time point because the violence had escalated, thus having accurate risk perception at this time was the most significant for the woman's safety.

In all three models, we hypothesized that earlier behavioral intentions would positively predict later behavioral intentions. Further, current and future risk perceptions would be positively related. We also hypothesized that current and future risk perception would negatively predict likelihood of staying in the relationship.

## **Methods**

### **Participants and Recruitment**

Female participants were recruited through the University of Washington (UW) Psychology Department Subject Pool (PDSP). Signing up for the PDSP was optional for undergraduate students enrolled in psychology courses. Participants viewed the study description

online via the PDSP website, and those who were interested were given the option of participating in the proposed study. The PDSP online listing described the study as an examination of college students' view on dating relationships. After signing up for the study, they were presented with a link to a website where they completed the study questionnaires. Participants were given course extra credit for being involved in the study. This study was part of a larger longitudinal study assessing intimate partner violence among college students. One thousand four hundred and forty-two participants were recruited for the larger study. For the purpose of the proposed study, only data from Asian American women were examined ( $N = 324$ ). The mean age for the study sample was 19 years old with 95% of participants between 18-21 years old. Sixty-three percent of the sample was in their first year of college, 18% in their second year, 13% in their third year, and 6% in their fourth or fifth year. Sixty percent of the sample reported not dating anyone exclusively, while 40% reported being in an exclusive relationship.

### **Procedure**

All procedures, including recruitment, assent to participate, data collection, and debriefing, were conducted online. Data was collected using Catalyst Web Q, a widely used online survey software that offered encrypted data transmission using SSL (https) and the ability to disable IP logging, which provided protection for participants' confidentiality and their data. Participants' name and email address were kept in a separate database, and participants' data was not linked to any identifying information. Participation took approximately 1-2 hours, and participants received 2 hours of research credit participation for their course. Participants first read an information statement that describes the purpose, procedure, risks, and benefits of the study. Once they consented to be in the study, participants were directed to complete background

questionnaires. After the background questionnaires, participants were prompted to read and respond to a story describing an intimate partner violence scenario. After finishing the study, participants were given a debriefing form with contact information of the investigators as well as other referral information for mental health assessment and/or treatment.

## **Measures**

**Demographics.** Participants' age, gender, racial identification, year in school, and relationship status were assessed.

**Cultural Variables.** The Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA; Suinn, Rickard-Figueroa, Lew, & Vigil, 1987) was used to assess the level of acculturation among Asian Americans. The scale includes 25 multiple choice questions that cover language, identity, friendship choice, behaviors, generation, geographic history, and attitudes. Question choices range from 1 (low acculturation) to 5 (high acculturation). An example question and answer choices include, "What is your movie preference? With answer choices, 1) Asian-language movies only, 2) Asian-language movies mostly, 3) Equally Asian/English movies, 4) English-language movies mostly, and 5) English-language movies only." This scale has been shown to have good reliability ( $\alpha = .88$ ; Suinn et al., 1987).

Loss of Face Scale (LOF; Zane 2002) was used to assess the extent to which an individual avoids situations and behaviors that are related to loss of face (threat to one's social integrity). The scale includes 21 items rated on a Likert-type scale from 1 (strongly disagree) to 5 (strongly agree). The scale was scored in the direction of loss of face, with higher scores representing higher loss of face. An example item includes, "I am more affected when someone criticizes me in public than when someone criticizes me in private." This scale has been shown to have good reliability ( $\alpha = .83$ ; Zane, 2002).

**Intimate Partner Violence Scenario.** Only participants who reported their lifetime sexual partner to be mostly or only men were given the IPV scenario ( $N=324$ ). Participants were asked to project themselves into the story as the protagonist and respond to questions throughout the story as though the events were actually happening to them. The scenario was written in second person to maximize the likelihood of bringing about real-life reporting responses. The scenario depicted an IPV situation between the protagonist and a hypothetical male partner (Eric) with whom she's been dating for more than 2 months. Eric's race was not specified so that the participants can project their usual dating partner's race onto him. The scenario started with the protagonist and Eric going to a party together. When they first arrived at the party, Eric got drinks for both of them. The content of the drinks was not specified in the story, and drinking was not mentioned again in the scenario. During the party, Eric got very jealous and angry that the protagonist was exchanging phone numbers with a male classmate (Shaun) to get class notes. Eric then pushed Shaun, who stumbled and fell. The protagonist and Eric left the party and came to Eric's house. Eric's behavior escalated to yelling at the protagonist and calling her names. In the next part of the story, Eric shoved the protagonist against the wall and held her there while screaming at her. The story ended with the protagonist feeling scared of Eric. She asked him to calm down and let her go, and he did.

Participants were prompted to answer questions at four time points during the story. They were asked open-ended questions about what they thought of Eric as a person, about the current relationship, and about what they would do next. Participants also answered questions about three different behavioral intentions (soothe, escape, escalation/resistance) in response to the IPV situation on a scale of 1 (not at all likely) to 5 (very likely). Soothe behavioral intentions consisted of 7 items. An example item of soothe behavioral intentions is, "*At this point, how*

*likely are you to keep trying to reassure Eric?*” Escape behavioral intentions consisted of 10 items. An example item of escape behavioral intentions is *“At this point, how likely are you to leave?”* Escalation/resistance behavioral intentions consisted of 6 items. An example item of escalation/resistance behavioral intentions is *“At this point, how likely are you to stay and fight with him?”* At question break 4, participants also answered questions about their perception of current and future risk that Eric would physically hurt them. Current risk perception was measured with one item, *“How likely is Eric to physically hurt you tonight?”* Future risk perception was measured with two items, *“How likely is Eric to physically hurt you at another time?”* and *“How likely is Eric to get angry like this again?”* Participants also answered one question regarding the likelihood of them staying in the relationship, *“How likely would you be to stay in a relationship with Eric if he hit you?”* Again, these questions were on a scale of 1 (not at all likely) to 5 (very likely).

The first question break occurred after Eric pushed the classmate to the ground. The second question break occurred after Eric and the protagonist left the party, and he began yelling and calling her names. The third question break occurred after Eric shoved the protagonist against the wall and held her there while screaming. The last question break occurred after the protagonist expressed fear, and Eric let go of her. To check the realism of the story, we asked participants to rate how realistic they find the story and how easy it was to project themselves into the story and respond like it was happening to them on a scale of 1 (not at all) to 5 (very). Participants in the story reported that the story was realistic ( $M = 3.81, SD = 1.07$ ) and that it was easy to project themselves into the story and respond like it was happening to them ( $M = 3.49, SD = 1.25$ ).

## **Results**

### **Data Analytic Approach**

To test the hypotheses, 3 path analysis models, one for each behavioral intention (soothe, escape, escalate/resist; see Figures 1, 3, and 5), were conducted in Mplus 6. All measures were assessed for skew and kurtosis, missing data, and outliers (West, Finch, & Curran, 1995). Missing data accounted for 1-10% of the dataset, and maximum likelihood estimation (MLE) was used for missing data. To assess model fit, the chi-square test of independence ( $X^2$ ), the root-mean-squared error of approximation (*RMSEA*), the standardized root mean square residual (*SRMR*), and the comparative fit index (*CFI*) will be used. Since the  $X^2$  test has been shown to be sensitive to sample size, which may lead to rejecting adequate models or retaining inadequate models, we also used the normed  $X^2$  (*NC*) index to assess model fit. Further, current practice emphasizes the importance of using multiple fit indices – *CFI*, *RMSEA*, *SRMR*,  $X^2$ , and *NC* – to assess model fit. A significant  $X^2$  indicates that the specified model does not fit the data. A *NC* of values less than 3 has been recommended as indicating good fit. A *RMSEA* index of  $< 0.05$  indicates very good fit, 0.05 to 0.08 indicates adequate fit, and  $> 0.1$  indicates poor fit. A *CFI* index of  $\geq 0.95$  indicates good fit. A *SRMR* index of  $< 0.06$  indicates good fit, 0.06 to 0.1 indicates adequate fit, and  $> 0.1$  indicates poor fit (Hu & Bentler, 1999, Kline, 2005). In assessing model fit, if the hypothesized model did not have good fit, modification indices were assessed to test alternative models.

### **Path Analysis**

Means, standard deviations, and range of participants' responses for each variable included in the 3 models are presented in Table 1.

**Soothe hypothesized model.** The hypothesized model (see Figure 1) did not adequately fit the data,  $X^2 (23) = 142.52, p < .01, RMSEA = .13, CFI = .68,$  and  $SRMR = .11$ . Modification indices indicated to include paths from soothe at time 1, soothe at time 2, and loss of face to

soothe at time 4. Further, a path from soothe at time 1 to current risk perception and a path from acculturation to future risk perception were also indicated. Paths from soothe at time 1 and 2 to stay in relationship were also indicated. We included these paths in the final model.

**Soothe final model.** The final model (see Figure 2) fit the data well,  $RMSEA = .06$ ,  $CFI = .95$ , and  $SRMR = .04$ . The  $X^2$  index was significant,  $X^2(16) = 33.14$ ,  $p = .01$ , which indicated that the model may be a poor fit to the data. However, since the  $X^2$  test may be overpowered to reject adequate models, we computed the  $NC(X^2/df = 2.07)$ , which indicated good fit. Further, the  $RMSEA$ ,  $CFI$ , and  $SRMR$  suggested that the model was a good fit to the data. Table 2 presents the covariance matrix for all the variables included in the final model.

An examination of the squared multiple correlations indicates that a moderate amount of variance was accounted for in this model by soothe at time 1 ( $R^2 = .03$ ), soothe at time 2 ( $R^2 = .03$ ), soothe at time 3 ( $R^2 = .01$ ), soothe at time 4 ( $R^2 = .31$ ), current risk perception ( $R^2 = .05$ ), future risk perception ( $R^2 = .09$ ), and stay in relationship ( $R^2 = .07$ ).

Standardized coefficients and standard errors in the final path analysis model are presented in Figure 2, and all paths shown are significant. Loss of face was negatively correlated with acculturation and current risk perception was positively correlated with future risk perception. Further, loss of face positively predicted soothe at time 4. Acculturation negatively predicted soothe at time 1 and positively predicted future risk perception. Soothe at time 1 positively predicted soothe at time 2 and soothe at time 4. Further, soothe at time 2 positively predicted soothe at time 3, and soothe at time 2 and 3 positively predicted soothe at time 4. Soothe at time 1 and 2 positively predicted the likelihood of staying in the relationship. Soothe at time 1 also negatively predicted current risk perception, and soothe at time 4 negatively

predicted current and future risk perception. Finally, future risk perception negatively predicted the likelihood of staying in the relationship.

Significant indirect effects were found for loss of face predicting current and future risk perception through soothe at time 4 such that higher loss of face predicted less current ( $\beta = -.03$ ,  $SE = .01$ ) and future risk perception ( $\beta = -.04$ ,  $SE = .02$ ). Further, soothe at time 1 predicted the likelihood of staying in the relationship through soothe at time 2 such that higher soothe at time 1 predicted higher likelihood of staying in the relationship ( $\beta = .03$ ,  $SE = .01$ ).

**Escape hypothesized model.** The hypothesized model (see Figure 3) did not adequately fit the data,  $X^2(23) = 164.57$ ,  $p < .01$ ,  $RMSEA = .14$ ,  $CFI = .70$ , and  $SRMR = .12$ . Modification indices indicated to include paths from acculturation to escape at time 2 and time 3. Further, paths from escape at time 1 and 2 to escape at time 4 were also indicated. We included these paths in the final model.

**Escape final model.** The final model (see Figure 4) fit the data well,  $X^2(19) = 27.86$ ,  $p = .09$ ,  $NC = 1.47$ ,  $RMSEA = .04$ ,  $CFI = .98$  and  $SRMR = .04$ . Table 3 presents the covariance matrix for all the variables included in the final model.

An examination of the squared multiple correlations indicates that a large amount of variance was accounted for in this model by escape at time 1 ( $R^2 = .01$ ), escape at time 2 ( $R^2 = .09$ ), escape at time 3 ( $R^2 = .10$ ), escape at time 4 ( $R^2 = .37$ ), current risk perception ( $R^2 = .21$ ), future risk perception ( $R^2 = .21$ ) and stay in relationship ( $R^2 = .02$ ).

Standardized coefficients and standard errors in the final path analysis model are presented in Figure 4, and all paths shown are significant. Loss of face was negatively correlated with acculturation and current risk perception was positively correlated with future risk perception. Acculturation positively predicted escape at time 2 and 3. Escape at time 1 positively

predicted escape at time 2 and escape at time 4. Further, escape at time 2 positively predicted escape at time 3 and 4. Escape at time 3 also positively predicted future risk perception, and escape at time 4 positively predicted current and future risk perception. Finally, future risk perception negatively predicted the likelihood of staying in the relationship.

Significant indirect effects were found for acculturation predicting current and future risk perception through escape at time 2 and 4 such that higher acculturation predicted more current ( $\beta = .05, SE = .02$ ) and future risk perception ( $\beta = .04, SE = .01$ ). Acculturation also predicted future risk perception through escape at time 2 and 3 such that higher acculturation predicted more future risk perception ( $\beta = .01, SE = .004$ ). Escape at time 1 predicted the likelihood of staying in the relationship through its effects on escape at time 4 and current risk perception such that higher escape behavioral intentions were associated with less likelihood of staying in the relationship ( $\beta = -.01, SE = .007$ ). Finally, the indirect effects of acculturation on the likelihood of staying in the relationship through escape at time 2, escape at time 4, and future risk perception was significant ( $\beta = -.01, SE = .005, p = .05$ ) such that higher acculturation was associated with less likelihood of staying in the relationship.

**Escalation/resistance hypothesized model.** The hypothesized model (see Figure 5) did not adequately fit the data,  $X^2(23) = 69.89, p < .01, RMSEA = .08, CFI = .89,$  and  $SRMR = .07$ . Modification indices indicated to include paths from acculturation to escalate at time 2 and future risk perception, and a path from loss of face to escalate at time 4. Further, paths from escalate at time 1 to escalate at time 3 and 4, from escalate at time 2 to escalate at time 4, and from escalate at time 4 to stay in relationship were also indicated. We included these paths in the final model.

**Escalation/resistance final model.** The final model (see Figure 6) fit the data well,  $RMSEA = .05, CFI = .98,$  and  $SRMR = .05$ . The  $X^2$  index was significant,  $X^2(16) = 26.65, p = .05$ ;

however, the *NC* fit index (1.67) indicates good fit. Further, the *RMSEA*, *CFI*, and *SRMR* fit indices suggest that the model is a good fit to the data. Table 4 presents the covariance matrix for all the variables included in the final model.

