Published in final edited form as:

Int Perspect Psychol. 2013 July 1; 2(3): . doi:10.1037/ipp0000004.

Cultural Beliefs, Intimate Partner Violence and Mental Health Functioning among Vietnamese Women

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Abstract

Intimate partner violence (IPV) against women occurs in all countries, with wide-ranging negative effects, including on mental health. IPV rates vary widely across countries, however, suggesting cultural factors may play a role in IPV. The primary purpose of the present study was to assess relations among IPV, mental health symptoms, and cultural beliefs among Vietnamese women, focusing on moderator effects of cultural beliefs on relations between IPV and mental health. IPV, anxious and depressive mental health symptoms, and culturally-related beliefs about IPV were cross-sectionally assessed in 105 married adult Vietnamese women randomly selected from public population registries in five provinces. IPV was significantly correlated with anxiety, depression, and suicidal ideation. Relations were moderated by wives' culturally-related beliefs about abuse (e.g., relations between IPV and mental health symptoms were smaller for women who believed that nothing could be done about abuse). Findings suggest that when attempting to prevent or treat effects of IPV, it will be important to consider that certain beliefs about IPV generally viewed as maladaptive (e.g., nothing can be done about abuse) may have adaptive effects, at least in the short-term, on relations between IPV and mental health functioning.

Keywords

intimate partner violence; mental health; cultural beliefs; moderator effects; statistical interactions

Although intimate partner violence (IPV) against women occurs in all countries, specific rates vary widely across the globe. A study by the WHO in ten countries, for example, found that women's one year prevalence for physical or sexual intimate partner violence ranged from 4% to 54% (Garcia-Mareno, Jansen, Ellsberg, Heise & Watts, 2006). Such cross-national variability suggests that cultural factors may influence IPV. Certain cultural factors such as Confucianism, which has widespread influence across east Asia, may facilitate IPV against women, and influence their reactions to it. Confucian tradition emphasizes harmony and self-restraint in interpersonal relationships yet also supports patriarchal beliefs and traditions that can place women in submissive and vulnerable positions (Ebrey, 2006). A central component of Confucianism is that men have absolute power over women and as the "weaker" sex, women must be taught what is appropriate. Before marriage, females are subordinate to their father, and after marriage they are subordinate to their husband (Gao et

al., 2012). Such a perspective has been linked to beliefs among both men and women that the husband has the right to “teach” his wife (including via abusive behavior) when necessary, setting the stage for violence towards women to be accepted by both men and women as legitimate treatment (Tang & Lai, 2008).

Other cultural factors also may influence IPV. Collectivism (vs. individualism), for instance, represents the extent to which a society emphasizes the interdependence of humans (vs. an emphasis on individual rights and personal achievement) (Hofstede, Hofstede, & Minkov, 2010). An important part of collectivism is the centrality of ‘face’ and ‘face-saving’ which refer to individuals’ sense of favorable social self-worth as judged by members of their social network, and the need to avoid public embarrassment (Hwang, 2012). Collectivistic cultures tend to emphasize maintaining this favorable judgment by others at whatever cost (e.g., Ting-Toomey & Kurogi, 1998). In the context of IPV, in cultures with high collectivism such as found in many Asian countries, the importance of face-saving may result in abused women being less likely to publicly acknowledge or seek help for abuse from their partners.

Another important cultural dimension is Power Distance, which refers to the belief among less powerful members of a society that social power is inherently unequally distributed, and that this is a fundamental part of reality that needs no justification; Power Distance tends to be higher in traditional cultures such as found in much of Asia. (Hofstede et al., 2010). In regards to IPV this belief, in conjunction with the Confucianistic perspective that men are absolutely higher on the social hierarchy than women, may result in women believing that a husband’s behavior, even abusive behavior, always is justified; i.e., whatever the husband does to the wife, he must have had justification as he is in a higher status position and hence always right.