An examination of the squared multiple correlations indicates that a moderate amount of variance was accounted for in this model by escalate/resistance at time 1 ( $R^2 = .05$ ), escalate/resistance at time 2 ( $R^2 = .10$ ), escalate/resistance at time 3 ( $R^2 = .38$ ), escalate/resistance at time 4 ( $R^2 = .09$ ), current risk perception ( $R^2 = .02$ ), future risk perception ( $R^2 = .04$ ), and stay in relationship ( $R^2 = .05$ ).

Standardized coefficients and standard errors in the final path analysis model are presented in Figure 6, and all paths shown are significant. Loss of face was negatively correlated with acculturation and current risk perception was positively correlated with future risk perception. Loss of face positively predicted escalation/resistance at time 4. Acculturation positively predicted escalation/resistance at time 1 and 2. Acculturation also positively predicted future risk perception. Escalation/resistance at time 1 positively predicted escalation/resistance at time 2 and 3 and negatively predicted escalation/resistance at time 4. Further, escalation/resistance at time 2 positively predicted escalation/resistance at time 3 and 4. Escalation/resistance at time 3 also positively predicted escalation/resistance at time 4. Escalation/resistance at time 3 positively predicted current and future risk perception. Finally, escalation/resistance at time 4 positively predicted likelihood of staying in relationship.

Significant indirect effects were found for acculturation predicting escalation/resistance at time 3 through escalation/resistance at time 1 and 2 ( $\beta = .03$ ,  $SE = .01$ ) such that higher acculturation predicted more escalation/resistance at time 3. Acculturation also predicted escalation/resistance at time 4 through escalation/resistance at time 1 ( $\beta = -.04$ ,  $SE = .02$ ) such

that higher acculturation predicted less escalation/resistance at time 4. Finally, escalation/resistance at time 1 predicted likelihood of staying in relationship through its effects on escalation/resistance at time 4 such that higher escalation/resistance at time 1 was associated with lower likelihood to stay in relationship ( $\beta = -.03, SE = .02$ ).

## **Discussion**

To examine cultural predictors of Asian American college women's in-the-moment responses to IPV, we tested 3 path models each examining the associations among loss of face, acculturation, current and future risk perception, the likelihood of staying in the relationship, and one of three behavioral intentions (soothe, escape, escalation/resistance).

### **Soothe Model**

Results from the final model assessing soothe behavioral intentions suggest that having higher concerns for losing face may increase Asian American college women's risk whereas acculturation may decrease Asian American college women's risk during an IPV situation. As hypothesized loss of face was negatively correlated with acculturation, and current risk perception was positively correlated with future risk perception. These correlations were shown for all 3 models. This supports our hypothesis that since loss of face is an Asian cultural construct, higher acculturation to the U.S. would be associated with less identification with this construct. We found that higher loss of face was associated with more soothe behavioral intention at time 4, and higher acculturation was associated with less soothe behavioral intentions at time 1. These findings are consistent with our hypotheses and current research showing that Asian American victims of violence tend to endure the violence in silence and engage in behaviors to soothe the perpetrator for fear of losing face (Bhuyan et al., 2005). Interestingly, loss of face did not predict soothe at time 1 as hypothesized. Perhaps loss of face was most

salient during the end of the story because the participants had experienced the height of the violence in the situation, which may have increased their awareness of the situation and the possible consequences to their social face that may have stemmed from the situation. Further, since this was the end of the scenario, the participants had to make a final decision about what they would do next, which could have significant impact on their social relationships.

Consistent with our hypotheses, we found that higher soothe behavioral intentions in the earlier time points predicted higher soothe behavioral intentions at later time points and that higher soothe behavioral intentions at time 4 were associated with less current and future risk perception. Moreover, higher future risk perception was associated with lower likelihood of staying in the relationship. This has significant implications suggesting that the act of soothing the perpetrator may decrease one's perception of risk. Consistent with cognitive dissonance theory (Festinger & Calsmith, 1959), those who were engaging in soothing behaviors, which kept them in the violent situation longer and maintained their interactions with the perpetrator, were motivated to perceive less risk. This lowered risk perception further decreased women's likelihood to leave the abusive situation and terminate the relationship.

We also found that higher soothe behavioral intentions at times 1 and 2 were directly associated with higher likelihood of staying in the relationship. Thus, soothe behavioral intentions may indirectly impact women's likelihood to stay in the relationship through decreasing risk perception or it may also directly impact women's likelihood to stay in the relationship, suggesting that this behavioral intention is particularly risky for Asian American college women. Further, these results indicate that soothing the perpetrator during the beginning of the scenario in which the violence level was lower increased one's likelihood of staying in the relationship regardless of risk perception. Thus, behavioral intentions during low-level, violent

situations may be significant predictors of future risk, and as such, interventions should not disregard low-level, violent situations and that a potential effective time to intervene may be during the early onset of an IPV situation.

Finally, we found that loss of face indirectly predicted current and future risk perception through its effects on soothe behavioral intentions such that higher loss of face predicted more soothe behavioral intentions, which then predicted less risk perception. This finding indicates that having high loss of face may have been a risk factor for Asian American college women in our sample because it increased their soothe behavioral intentions, which in turn, decreased their risk perception. We also found that higher acculturation directly predicted higher future risk perception, suggesting that acculturation may be a protective factor.

### **Escape Model**

Contrary to hypothesis, loss of face did not predict escape behavioral intentions in the final model. Perhaps the concept of losing face was less strongly related to escaping the situation because participants had the option of leaving alone and not telling anyone, thereby still preserving social face. However, as hypothesized, higher acculturation was associated with more escape behavioral intentions at times 2 and 3. This finding is consistent with research showing that among victimized women of Japanese descent, Japan-born individuals compared to U.S.-born individuals were significantly less likely to use active strategies (e.g., leaving the situation and seeking help) in response to IPV (Yoshihama, 2002). Further, Japan-born individuals viewed active strategies to be less effective than U.S.-born individuals.

Acculturation appears to be most salient during the most violent parts of the scenario (times 2 and 3). Perhaps this is because participants were particularly aware of their risk during these situations and were more motivated to make a decision about what to do next, and as such,

cultural influences such as messages about escape or knowledge about available resources may have been more salient.

Consistent with our hypothesis, we found that higher escape behavioral intentions in the earlier time points predicted higher escape behavioral intentions at later time points. Further, higher escape behavioral intentions at times 3 and 4 were associated with more current and future risk perception, which in turn predicted less likelihood of staying in the relationship. This is consistent with research showing that women were likely to terminate an abusive relationship if they perceived that the violence in the relationship will get worse (Pape & Arias, 2000).

Finally, results from significant indirect relationships showed that higher acculturation was associated with less likelihood of staying in the relationship through its effects on escape behavioral intentions and future risk perception such that higher acculturation predicted more escape behavioral intentions, which predicted higher future risk perception, which in turn predicted less likelihood of staying in the relationship. These results indicate that acculturation may play a protective role not only by increasing women's behavioral intentions to leave the dangerous IPV situation but also by increasing their risk awareness, thereby increasing their behavioral intentions to terminate the abusive relationship after the violent episode has ended. Perhaps this finding further supports previous research showing that adherence to patriarchal aspects of Asian cultural values increases women's risk for IPV and decreases their likelihood of leaving the abusive relationship and accessing help (Shiu-Thorton, Senturia, & Sullivan, 2005). However, our findings regarding acculturation may also explain the impact of other cultural or sociocultural constructs that have not been examined in this study, such as knowledge of available resources or adherence to gender norms. For instance, those more acculturated may have had more knowledge of available resources, which may have increased their escape

behavioral intentions and decision to terminate the relationship. Thus, more research is needed to elucidate our acculturation findings.

### **Escalation/Resistance Model**

Contrary to hypothesis, higher loss of face was associated with more escalation/resistance behavioral intentions at time 4. We had conceptualized escalation/resistance behavioral intentions as a behavior that could disrupt social harmony, and as such, individuals with high loss of face would have been likely to avoid these behaviors (Hall, Windover, & Maramba, 1998). However, our data indicated otherwise. It is noteworthy to mention that loss of face did not predict escalation/resistance during the part of the scenario in which the characters were in public (time 1). Therefore, it is possible that the private setting during time 4 in the scenario afforded those with high loss of face an opportunity to express their resistance. Further, this was the end of the story in which the participants had to decide whether to stay in the situation or leave. Thus, it is possible that individuals with high loss of face may have decided to stay and fight with the perpetrator because they viewed it as their last opportunity to resolve things in private. Our findings regarding risk perception support this notion. We found that higher escalation behavioral intentions at time 4 were associated with higher likelihood of staying in the relationship. We speculate that this is because this was the end of the scenario in which the perpetrator had already released the victim, she had no need to defend herself, and she was aware of the high level of violence that the perpetrator was capable of. Thus, having escalation/resistance behavioral intentions at this time point would indicate that the participants saw less risk in the situation and thus would have been more likely to stay in the relationship.

Contrary to hypothesis, higher escalation/resistance behavioral intentions at time 3 were associated with more risk perception, and higher future risk perception predicted less likelihood

of staying in the relationship. We speculate that higher escalation/resistance behavioral intentions at time 3 predicted more risk perception because time 3 was the height of violence during the scenario, and as such, women may have chosen to escalate/resist as a way to defend themselves, thereby also perceiving high risk in the situation. Thus, escalation/resistance behavioral intentions during time 3 may have been protective because these behavioral intentions were associated with less likelihood of staying in the relationship.

We found that, as hypothesized, higher acculturation was associated with more escalation/resistance behavioral intentions at time 1 and 2. Further, higher acculturation predicted more escalation/resistance at time 3 through its effects on escalation/resistance at time 1 and 2. Thus, those who were more acculturated were more likely to have escalation/resistance behavioral intentions during the parts of the scenario in which the characters were in public or when the perpetrator was most violent. This is consistent with research showing that Japanese Americans born in the U.S. compared to those born in Japan were more likely to confront their abusive partner in response to an IPV situation (Yoshihama, 2002). However, we found that acculturation predicted less escalation/resistance at time 4 through its effects on escalation/resistance at time 1 indicating that those who were more acculturated had fewer intentions to engage in these behaviors at the end of the scenario, in which the perpetrator had already released the victim. Perhaps those who were more acculturated and had lower loss of face engaged in escalation/resistances behavioral intentions during the height of the violence as a way to defend themselves against the perpetrator. However, when they were released at the end of the story, they may have been more likely to engage in other behavioral intentions such as escape. Conversely, those who were less acculturated and had higher loss of face may have been more likely to have escalation/resistance behavioral intentions at time 4 because they were more

likely to stay. The differential impact of acculturation on escalation/resistance behavioral intentions at different time points in the story suggests that the impact of acculturation on behavioral intentions is complex and changes based on the context and level of violence of the situation.

The associations between escalation/resistance behavioral intentions at all the time points were positive except for the association between times 1 and 4. Those who were more likely to escalate/resist at time 1 were less likely to escalate/resist at time 4. The difference between these two time points is that at time 1, the protagonist and perpetrator were in public and this was the first time that the participants were introduced to the perpetrator's violent behavior whereas at time 4, the characters were in private and the protagonist had experienced the height of perpetrator's anger and knew what he was capable of. As such, reacting through escalation/resistance at time 1, when one had felt a certain sense of safety, may be opposite of reacting at time 4, when one had experienced the height of violence and felt fear. Further, higher escalation/resistance at time 1 was associated with lower likelihood to stay in relationship through its effects on escalation/resistance at time 4. Thus, those who were more likely to escalate/resist at time 1 were less likely to stay in the relationship suggesting that early show of escalation/resistance during an IPV situation, in which one is in public, may be protective.

### **Limitations**

The present study includes a number of limitations that are important to consider. The use of self-report measures in the present study may be subject to social desirability bias given the sensitive topic of intimate partner violence and trauma history. However, since all study procedures were done online, participants had the ability to complete the questionnaires on their own computer and in a private setting if they so choose. Another limitation of the study is that

the study only included Asian American college women. Thus, findings from this may not be generalizable to the broader population of Asian Americans. However, because Asian American college women have been shown to be at risk for sexual victimization (Porter & Williams, 2011), and because little research has been done on this topic with this population, it is important to focus research related to behavioral intentions and perception regarding IPV in this sample.

Another limitation of the study is the categorization of Asian Americans into one group instead of examining subgroups of Asian Americans. Asian Americans are heterogeneous in terms of ethnicities, culture, customs, acculturation levels, socioeconomic status, and languages, thus having one group of Asian Americans would limit the nuances of the findings. However, there are shared cultural values among Asian American cultures, and as such, there is merit in examining the impact of these shared values on behaviors in this group. Further, we did not use race as a proxy for culture to predict the study's outcome and instead cultural variables such as acculturation and loss of face were included as predictors. Another limitation is that it is not possible to include all predictors and correlates of behavioral intentions and risk perception (e.g. alcohol use), and thus there might be other variables that may impact our findings. Finally, behavioral intentions and risk perception measured in the scenario may not predict real life behavioral intentions and risk perception. However, paradigms utilizing scenarios are frequently used in intimate partner violence research and have been shown to predict actual behaviors (Flowe, Ebbesen, & Putcha-Bhagavatula, 2007; Mason, Riger, & Foley, 2004; Messman-Moore & Brown, 2006). Further, due to ethnical limitations, researchers cannot study actual in-the-moment intentions, risk perception, and behaviors during an intimate partner violence scenario. Thus, using a scenario paradigm is the closest to studying in-the-moment intentions, perceptions,

and behaviors. Despite these limitations, the current study will be a valuable contribution to the field of IPV research.

### **Conclusion**

Our findings indicate that the cultural factors of loss of face and acculturation play a significant role in women's in-the-moment response to an IPV situation. Individuals with higher loss of face may be at increased risk during an IPV situation because of their higher likelihood to soothe and escalate/resist at the end of the scenario, which lowered their risk perception and increased their likelihood to stay in the relationship. Further, acculturation may be a protective factor such that those high in acculturation had less intentions to soothe, more intentions to escape, higher risk perception, and lower likelihood to stay in the relationship. Acculturation may also be a risk or protective factor in regards to escalation/resistance behavioral intentions because these intentions were both positively and negatively linked to acculturation depending on the context of the situation (e.g., level of violence and public vs. private setting). Further, we found that behavioral intentions also predict risk perception differently depending on the context of the situation. Context of the situation also changes one's behavioral intention such that higher likelihood of engaging in a behavioral intention in one context may predict lower likelihood of engaging in the same behavioral intention in a different context of the situation. Our findings indicate that the associations among cultural variables, behavioral intentions, risk perception, and likelihood of staying in the relationship are not static across time and context of the situation.

This study provides a number of significant contributions to the field of IPV. Extant research has mostly examined the dichotomy of staying or leaving behaviors in regards to IPV, and this was the first study to examine multiple in-the-moment behavioral intentions and risk perception. Further, this was the first study examining the significant impact of cultural variables

on Asian American college women's in-the-moment responses to IPV. Given the research indicating that Asian Americans are at risk for IPV (Tjaden & Thoennes, 2000), it is important to examine risk and protective factors specific to this population. Finally, our study is unique from other research in the IPV field because our sample is nonclinical. As such, our findings are generalizable to a broader population and may include individuals who have experienced less severe forms of IPV, those who have not labeled their experience as IPV, or those who have not access help. Given the low disclosure rates and barriers to access resources among Asian Americans, our findings are particularly informative for prevention and intervention efforts with this population.

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Table 1

*Descriptive statistics for all variables used in models.*

Variable	<i>M</i> ( <i>SD</i> )	Range	<i>n</i>
Loss of Face	3.20 (.56)	1.00 – 5.00	320
Acculturation	3.10 (.51)	1.77 – 4.40	315
Escalate Time 1	3.96 (.87)	1.00 – 5.00	285
Soothe Time 1	2.10 (.82)	1.00 – 4.50	285
Escape Time 1	2.37 (.94)	1.00 – 5.00	284
Escalate Time 2	3.27 (1.38)	1.00 – 5.00	284
Soothe Time 2	2.13 (1.23)	1.00 – 5.00	285
Escape Time 2	4.25 (.98)	1.00 – 5.00	285
Escalate Time 3	3.51 (1.41)	1.00 – 5.00	285
Soothe Time 3	2.72 (.92)	1.00 – 5.00	285
Escape Time 3	4.43 (1.09)	1.00 – 5.00	284
Escalate Time 4	1.37 (.76)	1.00 – 5.00	284
Soothe Time 4	2.05 (1.10)	1.00 – 5.00	284
Escape Time 4	3.30 (.84)	1.00 – 5.00	285
Current Risk Perception	3.66 (1.23)	1.00 – 5.00	282
Future Risk Perception	4.20 (1.04)	1.00 – 5.00	284
Stay in Relationship	1.18 (.59)	1.00 – 5.00	282

Table 2

*Covariance Matrix for Final Fit Models*

Final Model for Soothe Behavioral Intentions									
Variable	1	2	3	4	5	6	7	8	9
Soothe 1	0.67	-							
Soothe 2	0.17		-						
		1.51							
Soothe 3	0.06			-					
		0.13	0.84						
Soothe 4	0.19				-				
		0.64	0.30	1.20					
Current Risk Perception	-0.17	-		-		-			
		0.24	0.02	0.24	1.51				
Future Risk Perception	-0.12	-		-			-		
		0.29	0.02	0.30	0.89	1.07			
Stay in Relationship	0.08				-	-		-	
		0.15	0.07	0.11	0.03	0.08	0.35		
Loss of Face	0.06					-			-
		0.07	0.04	0.13	0.04	0.02	0.01	0.32	
Acculturation	-0.06			-			-	-	0.26
		0.04	0.02	0.05	0.07	0.11	0.05	0.07	
Final Model for Escape Behavioral Intentions									
Escape 1	0.87	-							
Escape 2	0.20		-						
		0.95							
Escape 3	0.12			-					
		0.30	1.17						
Escape 4	0.23				-				
		0.48	0.19	0.70					
Current Risk Perception	0.21					-			
		0.38	0.19	0.47	1.51				
Future Risk Perception	0.13						-		
		0.37	0.29	0.37	0.89	1.07			
Stay in Relationship	0.02	-	-	-	-	-		-	
		0.09	0.07	0.04	0.03	0.08	0.35		
Loss of Face	-0.02	-	-	-		-			-
		0.07	0.02	0.04	0.04	0.01	0.01	0.32	
Acculturation	0.04						-	-	0.26
		0.11	0.12	0.06	0.07	0.11	0.04	0.07	

Final Model for Escalation/Resistance Behavioral Intentions

Escalation/Resistance 1	0.75	-								
Escalation/Resistance 2	0.33		-							
		1.91								
Escalation/Resistance 3	0.32			-						
		1.19	1.99							
Escalation/Resistance 4	-0.06				-					
		0.21	0.20	0.58						
Current Risk Perception	0.11					-				
		0.30	0.24	0.04	1.52					
Future Risk Perception			0.20	0.17	-	0.89	1.07	-		
	0.15				0.08					
Stay in Relationship	-	-	-		0.09	-	-	0.35	-	
	0.07	0.04	0.04			0.03	0.08			
Loss of Face	-	-	-		0.04	0.04	-	0.01		-
	0.02	0.05	0.09				0.02		0.32	
Acculturation			0.15	0.09	-	0.07	0.11	-	-	
	0.10				0.06			0.05	0.07	0.26

## Figure Captions

*Figure 1.* Hypothesized model of the relations among loss of face, acculturation, soothe behavioral intentions, current and future risk perception, and likelihood of staying in the relationship.

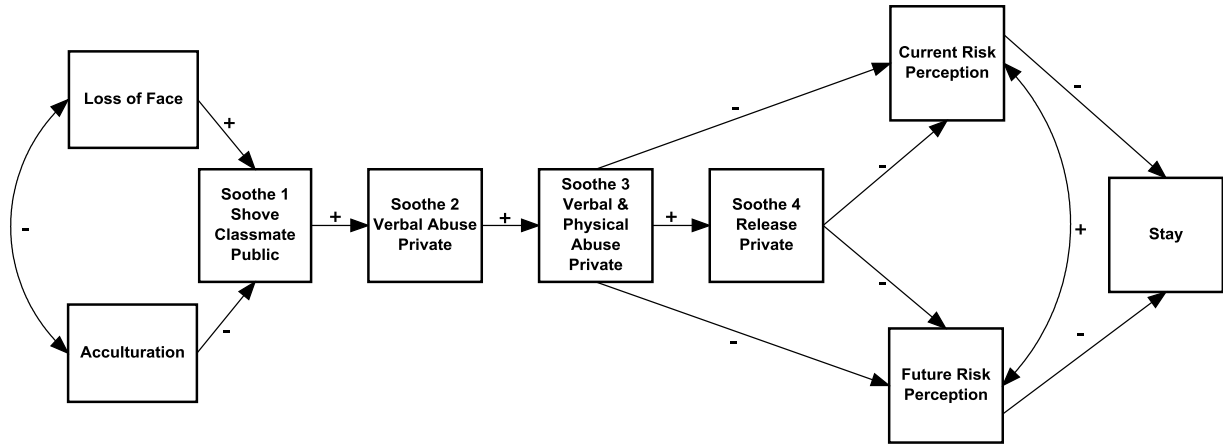
*Figure 2.* Final model with standardized estimates of the relations among loss of face, acculturation, soothe behavioral intentions, current and future risk perception, and likelihood of staying in the relationship. *Note.* All paths shown are significant ( $p < .05$ ).

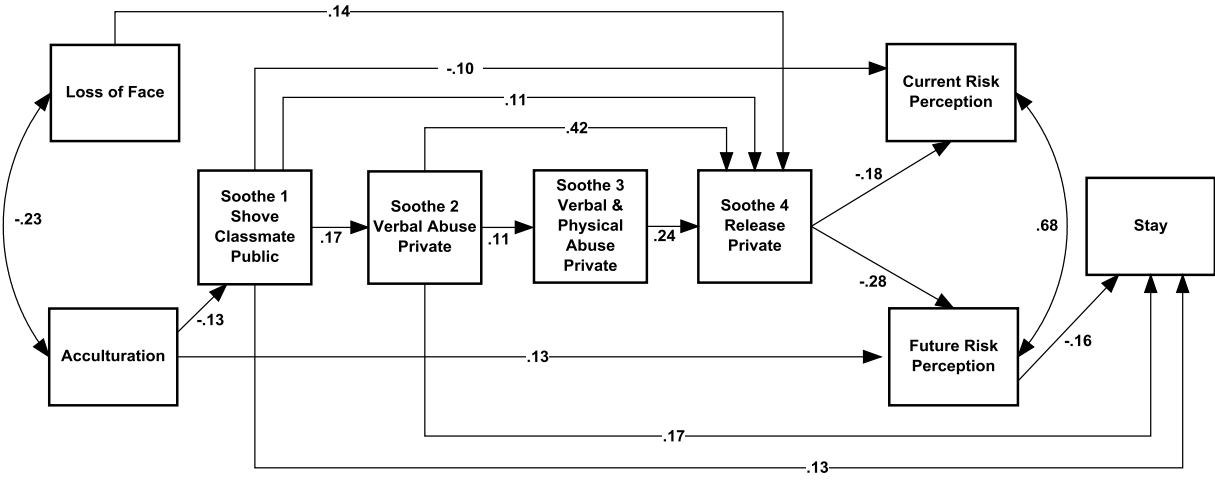
*Figure 3.* Hypothesized model of the relations among loss of face, acculturation, escape behavioral intentions, current and future risk perception, and likelihood of staying in the relationship.

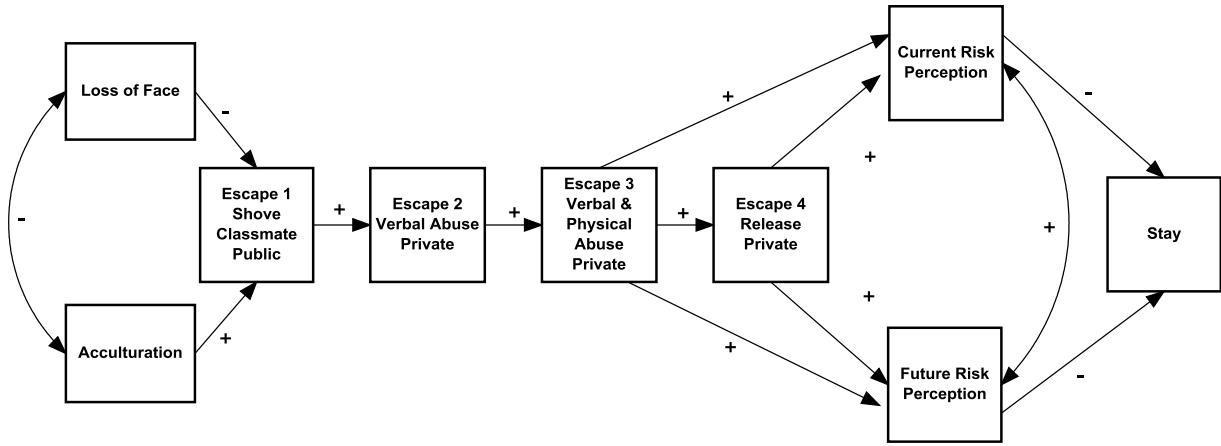
*Figure 4.* Final model with standardized estimates of the relations among loss of face, acculturation, escape behavioral intentions, current and future risk perception, and likelihood of staying in the relationship. *Note.* All paths shown are significant ( $p < .05$ ).

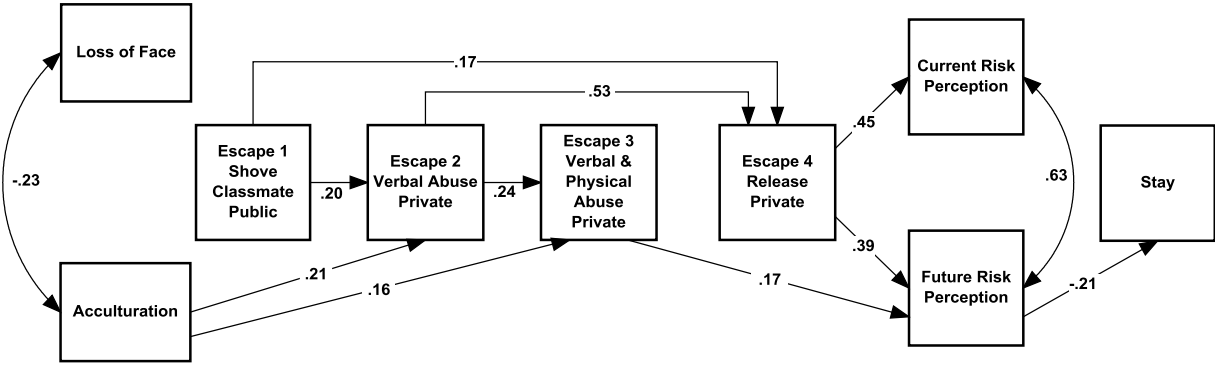
*Figure 5.* Hypothesized model of the relations among loss of face, acculturation, escalation/resistance behavioral intentions, current and future risk perception, and likelihood of staying in the relationship.

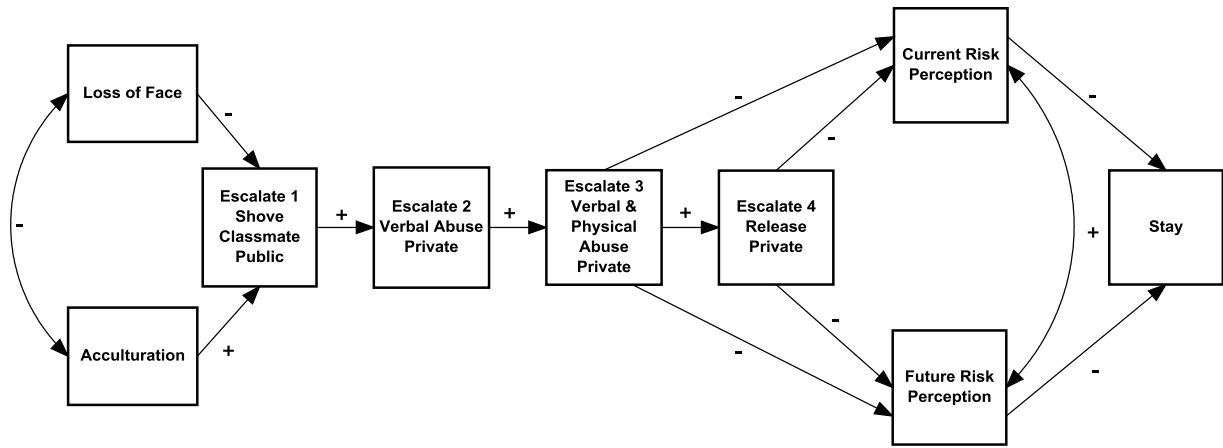
*Figure 6.* Final model with standardized estimates of the relations among loss of face, acculturation, escalation/resistance behavioral intentions, current and future risk perception, and likelihood of staying in the relationship. *Note.* All paths shown are significant ( $p < .05$ ).