Several studies have investigated the relations between such cultural beliefs and IPV against women (e.g., Prospero, Dwumah & Ofori-Dua, 2009; Thuc & Hendra, 2010). Ismayilova (2009), for example, found that patriarchal gender beliefs regarding the social justifiability of wife abuse were associated with significantly increased risk for IPV at both the individual and community levels. Most studies of such attitudes or beliefs have conceptualized these beliefs as risk factors for IPV, as having main effect relations with IPV (e.g., Ismayilova, 2009; Prospero et al., 2009; Thuc & Hendra, 2010). However, more complex relations may be involved, with such cultural beliefs serving as moderators of relations for instance between IPV and mental health functioning. That is, cultural beliefs may be involved in statistical interactions with IPV, with relations between the experience of IPV and the person’s mental health functioning varying as a function of the person’s cultural beliefs about IPV.

The foundation of cognitive theories of psychopathology is that humans respond to events based on their interpretation of the events, rather than directly to the events themselves. Thus, cognitive beliefs are seen to moderate the effects of negative life events on mental health outcomes such as anxiety and depression (e.g., Beck, 1976; Iacoviello, Grant, Alloy & Abramson, 2009). From this perspective, IPV may function as a negative life event, with culturally-related beliefs serving as moderators of relations between IPV and mental health functioning. For instance, the negative effects of abuse may vary as a function of the extent to which wives believe that husbands’ abusive behavior must inherently be justified (because husbands’ have higher social status than wives and consequently cannot act in error). For women who have such beliefs, the abuse then carries the implication that it is the wife’s own fault, adding feelings of guilt, etc. for the abuse as well as the abuse’s direct effects.

The Present Study

Thus, to understand more fully how culture influences IPV's relations to mental health functioning, it will be important to assess moderator effects of cultural beliefs. To most accurately assess such potential relations, it will be important to conduct assessments in populations with variability on a wide range of cultural beliefs, in order to minimize problems associated with restriction of range, etc. The present study focused on the southeast Asian nation of Vietnam, which is the 13th largest country in the world (Central Intelligence Agency, 2009). Vietnamese culture reflects a blend of its indigenous Dong Son culture mixed with influences from China and the West (Tran, 2001). These various influences have resulted in a relatively wide range of cultural beliefs, ranging from indigenous ancestor veneration, Confucianism beliefs from China, moderated by democratic influences from Europe, and socialism from the former Soviet Union (Tran, 2001). Vietnam thus represents an advantageous setting for conducting such assessments because of its range, diversity and variability in cultural factors (McLeod & Dieu, 2001; Rambo, 2005; Taylor, 1991).

The primary purpose of the present study was to conduct an assessment of IPV among married Vietnamese women, to more precisely identify relations between IPV and mental health functioning, in particular in regards to moderator relations among IPV, cultural beliefs, and mental health. We focused on married Vietnamese women because, as a traditional culture, there is relatively little cohabitation among non-married couples (Ghuman, 2005). The study was exploratory, in that there has not been sufficient prior research regarding moderator effects of cultural beliefs on relations between IPV and mental health functioning to make specific hypotheses.

A second focus of the study was on differentiating relations among IPV, and anxiety and depression. International studies of IPV and mental health functioning (e.g., Ellsberg, Jansen, Heise, Watts & Garcia-Moreno, 2008) including those in Vietnam (e.g., Thuc and Hendra, 2010) often have assessed mental health functioning via measures that assess emotional distress (e.g., the SRQ-20) but that do not differentiate anxiety and depression. Differentiating anxiety and depression is important because their causes and treatments do not fully overlap (Clark & Beck, 2010), and hence may require different prevention and intervention efforts. Thus, a second focus of the study was to assess relations between IPV, and anxiety and depression as separate constructs.