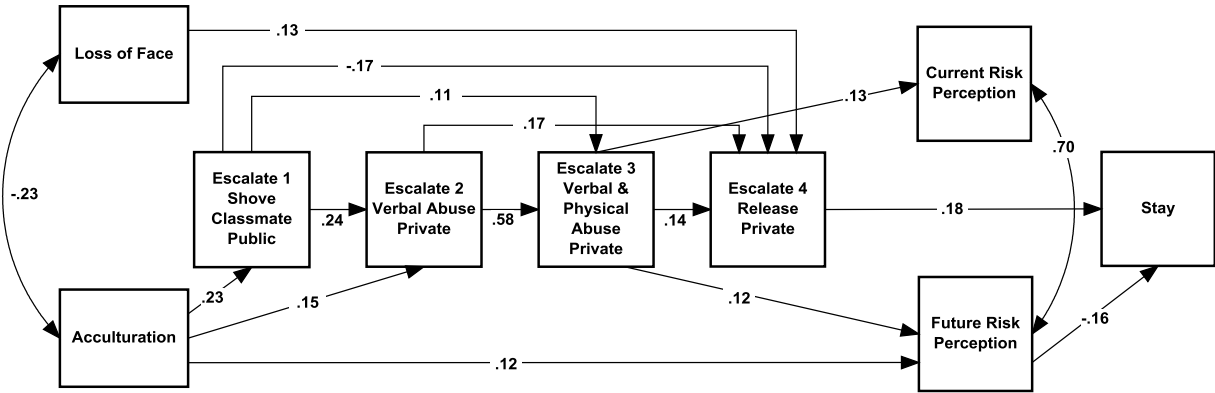












The impact of childhood and adult victimization history on Asian American women's in-the-moment responses to an intimate partner violence situation

## **Abstract**

Intimate partner violence (IPV) among Asian American women is a significant problem in the U.S., with 20-50% of women reporting to have experienced it in their lifetime. Further, nearly half of IPV victims reported to have experienced their first assault between the ages of 18 and 24, suggesting that Asian American college women may be particularly at risk for IPV. Extant research has also indicated that having a history of childhood abuse (CA) and IPV may impair women's behavioral intentions and risk perception during an IPV situation, thus increasing their risk for victimization. The purpose of the current study was to examine the impact of trauma history and trauma symptoms on Asian American college women's (N=324) in-the-moment behavioral intention, risk perception, and likelihood to stay in the abusive relationship during a progressively threatening IPV scenario. Three path models were tested, each assessing the relationship between CA, IPV, PTSD, current and future risk perception, likelihood of staying in the relationship, and one of three behavioral intentions (soothe, escape, and escalation/resistance). Results revealed that CA positively predicted IPV, and that CA predicted PTSD both directly and indirectly through IPV. Further, having more experiences of CA and IPV predicted more in-the-moment soothe behavioral intentions and less escape behavioral intentions, which in turn predicted less current and future risk perception. Having more experiences of CA and IPV also predicted greater escalation/resistance behavioral intentions; however, escalation/resistance intentions during different parts of the scenario were associated with both less risk perception and greater risk perception. Finally, higher risk perception predicted less likelihood of staying in the relationship. Findings indicate that trauma history may increase Asian American college women's risk during an IPV situation.

## **Prevalence of IPV among Asian/Pacific Islander Americans**

Intimate partner violence (IPV) among Asian American women is a significant problem in the U.S. Intimate partner violence (IPV) is defined as physical, sexual, or psychological harm by a current or former partner or spouse (Saltzman, Fanslow, MacMahon, & Shelley, 2002). National surveys indicate that 20-50% of Asian American women have been a victim of rape, physical violence, and/or stalking by an intimate partner (Black et al., 2011; Tjaden & Thoennes, 2000). Further, the proportion of Asian Americans reporting victimization has been shown to be significantly lower than the proportion of Asian Americans reporting perpetration, suggesting that underreporting of victimization may be an issue for this population and that actual rates of victimization may be higher than what has been reported in national surveys (Chang, Shen, & Takeuchi, 2009).

Rates of IPV among Asian American youths and college students have also been found to be significant. Approximately 57% of Asian American youths have been shown to report some form of emotional-psychological abuse in their relationship (Choi-Misailidis, Hishinuma, Nishimura, & Chesney-Lind, 2008). Among college students, psychological abuse by an intimate partner was reported by approximately 37% of Asian Americans and sexual abuse was reported by 15% of Asian Americans (Porter & Williams, 2011). Although there have only been a few studies documenting prevalence rates of IPV among Asian American college students, given the high rates of IPV among college students (Miller, 2011) and the high rates of Asian Americans in colleges (U.S. Census Bureau, 2010), Asian American college students may be at particularly high risk for IPV. Further, the dearth of research on IPV among Asian American college students suggests that more research assessing prevalence of IPV in this population is needed.

## **The Social-Ecological Model of Intimate Partner Violence**

The social-ecological model asserts that experiences of IPV are impacted by the dynamic interplay between factors operating at the individual, relationship, community, and societal level (Krug et al., 2002). The first level of the social-ecological model identifies individual level factors such as biology and personal history that may impact IPV victimization. This level has been supported by research showing that having a history of childhood abuse, IPV, or rape increases women's risk for IPV victimization and impact how they respond to the experience (Akers & Sellers, 2009). The second level of the model identifies factors related to interpersonal relationships, including peer relationships and family dynamics, which may impact risk and responses to IPV. Research has shown that high marital conflicts and tension with family members may increase an individual's risk for experiencing IPV (Hoffman, Demo, & Edwards, 1994). Further, residing in the same household as the abuser may likely increase the chance for repeated victimization. If the victim also associates with peers who condone violence and approve of IPV, she may be less likely to disclose, terminate the IPV relationship, and/or access resources. Thus, factors within individuals' social relationships have been shown to play a significant role in their IPV risk. The third level of the model identifies characteristics of the community contexts, such as schools, neighborhoods, and workplaces, which are associated with IPV victimization. Research has shown that residing in highly populated, low-income neighborhoods with high prevalence of unemployment, crimes, and drug trafficking is associated with violence victimization (Oyunbileg et al., 2009). Finally, the last level of the model identifies societal factors, such as cultural and social norms as well as health, educational, economic, and social policies, which may increase tolerance and support for IPV. Social and cultural norms that have been found to increase risk for IPV include norms that support traditional gender-roles,

male dominance over women, using violence to resolve conflicts, and victim-blaming (Hall et al., 2005).

The social-ecological model proposes that women's risk for IPV victimization and their responses to it are impacted by a myriad of factors that spans from the individual to the larger cultural context. This comprehensive framework is advantageous when examining the complexity of IPV victimization among ethnic minority women. This model has cross-cultural support and has been used as the gold standard by the World Health Organization and the Centers for Disease Control and Prevention to understand risk and responses to IPV victimization (CDC, 2009; Krung et al., 2002). The theory also provides different levels in which to intervene, thereby making it a valuable framework to use for prevention and intervention efforts. Using the social-ecological model as a framework, the current study will focus on the impact of individual level factors including childhood abuse, IPV, and trauma symptoms on women's responses to IPV.

### **Childhood Abuse, Intimate Partner Violence, and Mental Health Consequences**

**Childhood abuse and intimate partner violence.** Childhood abuse (CA) has been associated with IPV such that those who have experienced CA are at increased risk to experience IPV. According to the social learning theory, individuals who have experienced abuse or have witnessed parental violence during childhood may learn that physical, sexual, and psychological abuse are acceptable means to express and resolve problems (Akers & Sellers, 2009; Bandura, 1973). In particular, children may observe and model their behaviors after their same-gender caregivers. Thus, violent behaviors may become normative for the individual, and they may become violent themselves or may be more accepting of IPV, thereby making them more vulnerable to subsequent victimization. In a study examining IPV among South Korean college

students, Gover, Park, Tomsich, & Jennings (2011b) showed that having experienced childhood physical abuse or witnessing parental violence during childhood predicted psychological and physical violence victimization and perpetration in college. This pattern of findings was shown to be consistent for both South Korean and U.S. college students in a follow-up study (Gover et al., 2011a). Filipas & Ullman (2006) showed that 42% of women who reported childhood sexual abuse, compared to 14% of those without childhood sexual abuse, also reported an adult sexual assault. Thus, women with a childhood abuse history were 3 times more likely than women without such history to be victimized in adulthood. These findings indicate that having a CA experience significantly increases one's risk for IPV.

#### **Mental health consequences from childhood abuse and intimate partner violence.**

Both CA and IPV have been associated with a variety of negative mental health consequences (Beck et al., 2011; Campbell, Greeson, Raja, & Bybee, 2008; Filipas & Ullman, 2006; Krause, Kaltman, Goodman, & Dutton, 2008; Wong et al., 2011). Women who have experienced a history of CA and/or IPV have been shown to be at risk for posttraumatic stress symptoms, anxiety, and depression (Becker, Stuewig, & McCloskey; Lang, Stein, Kennedy, & Foy, 2004; Shore et al., 2011). Among those who have experienced both CA and IPV, mental health symptoms appear to be associated with both the distal experience of CA and the proximal experience of IPV. Thus, CA has been shown to directly predict mental health consequences and indirectly predict mental health consequences through IPV (Lindhorst et al., 2009). Lindhorst et al. showed that child abuse by a parent contributed to current psychological distress by producing maintained psychological distress from the time of occurrence as well as increasing the risk of IPV, which led to additional distress beyond what was already experienced. A study assessing childhood sexual abuse and adult sexual assault revictimization among female college

students showed that those who were revictimized had more current self-blame, were more likely to use drugs or alcohol to cope, were more likely to withdraw from people, and were more likely to act out sexually compared to those who only experienced childhood sexual abuse (Filipas & Ullman, 2006). Further, these negative coping strategies predicted more severe PTSD symptoms. Arata (1999) showed that women who have experienced both childhood sexual abuse and adult sexual assault were more likely to have a lifetime PTSD diagnosis than those who have experienced only childhood sexual abuse. These findings indicate that women who have experienced CA are more at risk to experience IPV in adulthood, and experiences of IPV and CA may independently or synergistically contribute to negative mental health consequences.

### **Intimate Partner Violence and Psychological Correlates of Revictimization**

Those who have experienced IPV are at risk for being revictimized by the index partner or by someone else. In a prospective study of female IPV survivors, Krause et al. (2008) showed that 39% of the sample was physically or sexually revictimized by their index partner, and 16% was revictimized by someone else within 1 year of their first victimization. Matlow & Deprince (2012) showed that 57% of their sample reported experiencing multiple perpetrations by the index partner and 31% reported multiple victimizations by a different perpetrator. These alarming rates indicate a need for research to examine factors that may place women at risk for revictimization. Although perpetrators are the ones who cause IPV, understanding correlates of IPV can help women better protect themselves against such violence.

It has been hypothesized that one pathway by which IPV may place women at risk for revictimization is through women's risk perception and behavioral intention during the threatening situation. In a study utilizing a video scenario paradigm to assess participants' risk recognition, Witte & Kendra (2010) showed that women who have experienced IPV, compared

to non-victims, were less likely to report that the progressively violent interaction in the video “has gone too far” (i.e. indicating threat of assault). Further, women with a history of IPV were less likely to perceive that the situation “has gone too far” throughout the scenario than non-victims, suggesting that they were unable to differentiate between more subtle cues of threat (e.g. punching the sofa in the video) and more obvious cues of threat (e.g. slapping the victim in the video) to indicate that the situation “has gone too far.” These findings indicate that women with an IPV history may be more at risk for revictimization because of impaired risk perception during a risky situation. However, other studies utilizing survey data have shown that women with a victimization history are more accurate at predicting their future risk than non-victims (Conner-Smith, Henning, Moore, & Holdford, 2011; Gondolf & Heckert, 2003; Harding & Helweg-Larsen, 2009; Heckert & Gondolf, 2004; Helweg-Larsen, Harding, & Kleinman, 2008). Thus, it was hypothesized that perhaps these women may be accurate at predicting their risk when not in a dangerous environment; however, when faced with a threatening scenario, they may not be able to accurately process the threatening cues in the moment, and as such, may engage in behaviors that put them more at risk (reviewed in Gidycz, McNamara, & Edwards, 2006). This suggests the importance of utilizing an in-the-moment scenario paradigm that simulates high risk IPV situations and activates acute visceral states in order to mirror real life experiences. In a study utilizing a written scenario paradigm to assess women’s in-the-moment behavioral intention in response to threat, Messman-Moore & Brown (2006) showed that women who have experienced a sexual assault indicated that they would stay in a progressively threatening scenario longer than non-victims. They also showed that women who reported to stay longer in the hypothetical scenario were more likely to be victimized or revictimized during an 8 months follow-up assessment. This suggests that behavioral intentions (as measured in a

hypothetical scenario) do predict experiences of victimization, and women who have experienced past victimization have riskier behavioral intentions than non-victims.

One pathway through which past IPV may impact behavioral intentions, risk perception, and subsequent victimization is through trauma symptoms. According to Marx, Heidt, & Gold's (2005) theory of sexual revictimization, individuals with a history of child sexual abuse (CSA) are at risk for adult revictimization because their attempts at regulating emotional consequences from the trauma distract them from perceiving danger cues and limit their cognitive and physiological resources to defend against perpetrators in a risky environment. Specifically, the authors proposed that individuals with CSA may regulate their emotions through passive avoidance (i.e., behaviors or responses to avoid psychological distress such as substance use, hostility, dissociation, distraction, numbing, and repression). Thus by engaging in these passive avoidance behaviors, individuals may appear to have less concentration, to be less emotionally present, and to be distracted and less aware, thereby signaling to perpetrators that they are easy targets. Further, sustained attempts to regulate negative affect may compromise these individuals' perception of danger cues and self-defense efforts. Soler-Baillo, Marx, & Sloan (2005) tested this model in a study examining participants' responses and heart rate while they listened to a progressively violent date rape scenario. Results showed that individuals with a history of sexual assault, compared to non-victims, waited a longer amount of time before declaring that the perpetrator in the scenario has become threatening. Further, victims of sexual assault had significantly lower heart rates than non-victims at the beginning of the scenario, indicating that victims are less able to perceive subtle danger cues. Victims also reported the scenario as more upsetting and arousing than non-victims, suggesting that perhaps they may be regulating their negative emotions, thus resulting in lower physiological reactivity and defensive

responding. Risser, Hetzel-Riggin, Thomsen & McCanne (2006) showed that PTSD symptoms, in particular the hyper-arousal symptoms, mediated the relationship between past and future sexual victimization. Similar findings were also shown for trauma other than IPV. Orcutt, Erickson, & Wolfe (2002) showed that combat trauma exposure predicted increased risk for experiencing future traumatic events, and that PTSD symptoms mediated this relationship. Consistent with Marx et al.'s sexual revictimization model, the authors hypothesized that PTSD symptoms lead to deficits in self-protective behaviors, thus resulting in increased risk for revictimization. They proposed that, "PTSD may impair self-protective behavior by negatively impacting an individual's ability to disengage from risky situations." For example, individuals with PTSD may be more hypervigilant to threat in the world, which would often result in false alarms. Thus, for these individuals, experiencing so many false alarms may lead to a disconnect between emotional arousal and behavioral response. As such, those with PTSD may show increased attention to threat and at the same time have deficits in self-protective behavioral response. Further, it is possible that PTSD may impair information processing such that individuals may perceive threat but are unable to process how to respond to the threat. Twamley et al. (2009) showed that women who have PTSD from IPV, compared to non-victims, performed more poorly on a comprehensive neuropsychological battery assessing executive functioning. Further, among those with PTSD, more severe symptoms were associated with slower processing speed, and more severe dissociative symptoms were associated with poorer reasoning performance. These findings suggest that trauma symptoms from IPV may increase risk for victimization through impairing cognitive processing of danger cues and of self-defense behavioral intentions.

### **Purpose**

The purpose of the current study was to assess predictors of in-the-moment behavioral intentions and risk perception during an IPV scenario among a sample of Asian American college women. Predictors that were examined included history of CA, history of IPV, and trauma symptoms. Although extant research has shown an association between victimization history, trauma symptoms, and behavioral intentions to escape a threatening situation, no study to date has examined these relationships among behavioral intentions other than escape (e.g. soothe and escalate/resist). Although there may be many effective ways to respond to IPV, and effectiveness of responses is likely influenced by context, resources, as well as victim and perpetrator characteristics, studies on women's help seeking behaviors have found that responses in which women can distance themselves from the abusive relationship, such as through termination of the relationship or escaping a violent episode, were associated with the best consequences (e.g., less physical injuries and mental health problems; Campbell, Sullivan, & Davidson, 1995). We conceptualized soothe and escalation/resistance behavioral intentions as risky because engaging in these behaviors would maintain the victim's engagement with the perpetrator and decrease their likelihood of leaving. Further, given extant research showing the interactive effects of violent relationships in which violence from both parties can fuel the situation (Winstok, 2008), escalation/resistance behavioral intentions may be particularly risky. Finally, no previous research has examined these associations among an Asian American sample, and as such, the current study would fill this knowledge gap in the literature.

In the present study, we tested 3 hypothesized path models (see Figures 1, 3, and 5) each examining the associations among CA, IPV, PTSD, current and future risk perception, the likelihood of staying in the relationship, and one of three behavioral intentions (soothe, escape, escalation/resistance). For all three models, we hypothesized that experiences of CA would

positively predict experiences of IPV (Gover, Park, Tomsich, & Jennings, 2011b). Further, CA would positively predict trauma symptoms directly and indirectly through IPV (Lindhorst et al., 2009). We also hypothesized that for all three models earlier behavioral intentions would positively predict later behavioral intentions. Finally, we hypothesized that for all three models, higher risk perception would predict less likelihood of staying in the relationship.

We hypothesized that greater trauma symptoms would be associated with more soothe behavioral intentions, less escape behavioral intentions, and more escalation/resistance behavioral intentions. This was predicted because, due to the cognitive impairment shown in research with PTSD individuals (Twamley et al., 2009), those with higher trauma symptoms may not process danger cues adequately and may engage in behaviors that may keep them at risk. We also hypothesized that those who had greater soothe behavioral intentions at time 3 and 4 would have perceived less risk. Further, we hypothesized that those who had greater escape behavioral intentions at time 3 and 4 would have perceived more current and future risk. Finally, we hypothesized that those who had greater escalation/resistance behavioral intentions at time 3 and 4 would have perceived less risk. Due to cognitive dissonance theory, people are more likely to behave in ways that are consistent with their beliefs or will change their beliefs to be more consistent with their behaviors (Festinger & Carlsmith, 1959). Thus, having the intention to be engaged with the perpetrator either in a soothing manner or in an escalating/resistance manner would have made participants more likely to perceive less risk, whereas having the intention to escape the situation would have made participants feel that the situation was more risky. Thus, behavioral intentions may have acted as salient cues influencing women's risk perception. Further, risk perception was assessed at time point 4 instead of time point 1 because this was when the full scenario was revealed. Thus the women had all of the information about the

scenario to make a determination of their current and future risk. This was also a critical time point because the violence had already escalated, thus having accurate risk perception at this time may have been the most significant factor for the woman's safety.

## **Method**

### **Participants and Recruitment**

Female participants were recruited through the University of Washington (UW) Psychology Department Subject Pool (PDSP). Signing up for the PDSP was optional for undergraduate students enrolled in psychology courses. Participants viewed the study description online via the PDSP website, and those who were interested were given the option of participating in the proposed study. The PDSP online listing described the study as an examination of college students' view on dating relationships. After signing up for the study, they were presented with a link to a website where they completed the study questionnaires. Participants were given course extra credit for being involved in the study. This study was part of a larger longitudinal study assessing intimate partner violence among college students

One thousand four hundred and forty-two participants were recruited for the larger study. For the purpose of the proposed study, only data from Asian American women were examined ( $N = 324$ ). The mean age for the study sample was 19 years old with 95% of participants between 18-21 years old. Sixty-three percent of the sample was in their first year of college, 18% in their second year, 13% in their third year, and 6% in their fourth or fifth year. Sixty percent of the sample reported not dating anyone exclusively, while 40% reported being in an exclusive relationship.

### **Procedure**

All procedures, including recruitment, assent to participate, data collection, and debriefing, were conducted online. Data was collected using Catalyst Web Q, a widely used online survey software that offered encrypted data transmission using SSL (https) and the ability to disable IP logging, which provided protection for participants' confidentiality and their data. Participants' name and email address were kept in a separate database, and participants' data was not linked to any identifying information. Participation took approximately 1-2 hours, and participants received 2 hours of research credit participation for their course. Participants first read an information statement that describes the purpose, procedure, risks, and benefits of the study. Once they consented to be in the study, participants were directed to complete background questionnaires. After the background questionnaires, participants were prompted to read and respond to a story describing an intimate partner violence scenario. After finishing the study, participants were given a debriefing form with contact information of the investigators as well as other referral information for mental health assessment and/or treatment.

## **Measures**

**Demographics.** Participants' age, gender, racial identification, year in school, and relationship status were assessed.

**Trauma history.** Childhood Trauma Questionnaire (CTQ; Bernstein, Fink, Handelsman, & Foote, 1994; Bernstein et al., 2003). The CTQ is a 28-item measure that assesses five factors of trauma experienced in childhood and adolescence: physical abuse (e.g. "When I was growing up, people in my family hit me so hard that it left me with bruises or marks"), emotional abuse (e.g. "When I was growing up, I felt that someone in my family hated me"), sexual abuse (e.g. "When I was growing up, someone tried to make me do sexual things or watch sexual things"), emotional neglect and physical neglect. Questions are answered on a scale of 1 = never true to 5

= very often true. This scale has been shown to have good reliabilities, with subscale reliabilities ranging from  $\alpha = .78-.93$ .

The Conflict Tactics Scale (Straus, 1996) is a 39 item assessment that was used to measure physical, sexual, and psychological aggression by a romantic partner. Participants rated each item on a Likert-type scale with answer options 0 (this has never happened), 1 (once in the past year), 2 (twice in the past year), 3 (3-5 times in the past year), 4 (6-10 times in the past year), 5 (11-20 times in the past year), 6 (more than 20 times in the past year) and 7 (not in the past year, but sometime in my life). An example item include, "My partner used a knife or gun on me." This scale has been shown to have adequate reliability  $\alpha$  ranging from .79 - .95 among the subscales (Straus, 1996).

**Mental health.** PTSD Symptoms Scale: Self Report (PSS-SR; Foa et al., 1993) was used to assess posttraumatic stress symptoms as measured by the DSM IV-TR. 18 items. Primary symptom clusters assessed include re-experiencing symptoms, avoidance symptoms, and arousal symptoms. An example item include, "having bad dreams or nightmares about the traumatic event." Participants rate each item on a scale of 1 (not at all or only one time) to 4 (5 or more times a week/almost always). The scale was shown to have good reliability ( $\alpha = .78$  for re-experiencing, .80 for avoidance, and .82 for arousal; Foa et al., 1993).

**Intimate partner violence scenario.** Only participants who reported their lifetime sexual partner to be mostly or only men were given the IPV scenario ( $N=324$ ). Participants were asked to project themselves into the story as the protagonist and respond to questions throughout the story as though the events were actually happening to them. The scenario was written in second person to maximize the likelihood of bringing about real-life reporting responses. The scenario depicted an IPV situation between the protagonist and a hypothetical male partner (Eric) with

whom she's been dating for more than 2 months. Eric's race was not specified so that the participants can project their usual dating partner's race onto him. The scenario started with the protagonist and Eric going to a party together. When they first arrived at the party, Eric got drinks for both of them. The content of the drinks was not specified in the story, and drinking was not mentioned again in the scenario. During the party, Eric got very jealous and angry that the protagonist was exchanging phone numbers with a male classmate (Shaun) to get class notes. Eric then pushed Shaun, who stumbled and fell. The protagonist and Eric left the party and came to Eric's house. Eric's behavior escalated to yelling at the protagonist and calling her names. In the next part of the story, Eric shoved the protagonist against the wall and held her there while screaming at her. The story ended with the protagonist feeling scared of Eric. She asked him to calm down and let her go, and he did.

Participants were prompted to answer questions at four time points during the story. They were asked open-ended questions about what they thought of Eric as a person, about the current relationship, and about what they would do next. Participants also answered questions about three different behavioral intentions (soothe, escape, escalation/resistance) in response to the IPV situation on a scale of 1 (not at all likely) to 5 (very likely). Soothe behavioral intentions consisted of 7 items. An example item of soothe behavioral intentions is, "*At this point, how likely are you to keep trying to reassure Eric?*" Escape behavioral intentions consisted of 10 items. An example item of escape behavioral intentions is "*At this point, how likely are you to leave?*" Escalation/resistance behavioral intentions consisted of 6 items. An example item of escalation/resistance behavioral intentions is "*At this point, how likely are you to stay and fight with him?*" At question break 4, participants also answered questions about their perception of current and future risk that Eric would physically hurt them. Current risk perception was

measured with one item, “*How likely is Eric to physically hurt you tonight?*” Future risk perception was measured with two items, “*How likely is Eric to physically hurt you at another time?*” and “*How likely is Eric to get angry like this again?*” Participants also answered one question regarding the likelihood of them staying in the relationship, “*How likely would you be to stay in a relationship with Eric if he hit you?*” Again, these questions were on a scale of 1(not at all likely) to 5 (very likely).

The first question break occurred after Eric pushed the classmate to the ground. The second question break occurred after Eric and the protagonist left the party, and he began yelling and calling her names. The third question break occurred after Eric shoved the protagonist against the wall and held her there while screaming. The last question break occurred after the protagonist expressed fear, and Eric let go of her. To check the realism of the story, we asked participants to rate how realistic they find the story and how easy it was to project themselves into the story and respond like it was happening to them on a scale of 1 (not at all) to 5 (very). Participants in the story reported that the story was realistic ( $M = 3.81, SD = 1.07$ ) and that it was easy to project themselves into the story and respond like it was happening to them ( $M = 3.49, SD = 1.25$ ).

## **Results**

### **Data Analytic Approach**

To test the hypotheses, 3 path analysis models, one for each behavioral intention (soothe, escape, escalation/resistance; see Figure 1, 2, and 3), were conducted in Mplus 6. All measures were assessed for skew and kurtosis, missing data, and outliers (West, Finch, & Curran, 1995). Missing data accounted for 1-10% of the dataset, and maximum likelihood estimation (MLE) was used for missing data. Descriptive statistics showed a significant skew in the distribution of

the intimate partner violence variable (Conflict Tactics Scale), and skew was corrected through a square root transformation of this variable (Tabachnick & Fidell, 2007). To assess model fit, the chi-square test of independence ( $X^2$ ), the root-mean-squared error of approximation (*RMSEA*), the standardized root mean square residual (*SRMR*), and the comparative fit index (*CFI*) will be used. Since the  $X^2$  test has been shown to be sensitive to sample size, which may lead to rejecting adequate models or retaining inadequate models, we also used the normed  $X^2$  (*NC*) index to assess model fit. Further, current practice emphasizes the importance of using multiple fit indices – *CFI*, *RMSEA*, *SRMR*,  $X^2$ , and *NC* – to assess model fit. A significant  $X^2$  indicates that the specified model does not fit the data. A *NC* of values less than 3 has been recommended as indicating good fit. A *RMSEA* index of < 0.05 indicates very good fit, 0.05 to 0.08 indicates adequate fit, and > 0.1 indicates poor fit. A *CFI* index of  $\geq 0.95$  indicates good fit. A *SRMR* index of < 0.06 indicates good fit, 0.06 to 0.1 indicates adequate fit, and > 0.1 indicates poor fit (Hu & Bentler, 1999, Kline, 2005). In assessing model fit, if the hypothesized model did not have good fit, modification indices were assessed to test alternative models.

## **Descriptives**

Means, standard deviations, and range of participants' responses for each variable included in the 3 models are presented in Table 1. Twenty-three percent of the sample reported to have experienced sexual victimization, 17% reported to have experienced physical assault, 50% reported to have experienced psychological aggression, and 4% reported to have experienced injury from intimate partner violence within the past year. In regards to childhood abuse, 72% reported to have experienced some form of emotional abuse, 53% reported to have experienced physical abuse, 14% reported to have experienced sexual abuse, 73% reported to have experienced emotional neglect, and 44% reported to have experienced physical neglect.

Experiences of each type of IPV and CA were not mutually exclusive, and thus, women may have experienced more than one type of IPV and CA.

### **Path Analysis**

**Soothe hypothesized model.** The hypothesized model (see Figure 1) did not adequately fit the data,  $X^2(31) = 126.48$ ,  $p < .01$ ,  $RMSEA = .10$ ,  $CFI = .75$  and  $SRMR = .10$ . Modification indices indicated to include a path from IPV to soothe at time 3 and paths from IPV, soothe at time 1, and soothe at time 2 to soothe at time 4. Lastly, a path from soothe at time 2 to likelihood of staying in the relationship was also indicated. We included these paths in the final model.

**Soothe final model.** The final model (see Figure 2) fit the data well,  $X^2(26) = 30.93$ ,  $p = .23$ ,  $NC = 1.19$ ,  $RMSEA = .03$ ,  $CFI = .99$  and  $SRMR = .05$ . Table 2 presents the covariance matrix for all the variables included in the final model.

An examination of the squared multiple correlations indicates that a moderate amount of variance was accounted for in this model by IPV ( $R^2 = .08$ ), PTSD ( $R^2 = .08$ ), soothe at time 1 ( $R^2 = .00$ ), soothe at time 2 ( $R^2 = .03$ ), soothe at time 3 ( $R^2 = .03$ ), soothe at time 4 ( $R^2 = .32$ ), current risk perception ( $R^2 = .04$ ), future risk perception ( $R^2 = .08$ ), and likelihood of staying in the relationship ( $R^2 = .05$ ).

Standardized coefficients and standard errors in the final path analysis model are presented in Figure 2, and all paths shown are significant. Current risk perception was positively correlated with future risk perception. Childhood abuse (CA) positively predicted intimate partner violence (IPV). Further, both CA and IPV positively predicted PTSD symptoms. IPV also positively predicted soothe at time 3 and 4. Soothe at time 1 positively predicted soothe at time 2 and 4, and soothe at time 2 and 3 positively predicted soothe at time 4. Soothe at time 2 also positively predicted the likelihood of staying in the relationship. Further, soothe at time 4

negatively predicted current and future risk perception. Lastly, future risk perception negatively predicted the likelihood of staying in the relationship.

Significant indirect effects were found for CA predicting PTSD symptoms through IPV such that more CA was associated with more PTSD symptoms ( $\beta = .05$ ,  $SE = .02$ ). IPV significantly predicted current and future risk perception through soothe at time 4 such that more IPV was associated with less current ( $\beta = -.03$ ,  $SE = .01$ ) and future risk perception ( $\beta = -.05$ ,  $SE = .02$ ). Further, CA significantly predicted current and future risk perception through its effects on IPV and soothe at time 4 such that more CA was associated with less current ( $\beta = -.01$ ,  $SE = .01$ ) and future risk perception ( $\beta = -.01$ ,  $SE = .01$ ).

**Escape hypothesized model.** The hypothesized model (see Figure 3) did not adequately fit the data,  $X^2(31) = 155.54$ ,  $p < .01$ ,  $RMSEA = .11$ ,  $CFI = .75$  and  $SRMR = .10$ . Modification indices indicated to include a path from CA to escape at time 2 and paths from escape at time 1 and 2 to escape at time 4. We included these paths in the final model.

**Escape final model.** The final model (see Figure 4) fit the data well,  $X^2(28) = 32.19$ ,  $p = .27$ ,  $NC = 1.15$ ,  $RMSEA = .02$ ,  $CFI = .99$  and  $SRMR = .04$ . Table 2 presents the covariance matrix for all the variables included in the final model.

An examination of the squared multiple correlations indicates that a moderate amount of variance was accounted for in this model by IPV ( $R^2 = .08$ ), PTSD ( $R^2 = .08$ ), escape at time 1 ( $R^2 = .00$ ), escape at time 2 ( $R^2 = .07$ ), escape at time 3 ( $R^2 = .08$ ), escape at time 4 ( $R^2 = .37$ ), current risk perception ( $R^2 = .21$ ), future risk perception ( $R^2 = .21$ ), and likelihood of staying in the relationship ( $R^2 = .02$ ).

Standardized coefficients and standard errors in the final path analysis model are presented in Figure 4, and all paths shown are significant. Current risk perception was positively

correlated with future risk perception. CA positively predicted IPV. Further, both CA and IPV positively predicted PTSD symptoms. CA also negatively predicted escape at time 2. Escape at time 1 positively predicted escape at time 2 and 4, and escape at time 2 positively predicted escape at time 3 and 4. Further, escape at time 3 positively predicted future risk perception, and escape at time 4 positively predicted both current and future risk perception. Lastly, future risk perception negatively predicted likelihood of staying in the relationship.

Significant indirect effects were found for CA predicting PTSD symptoms through IPV such that experiencing more CA was associated with more PTSD symptoms ( $\beta = .05, SE = .02$ ). CA significantly predicted escape at time 3 and escape at time 4 through its effects on escape at time 2 such that experiencing more CA was associated with less escape behavioral intentions at time 3 ( $\beta = -.04, SE = .02$ ) and time 4 ( $\beta = -.08, SE = .03$ ). Further, CA significantly predicted current and future risk perception through its effects on escape at time 2 and 4 such that experiencing more CA was associated with less current ( $\beta = -.04, SE = .02$ ) and future risk perception ( $\beta = -.03, SE = .01$ ). Lastly, escape at time 1 negatively predicted likelihood of staying in the relationship through its effects on escape at time 2, escape at time 4, and future risk perception such that higher escape behavioral intentions were associated with lower likelihood of staying in the relationship ( $\beta = -.01, SE = .01$ ).

**Escalation/resistance hypothesized model.** The hypothesized model (see Figure 5) did not adequately fit the data,  $X^2(31) = 69.10, p < .01, RMSEA = .06, CFI = .91$  and  $SRMR = .07$ . Modification indices indicated to include paths from IPV to escalation/resistance at time 2 and from CA to escalation/resistance at time 4. Further, a path from escalation/resistance at time 4 to likelihood of staying in the relationship were also indicated. We included these paths in the final model.

**Escalation/resistance final model.** The final model (see Figure 6) fit the data well,  $\chi^2(28) = 44.96, p = .02, NC = 1.61, RMSEA = .04, CFI = .96$  and  $SRMR = .05$ . Table 2 presents the covariance matrix for all the variables included in the final model.

An examination of the squared multiple correlations indicates that a moderate amount of variance was accounted for in this model by IPV ( $R^2 = .08$ ), PTSD ( $R^2 = .08$ ), escalation/resistance at time 1 ( $R^2 = .002$ ), escalation/resistance at time 2 ( $R^2 = .10$ ), escalation/resistance at time 3 ( $R^2 = .37$ ), escalation/resistance at time 4 ( $R^2 = .07$ ), current risk perception ( $R^2 = .02$ ), future risk perception ( $R^2 = .03$ ), and likelihood of staying in the relationship ( $R^2 = .05$ ).

Standardized coefficients and standard errors in the final path analysis model are presented in Figure 6, and all paths shown are significant. Current risk perception was positively correlated with future risk perception. CA positively predicted IPV. Further, both CA and IPV positively predicted PTSD symptoms. CA also positively predicted escalation/resistance at time 4. IPV positively predicted escalation/resistance at time 2. Further, escalation/resistance at time 1 positively predicted escalation/resistance at time 2, escalation/resistance at time 2 positively predicted escalation/resistance at time 3, and escalation/resistance at time 3 positively predicted escalation/resistance at time 4. Escalation/resistance at time 3 positively predicted current and future risk perception. Conversely, escalation/resistance at time 4 negatively predicted future risk perception. Escalation/resistance at time 4 positively predicted likelihood of staying in the relationship. Lastly, future risk perception negatively predicted likelihood of staying in the relationship.

Significant indirect effects were found for CA predicting PTSD symptoms through IPV such that experiencing more CA was associated with more PTSD symptoms ( $\beta = .05, SE = .02$ ).

IPV significantly predicted escalation/resistance at time 3 through its effects on escalation/resistance at time 2 such that more experiences of IPV were associated with more escalation resistance behavioral intentions ( $\beta = .10, SE = .04$ ). CA also significantly predicted escalation/resistance at time 3 through its effects on IPV and escalation/resistance at time 2 such that more experiences of CA were associated with higher escalation/resistance behavioral intentions ( $\beta = .03, SE = .01$ ). Lastly, CA indirectly predicted likelihood of staying in the relationship through its effects on escalation/resistance at time 4 such that more experiences of CA were associated with higher likelihood of staying in the relationship ( $\beta = .04, SE = .02$ ).

### **Discussion**

To examine trauma history as predictors of Asian American college women's in-the-moment responses to IPV, we tested 3 path models each examining the associations among CA, IPV, PTSD, current and future risk perception, the likelihood of staying in the relationship, and one of three behavioral intentions (soothe, escape, escalation/resistance).

Findings of sample statistics showed that the prevalence of both CA and IPV was very high. Rates of sexual, physical, and psychological victimization among Asian American college women in our sample were comparable to that of White college women shown in previous research (Miller, 2011; Fisher, Cullen, & Turner, 2000). As such, our results support existing research indicating that Asian American college women are at risk for IPV (Choi-Misailidis, Hishinuma, Nishimura, & Chesney-Lind, 2008). Further, Asian Americans in our sample also reported high prevalence of childhood abuse. The rates for different experiences of CA in our study were higher than rates documented for the general population in national represented surveys (Hussey, Chang, & Kotch, 2006), indicating that Asian American college women may be particularly at risk for CA.

## **Soothe Model**

As hypothesized, we found that having a history of CA predicted IPV, and that CA predicted PTSD directly and indirectly through IPV. These findings were replicated in all three models. Further, consistent with our hypotheses, having experienced more IPV increased women's soothe behavioral intentions, which predicted less current and future risk perception, which in turn predicted higher likelihood of staying in the relationship. We also found that having experienced more CA indirectly predicted less current and future risk perception through its effects on IPV and soothe behavioral intentions. Our results indicate the significant negative impact of past experiences of IPV and even more distal experiences of CA on women's in-the-moment responses to IPV.

Consistent with previous research (Filipas & Ullman, 2006), we found that CA predicted IPV. It has been proposed that individuals who have experienced abuse or have witnessed parental violence during childhood may learn that violent behaviors are normative and may be more accepting of IPV, thereby making them more vulnerable to subsequent victimization. (Akers & Sellers, 2009; Bandura, 1973). This was supported in a study examining IPV among South Korean college students, which showed that having experienced childhood physical abuse or witnessing parental violence during childhood predicted psychological and physical violence victimization and perpetration in college (Gover, Park, Tomsich, & Jennings, 2011b). Our findings also showed that a history of CA predicted more trauma symptoms directly and indirectly through IPV. This is consistent with Lindhorst et al. (2009) findings showing that CA contributed to current psychological distress by producing maintained psychological distress from the time of occurrence as well as increasing the risk of IPV, which led to additional distress beyond what was already experienced.

We also found that experiencing more IPV predicted more soothe behavioral intentions at time 3 and 4. Further, higher soothe behavioral intentions at time 4 predicted less current and future risk perception, which in turn predicted higher likelihood of staying in the relationship. Indirect effects also showed that CA predicted less risk perception through its effects on IPV and soothe behavioral intention at time 4. Thus, soothe behavioral intentions at time 4 was the mechanism through which CA and IPV impacted risk perception and subsequent decision to stay in the relationship. These findings indicate that having a history of victimization is particularly influential for women's decision making during the part of the story in which it may have been the most opportune time to escape (time 4). During this part of the story, although the victim was portrayed as having high levels of fear, the scenario depicted the perpetrator as complying with the victim's request to let go. Thus, our results showing that women with a trauma history had more intentions to engage with the perpetrator through soothing tactics after the perpetrator had released her indicate that these women may not have perceived the escape cue in the story or may not have thought that the situation was dangerous enough to escape. Our findings are consistent with past research showing that women with a history of IPV were more likely to perceive a hypothetical IPV situation as less dangerous and remain in the situation longer than women without such history (Witte & Kendra, 2010).

Our findings and past research indicate that women with an IPV history may be more at risk for victimization because of impaired risk perception during a risky situation. It was hypothesized that this impaired risk perception is a product of PTSD symptoms (Twamley et al., 2009). However, contrary to hypothesis, we found that PTSD symptoms did not predict behavioral intentions in any of the models. Instead, behavioral intentions rather than PTSD were found to be the critical factor linking previous trauma history to risk perception in the moment

and the decision to stay in the relationship. Thus, perhaps women with a trauma history were responding in a risky manner to IPV situations because of their attitudes and beliefs that have been shaped by their experiences rather than because of impaired cognitive processing from PTSD. According to the theory of planned behavior, victimized women's behavioral intentions to leave an abusive relationship are impacted by beliefs about the extent to which the behavioral response would lead to a desired outcome, is approved by the social network, and could be successfully completed based on the available resources (Ajzen & Madden, 1986). As such, women with a history of IPV in our study may have had more experience with engaging in soothing tactics, and thus may have been more comfortable in using this tactic, particularly if it had proved useful in the past. Thus, their victimization history may have conditioned their behavior response patterns and shaped their belief that certain behavioral intentions, like soothe, are acceptable and effective means to resolve problems. Another explanation for our null PTSD finding could be that the level of PTSD experienced in our sample was too low and the scores lacked sufficient variance to predict behavioral intentions and risk perception because our sample consisted of a non-clinical population. Thus, more research is needed to examine our model in a clinical sample to test the mediating role of PTSD.

### **Escape Model**

Consistent with our hypotheses, having experienced more CA directly and indirectly predicted lower escape behavioral intentions and lower current and future risk perception. Further, as hypothesized, lower future risk perception, in turn, predicted higher likelihood of staying in the relationship. Thus, these findings suggest that having experienced CA may pose as a unique risk factor for women during an IPV situation through its impact on escape behavioral intentions.

Our finding that CA negatively predicted escape behavioral intentions at time 2 has significant implications. This finding showed that distal experiences of CA had an impact on in-the-moment decision making for women during an IPV situation many years later. Further, CA impacted behavioral intentions directly rather than through IPV or PTSD. In fact, IPV and PTSD were both not predictive of escape behavioral intentions in our model. Thus, having experienced CA was uniquely associated with escape behavioral intentions, suggesting that there may have been specific CA related factors that were impacting women's in-the-moment responses to IPV. Past research indicates that experiences of CA may change one's belief system such that one may be more tolerant of violence, may perceive less risk, and may be more likely to remain in an abusive relationship (Akers & Sellers, 2009; Gover et al., 2011a). Further, our finding that CA had a direct relationship with escape behavioral intentions at time 2 indicates that trauma history was particularly influential in women's decision making during the part in the scenario in which the violence has increased to a more threatening level (e.g., the perpetrator directed his violence toward the victim and the characters moved from a public place to a private place). Thus, as the situation was getting more violent, those who had more experiences with CA were less likely to have escape behavioral intentions. Further, CA indirectly predicted less escape behavioral intentions at time 4, which was when the perpetrator had released the victim in the scenario. This indicates that CA may have decreased the women's intentions to escape an IPV situation, even perhaps at the most opportune time to leave. Our findings also showed that CA predicted less current and future risk perception through its effects on escape behavioral intentions, which in turn predicted higher likelihood of staying in the relationship. This indicates that CA may not only increase women's in-the-moment risk during an occurring IPV episode by decreasing their

escape intentions but also increase their risk for experiencing multiple IPV episodes by decreasing their future risk perception and increasing their likelihood to stay in the relationship.

### **Escalation/Resistance Model**

Our findings showed that, as hypothesized, both CA and IPV predicted higher escalation/resistance behavioral intentions. Also consistent with our hypothesis, higher escalation/resistance behavioral intentions at time 4 predicted less future risk perception and higher likelihood of staying in the relationship. However, contrary to our hypothesis, higher escalation/resistance behavioral intentions at time 3 predicted more risk perception. Finally, as hypothesized, future risk perception was negatively associated with the likelihood of staying in the relationship. Results indicate that past experiences of CA and IPV may increase women's risk during an IPV situation by increasing their escalation/resistance behavioral intentions. However, our escalate/resist findings regarding the impact of trauma history on risk perception and the likelihood of staying in the relationship have mix implications and warrants further examination.

CA predicted higher behavioral intentions to escalate/resist at time 4, which in turn predicted higher likelihood to stay in the relationship. This is consistent with research indicating that individuals who have experienced CA may normalize violence, believe that violent behaviors are acceptable means to resolve conflicts, and may engage in violent behaviors themselves (Bandura, 1973). Participants' likelihood to have escalation/resistance behavioral intentions at time 4 may have been particularly risky because this was the end of the scenario in which the perpetrator had already released the victim, she had no need to actively defend herself, and she was aware of the high level of violence that the perpetrator was capable of. Thus, having escalation/resistance behavioral intentions at this time point decreased her risk perception and

increased her likelihood of staying and engaging with the perpetrator. Further, engaging in escalation/resistance behavioral intentions at any point during an IPV situation may increase women's risk given the research indicating that the escalation of violence in IPV situations often includes both people increasing violent behaviors (Winstok, 2008). Moreover, IPV situations in which both partners are engaging in violent behaviors (i.e. reciprocal violence) compared to IPV situations in which only one partner is engaging in violent behaviors have been shown to result in greater injuries (Whitaker et al., 2007). Our findings also showed that women with more CA experiences were not only more likely to have escalate/resist intentions at the end of the IPV scenario (time 4), but they were also more likely to perceive less risk and stay in the relationship. Thus, having intentions to stay in the relationship after this episode of violence indicates that these women may be at risk for experiencing repeated, and perhaps more severe, victimizations in the future.

The relationship between trauma history and escalation/behavioral intentions appears to be different for IPV. IPV was associated with escalation/resistance behavioral intentions during times 2 and 3, which corresponded to the most violent parts of the scenario, but not time 4, a less violent part of the scenario. This indicates that women who have experienced more IPV may have reacted with more escalation/resistance behavioral intentions during the most violent parts of the scenario in self-defense. As such, they saw more risk and were less likely to stay in the relationship. Thus, it appears that the relationship between victimization history and escalation/resistance behavioral intentions, risk perception, and likelihood of staying in the relationship is complex and changes based on the context and level of violence of the situation as well as the type of victimization history. More research is needed to examine this finding.

### **Limitations**

The present study includes a number of limitations that are important to consider. The use of self-report measures in the present study may be subject to social desirability bias given the sensitive topic of intimate partner violence and trauma history. However, since all study procedures were done online, participants had the ability to complete the questionnaires on their own computer and in a private setting if they so choose. Another limitation of the study is that the study only included Asian American college women. Thus, findings from this may not be generalizable to the broader population of Asian Americans. However, because Asian American college women have been shown to be at risk for sexual victimization (Porter & Williams, 2011), and because little research has been done on this topic with this population, it is important to focus research related to behavioral intentions and risk perception regarding IPV in this sample. Another limitation of the study is the categorization of Asian Americans into one group instead of examining subgroups of Asian Americans. Asian Americans are heterogeneous in terms of ethnicities, culture, customs, acculturation levels, socioeconomic status, and languages, thus having one group of Asian Americans would limit the nuances of the findings. However, there are shared cultural values among Asian American cultures, and as such, there is merit in examining the impact of these shared values on behaviors in this group. Another limitation is that it is not possible to include all predictors and correlates of behavioral intentions and risk perception (e.g. alcohol use), and thus there might be other variables that may impact our findings. Finally, behavioral intentions and risk perception measured in the scenario may not predict real life behavioral intentions and risk perception. However, paradigms utilizing scenarios are frequently used in intimate partner violence research and have been shown to predict actual behaviors (Flowe, Ebbesen, & Putcha-Bhagavatula, 2007; Mason, Riger, & Foley, 2004; Messman-Moore & Brown, 2006). Further, due to ethnical limitations, researchers cannot

study actual in-the-moment intentions, risk perception, and behaviors during an intimate partner violence scenario. Thus, using a scenario paradigm is the closest to studying in-the-moment intentions, perceptions, and behaviors. Despite these limitations, the current study will be a valuable contribution to the field of IPV research.

### **Conclusion**

Our findings further support previous research that having a history of CA increases one's likelihood for IPV, and that both CA and IPV victimizations are associated with negative psychological consequences. Further, our findings showed that having more trauma experiences increased women's risk during an IPV situation by increasing their soothe behavioral intentions, escalation/resistance behavioral intentions, and decreasing their escape behavioral intentions. As a consequence, these individuals had lower risk perception and higher likelihood of staying in the relationship. Interestingly, we found that trauma experiences were indirectly associated with both higher and lower risk perception through escalation/resistance behavioral intentions at different time points. Thus, behavioral intentions predicted risk perception differently depending on the context of the situation, indicating that the associations among trauma variables, behavioral intentions, risk perception, and the likelihood of staying in the relationship are not static across time and context of the situation.

This study provides a number of significant contributions to the field of IPV. First, extant research has mostly examined the dichotomy of staying or leaving behaviors in regards to IPV, and this was the first study to examine multiple in-the-moment behavioral intentions and risk perception. Second, our study provides further understanding regarding the impact of trauma history on women's in-the-moment responses to IPV. Understanding trauma-related risk factors that may impair women's responses during an IPV situation will aid in the development of

education, prevention, and intervention programs to help women engage in more effective and protective responses to IPV. Third, this was the first research study to examine in-the-moment risk perception and behavioral intentions among Asian Americans. Given the research indicating that Asian Americans are at risk for IPV (Tjaden & Thoennes, 2000), it is important to examine risk and protective factors specific to this population. Finally, our study is unique from other research in the IPV field because our sample is nonclinical. As such, our findings are generalizable to a broader population and may include individuals who have experienced less severe forms of IPV, those who have not labeled their experience as IPV, or those who have not access help. Given the low disclosure rates and barriers to access resources among Asian Americans, our findings are particularly informative for prevention and intervention efforts with this population.

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Table 1

*Descriptive statistics for all variables used in models.*

Variable	<i>M</i> ( <i>SD</i> )	Range	<i>n</i>
Childhood Trauma	1.47 (.54)	1.00 – 4.32	324
Intimate Partner Violence	.35 (.52)	0.00 – 4.18	250
Posttraumatic Symptoms	1.41 (.51)	1.00 – 3.35	265
Escalate Time 1	3.96 (.87)	1.00 – 5.00	285
Soothe Time 1	2.10 (.82)	1.00 – 4.50	285
Escape Time 1	2.37 (.94)	1.00 – 5.00	284
Escalate Time 2	3.27 (1.38)	1.00 – 5.00	284
Soothe Time 2	2.13 (1.23)	1.00 – 5.00	285
Escape Time 2	4.25 (.98)	1.00 – 5.00	285
Escalate Time 3	3.51 (1.41)	1.00 – 5.00	285
Soothe Time 3	2.72 (.92)	1.00 – 5.00	285
Escape Time 3	4.43 (1.09)	1.00 – 5.00	284
Escalate Time 4	1.37 (.76)	1.00 – 5.00	284
Soothe Time 4	2.05 (1.10)	1.00 – 5.00	284
Escape Time 4	3.30 (.84)	1.00 – 5.00	285
Current Risk Perception	3.66 (1.23)	1.00 – 5.00	282
Future Risk Perception	4.20 (1.04)	1.00 – 5.00	284
Stay in Relationship	1.18 (.59)	1.00 – 5.00	282

Table 2

*Covariance Matrix for Final Fit Models*

Final Model for Soothe Behavioral Intentions										
Variable	1	2	3	4	5	6	7	8	9	10
IPV	0.26	-								
PTSD	0.06	0.25	-							
Soothe 1	0.01	0.01	0.67	-						
Soothe 2	0.07	0.01	0.17	1.51	-					
Soothe 3	0.07	-0.01	0.06	0.13	0.84	-				
Soothe 4	0.14	0.02	0.19	0.64	0.31	1.20	-			
C Risk Perception	-0.02	0.05	-0.17	-0.24	0.02	-0.24	1.52	-		
F Risk Perception	-0.03	0.04	-0.12	-0.29	0.02	-0.30	0.89	1.07	-	
Stay in Relationship	0.04	0.00	0.08	0.15	0.07	0.12	-0.03	-0.08	0.35	-
Childhood Abuse	0.08	0.06	0.05	0.04	-0.01	0.03	-0.02	-0.01	0.02	0.29
Final Model for Escape Behavioral Intentions										
IPV	0.27	-								
PTSD	0.06	0.25	-							
Escape 1	-0.07	-0.01	0.88	-						
Escape 2	-0.01	-0.01	0.21	0.96	-					
Escape 3	0.02	-0.01	0.12	0.30	1.18	-				
Escape 4	-0.03	0.02	0.23	0.48	0.20	0.70	-			
C Risk Perception	-0.02	0.05	0.21	0.38	0.19	0.47	1.51	-		
F Risk Perception	-0.03	0.04	0.13	0.37	0.29	0.37	0.89	1.07	-	
Stay in Relationship	0.04	0.00	0.02	-0.09	-0.07	-0.04	-0.03	-0.08	0.35	-
Childhood Abuse	0.08	0.06	-0.02	-0.09	-0.09	-0.03	-0.01	-0.01	0.02	0.29
Final Model for Escalation/Resistance Behavioral Intentions										
IPV	0.27	-								
PTSD	0.06	0.26	-							
Escalation/Resistance 1	0.03	0.02	0.75	-						
Escalation/Resistance 2	0.13	0.05	0.33	1.92	-					
Escalation/Resistance 3	0.15	0.07	0.32	1.19	2.00	-				
Escalation/Resistance 4	0.04	0.05	-0.06	0.22	0.20	0.58	-			
C Risk Perception	-0.02	0.05	0.11	0.31	0.24	0.04	1.52	-		
F Risk Perception	-0.03	0.04	0.14	0.19	0.17	-0.08	0.89	1.07	-	
Stay in Relationship	0.05	0.00	-0.07	-0.04	-0.03	0.09	-0.03	-0.08	0.35	-
Childhood Abuse	0.08	0.06	-0.04	0.03	0.03	0.09	-0.02	-0.01	0.02	0.29

*Note.* IPV = intimate partner violence, PTSD = posttraumatic stress disorder, C risk perception = current risk perception, F risk perception = future risk perception.

## Figure Captions

*Figure 1.* Hypothesized model of the relations among child abuse, intimate partner violence, posttraumatic stress symptoms, soothe behavioral intentions, current and future risk perception, and likelihood of staying in the relationship.

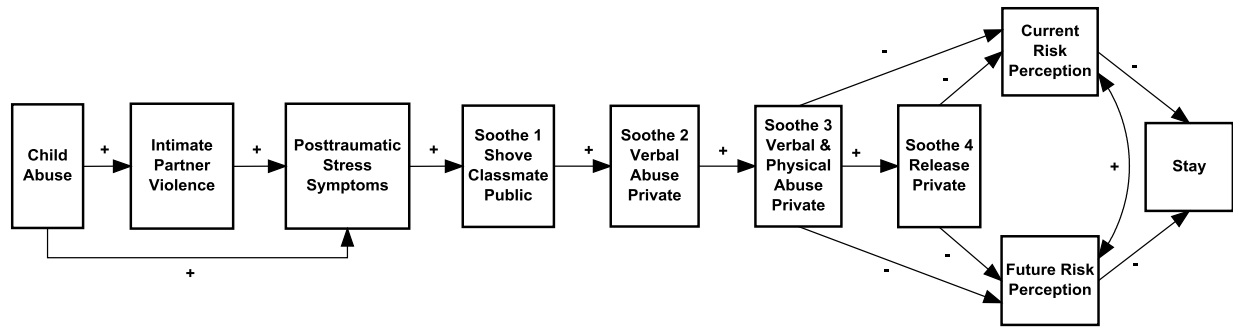
*Figure 2.* Final model with standardized estimates of the relations among child abuse, intimate partner violence, posttraumatic stress symptoms, soothe behavioral intentions, current and future risk perception, and likelihood of staying in the relationship. *Note.* All paths shown are significant ( $p < .05$ ).

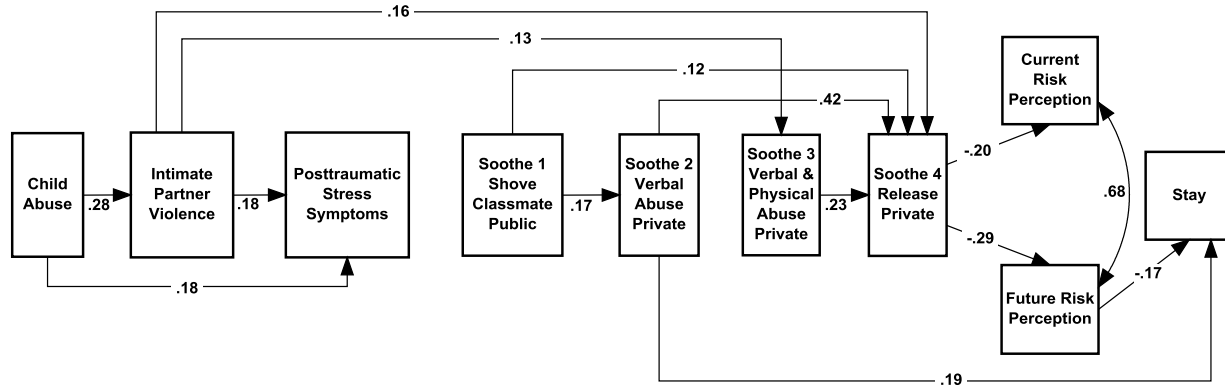
*Figure 3.* Hypothesized model of the relations among child abuse, intimate partner violence, posttraumatic stress symptoms, escape behavioral intentions, current and future risk perception, and likelihood of staying in the relationship.

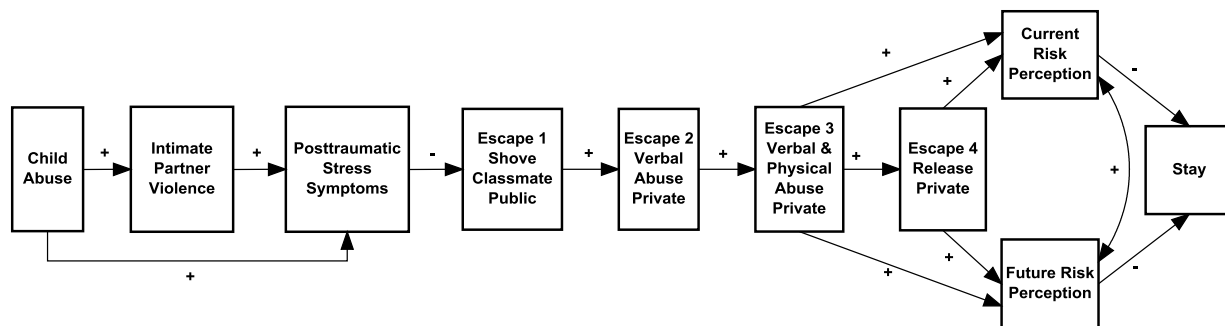
*Figure 4.* Final model with standardized estimates of the relations among child abuse, intimate partner violence, posttraumatic stress symptoms, escape behavioral intentions, current and future risk perception, and likelihood of staying in the relationship. *Note.* All paths shown are significant ( $p < .05$ ).

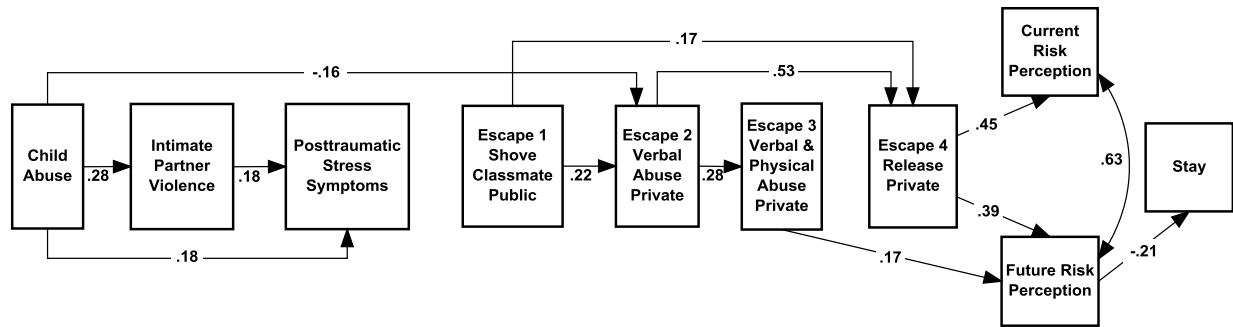
*Figure 5.* Hypothesized model of the relations among child abuse, intimate partner violence, posttraumatic stress symptoms, escalation/resistance behavioral intentions, current and future risk perception, and likelihood of staying in the relationship.

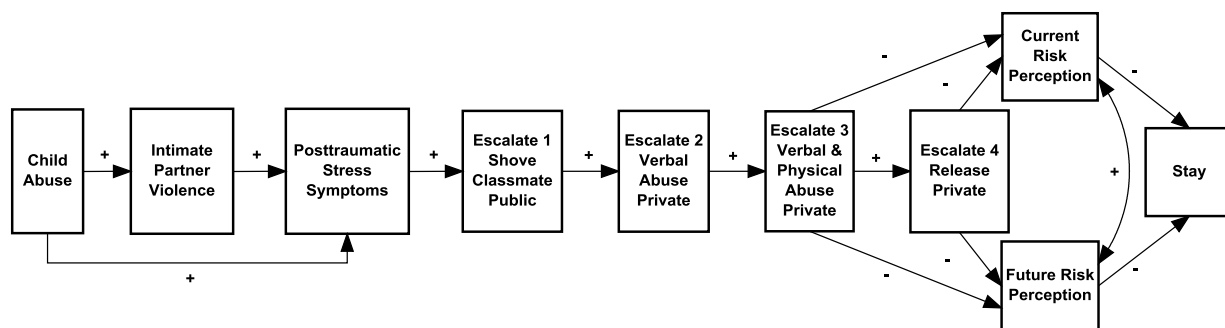
*Figure 6.* Final model with standardized estimates of the relations among child abuse, intimate partner violence, posttraumatic stress symptoms, escalation/resistance behavioral intentions, current and future risk perception, and likelihood of staying in the relationship. *Note.* All paths shown are significant ( $p < .05$ ).

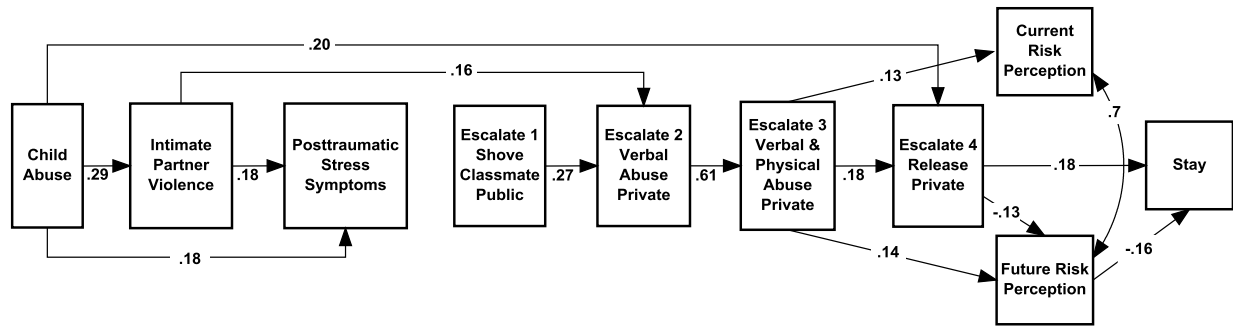












## Summary

Consistent with the social-ecological model, findings from our three studies showed the significant impact of individual and societal level factors on Asian American college women's responses to IPV. Results from our qualitative study indicated that there are both protective and risk factors in Asian American college women's responses to IPV. We found that the majority of women attributed the perpetrator's violence to his character and held negative views of him. Previous research indicates that this is protective. Those who held negative attributions of the abuser have been shown to perceive more risk in the situation and were more likely to engage in self-protective behaviors such as leaving the abusive relationship (Rhatigan, Street, & Axsom, 2006). However, we also found that a substantial number of women maintained positive views of the perpetrator and attributed his violence to situational factors as well as the victim's behaviors, indicating that many women may be at increased risk for remaining in the abusive relationship and for revictimization. Further, we found that women chose to engage in three primary behavioral intentions during the scenario: soothing the perpetrator, escaping the situation, and fighting with the perpetrator. Women chose different behavioral intentions based on the different levels of violence in the IPV scenario, suggesting that women's responses during an IPV situation are complex and fluctuate depending on context. Finally, results indicate that the majority of women did not report intentions to end the relationship or to seek help, suggesting that Asian American college women may be particularly at risk for IPV victimization and negative consequences.

Results from our second study indicated that the cultural factors of loss of face and acculturation played a significant role in women's in-the-moment response to an IPV situation. Individuals with higher loss of face may be at increased risk during an IPV situation because of

their higher likelihood to soothe and escalate/resist at the end of the scenario, which lowered their risk perception and increased their likelihood to stay in the relationship. Further, acculturation may be a protective factor such that those high in acculturation had less intentions to soothe, more intentions to escape, higher risk perception, and lower likelihood to stay in the relationship. Acculturation may also be a risk or protective factor in regards to escalation/resistance behavioral intentions because these intentions were both positively and negatively linked to acculturation depending on the context of the situation (e.g., level of violence and public vs. private setting). Further, we found that behavioral intentions also predict risk perception differently depending on the context of the situation. Thus, our findings indicate that the associations among cultural variables, behavioral intentions, risk perception, and likelihood of staying in the relationship are not static across time and context of the situation.

Findings from our third study further supported previous research that having a history of CA increases one's likelihood for IPV victimization, and that both CA and IPV victimizations are associated with negative psychological consequences. Further, our findings showed that having more victimization experiences increased women's risk during an IPV situation by increasing their soothe behavioral intentions, escalation/resistance behavioral intentions, and decreasing their escape behavioral intentions. As a consequence, these individuals had lower risk perception and higher likelihood of staying in the relationship. Interestingly, we found that trauma experiences were indirectly associated with both higher and lower risk perception through escalation/resistance behavioral intentions at different time points. Thus, behavioral intentions predicted risk perception differently depending on the context of the situation, indicating that the associations among trauma variables, behavioral intentions, risk perception,

and the likelihood of staying in the relationship changes depending on the context of the situation.

Results from our three studies indicate that although the impact of individual level and cultural level factors on Asian American college women's responses to IPV are complex, general trends allowed us to infer risk and protective factors. At the cultural level, it appears that adherence to loss of face may increase women's risk to engage in behaviors that may keep them in the abusive situation, lowers their risk perception, and decrease their likelihood of terminating the relationship. Acculturation may be a risk or protective factor depending on its association with the type of behavioral intention and the context of the situation. At the individual level, a history of CA increases women's risk for IPV victimization, and CA predicts PTSD both directly and indirectly through IPV. Further, having a history of CA and IPV may increase women's risk during an IPV situation by increasing behavioral intentions that may keep the women engaged with the perpetrator, decreasing their risk perception, and increasing their likelihood of staying in the relationship. Finally, trauma history appears to directly impact behavioral intentions and risk perception without any mediating effects of PTSD symptoms.

This dissertation provides a number of significant contributions to the field of IPV. First, extant research has mostly examined the dichotomy of staying or leaving behaviors in regards to IPV, and this was the first project to examine multiple in-the-moment behavioral intentions and risk perception. Second, our project provides prevalence rates of CA and IPV among Asian American college women, which only a few previous studies have examined. Given the research indicating that Asian Americans are at risk for IPV (Tjaden & Thoennes, 2000), it is important to examine risk and protective factors specific to this population. Third, this project furthers current understanding regarding the impact of trauma history on women's in-the-moment responses to

IPV. Understanding trauma-related risk factors impacting women's responses to IPV will aid in the development of education, prevention, and intervention programs to help women engage in more effective and protective responses to IPV. Fourth, this was the first project to examine the effects of cultural factors on in-the-moment risk perception and behavioral intentions among Asian Americans. Finally, our study is unique from other research in the IPV field because our sample was nonclinical. As such, our findings are generalizable to a broader population and may include individuals who have experienced less severe forms of IPV, those who have not labeled their experience as IPV, or those who have not accessed help. Given the low disclosure rates and barriers to access resources among Asian Americans, our findings are particularly informative for prevention and intervention efforts with this population.

It is important to note that Asian American women's experiences of IPV may be impacted by many other cultural and socio-cultural factors that were not examined in this study. Thus, future research should examine the influence of immigration status, socio-economic status, financial dependence/independence, discrimination, and language barriers on Asian American women's responses to IPV. Future research should also examine these associations among specific ethnic groups of Asian Americans.

In terms of individual level factors, substance use, relationship attachment, as well as other personality characteristics may also have significant impact on women's responses to IPV. Thus, future research should examine these additional factors as well as examine the interaction between factors at different levels. Finally, this project has laid a foundation for future studies to build upon. Now that we have shown the link between individual and cultural level factors predicting behavioral intentions and risk perception, the next step will be to examine the associations between behavioral intentions and risk perception during a hypothetical scenario

and real life behaviors. Thus, future studies should examine these associations longitudinally by assessing whether in-the-moment responses to a hypothetical situation will predict responses during actual IPV experiences.

## Appendix

### Hypothetical IPV Scenario

Please read the following story. At times, the story will pause and you will be asked to respond to questions about the story. Please project yourself into the story—that is, please do your best to respond as if the events are *actually happening to you* when asked what you would really do if you were in a situation like the one described.

You and Eric have been going out for more than two months now, and you're pretty into each other. You are definitely physically attracted to Eric—he's totally hot. You'd had a crush on him for a while before you two started seeing each other, and you were so happy to find out that he was into you too. Now that you're together, you've found that you have a lot in common and never run out of things to talk about. You love how attentive Eric is. He calls or texts you several times each day just to see what you're up to. You find that you're spending a lot of time with him and you're not seeing your friends as much as you used to. Eric says that you should spend more time with your friends if you want to, but also says that he'd rather have you spending time with him instead.

Tonight, you and Eric are heading to a party at your friend's house. You're hoping he won't want to leave right away like he sometimes does. He's more of a homebody than you, and isn't much for parties, especially if the party is thrown by a friend of yours and not his. When you get there, you both seem to be having a good time. Eric goes and gets drinks for you both. Soon you are talking to Beth, one of your good friends, about some hilarious photos she posted on Facebook. After a few minutes, you notice that Eric looks kinda bored. He asks you if you want to dance. After you dance for a while, Eric heads to the bathroom. You see Shaun, a friend of yours from class, and start talking to him about what he thought of the midterm you finished a

few days before. He missed class the day after the test, and you tell him what your instructor said about the exam. You thought it was a hard test and it feels good to talk about it with him. You're so involved in the conversation that you don't know how much time has passed before Eric comes to find you. He is definitely ready to leave and is a little rude to Shaun. The party is getting really fun and you are bummed to leave because so many of your friends are there who you haven't seen lately, but you can tell that Eric isn't enjoying himself anymore, so you agree to go.

You and Eric are just leaving the party when Shaun comes running after you. "Hey!" he says. "I'm glad I caught you. I was wondering whether I could borrow your notes from class yesterday. I sure don't want to screw up the final, too." You tell him you'd be happy to let him copy your notes and begin exchanging phone numbers with him. Suddenly Eric says to you, "You're not giving him your number." You and Shaun are confused. You say, "What are you talking about?" Eric says, "I'm not going to stand around and watch him hit on you." He seems pretty angry now. You try to reassure him that Shaun is just a classmate and you have no interest in getting with him, but he clearly doesn't believe you. Shaun says, "Seriously, man, we're just friends. I'm just trying to get some notes from class." Then Eric gets really mad. He starts yelling at Shaun, cursing, and calling him a liar. Shaun keeps trying to reassure him until finally Eric yells, "Stop lying, you asshole! Leave us the fuck alone!" and pushes Shaun, who stumbles and falls.

### *Question Break 1*

After the interaction with Shaun, you and Eric head to Eric's house, which is nearby. Eric is still fuming over Shaun trying to get your number, and does not seem to be responding to your attempts to calm him down. You tell Eric that you really care about him, that you have no

interest in Shaun, and that you would never cheat on him. The discussion is becoming increasingly heated as you approach Eric's house. It's like Eric won't rest until you admit that you are interested in Shaun which you definitely aren't. When you get inside, he erupts again. He starts yelling at you and calling you names ("Whatever, you slut, I don't know why I would even believe you..."), and accusing you of being unfaithful. You continue trying to reassure him, but he just gets angrier and angrier.

*Question Break 2*

Eric is getting angrier and angrier. Finally he screams, "I know you've been sleeping around!" He grabs you and shoves you hard up against the wall. He continues to scream at you while holding you against the wall.

*Question Break 3*

Now you are feeling kinda scared of Eric. You ask him to please calm down. You tell him that you're afraid and ask him to let go of you. Finally he does.

*Question Break 4*