Methods

Participants and Sampling Frame

In order to maximize the range and variability of our cultural variables, the sampling frame for this study covered urban, semi-rural, and rural areas in northern, central and southern Vietnam. The urban site was Hanoi, the capital and the second largest city in Vietnam. Semi-rural areas included coastal Quang Ninh province, and Thuy Nguyen which is an outlying district of Hai Phong city in northern Vietnam. The two rural sites were Son Ha in central Vietnam, and Long Khanh in southern Vietnam. Approximately equal numbers of participants were obtained from each site.

Participants for this study were 105 Vietnamese women. The mean age of the women was 40 years ($SD=9.5$) and the mean age of their husbands was 43 years ($SD=9.2$). The length of time that the women had been married at the time of the interview ranged from 1 month to 41 years, with an average length of 17 years ($SD=9.9$). Approximately 59% of the women and 52% of their husbands had graduated from high school, and 32% of the women and 29%

of the men reported having attended college or some other post-high school education (see Table 1).

Potential participants were identified from public population lists. In Vietnam, all citizens must register with neighborhood authorities, and these population lists are public record. One hundred of the participating women were randomly selected from these lists. In addition, in order that the sample would include women who had just married, we also included in the sample five women randomly selected from public marriage registries who had been married within the last six months. Similar to the general population lists, in Vietnam couples who have married must register the marriage with local neighborhood authorities within one month of marriage. These lists also are public record.

The project was conducted with the collaboration of the Vietnamese Women's Union, which is a national governmental agency that has responsibility for advocating for and supporting women in Vietnam. As part of their participation in this project, Women Union's staff introduced the project interviewer to potential participants after they were selected from the lists. One hundred and eight women were asked to participate in the study, and all but three (from the public population lists) agreed to participate, for a participation rate of 97%.

Measures

Intimate Partner Violence—We assessed four domains of IPV: (a) Physical Abuse, (b) Sexual Abuse, (c) Emotional Abuse (e.g., humiliating the wife), and (d) Controlling Behavior (e.g., restricting the wife's access to friends or family members). We used the *WHO Multicountry Study on Women's Health and Life Experiences Questionnaire* (World Health Organization, 2000) that has been translated, adapted, validated, and used in numerous countries including Vietnam (e.g., Thuc & Hendra, 2010). Participants rated the frequency that they have experienced the events described in the items in regards to their current situation over the past year, using the scale of: 0=never, 1=once, 2=twice, 3=more than twice. We computed Cronbach alpha internal consistency estimates in the present sample, with α .80 judged good, $.80 > \alpha$.70 acceptable, and $.70 > \alpha$.60 marginally acceptable (George & Mallery, 2003). For the IPV measure, the internal consistency alpha were: Physical Abuse=.94; Sexual Abuse=.70; Emotional Abuse=.84; Controlling Behavior=.74.

Mental health functioning—To assess depressive symptoms, we used the PHQ-9 (Kroenke, Spitzer & Williams, 2001). The PHQ-9 contains nine items that assess the symptoms of major depressive disorder (e.g., "Feeling down, depressed, or hopeless") rated on a four point Likert-type scale for their occurrence over the past two weeks. The PHQ-9 is well validated (e.g., Martin, Rief, Klaiberg & Braehler, 2006), and is widely used across the globe (e.g., Adewuya, Ola & Afolabi, 2006). In the present study, the alpha internal consistency reliability for the total score was .85. For the purposes of this study, to obtain more variability in the assessment of suicidal/self-harm ideation, we separated the PHQ-9 suicide item ("Thoughts that you would be better off dead, or of hurting yourself in some way") into two parts. The mean of these two items was used as a measure of suicidal ideation. To assess anxiety symptoms, we used the GAD-7 (Spitzer, Kroenke, Williams & Lowe, 2006) which assesses seven anxiety symptoms (e.g., "Feeling nervous, anxious or on edge") rated for their frequency of occurrence over the past two weeks on a 4 point scale. The GAD-7 has been validated in a number of studies (e.g., Kroenke, Spitzer, Williams & Löwe, 2010), and is widely used in Asia (e.g., Ying, Jiang, Yang & Zhu, 2010) as well as in many other parts of the world (e.g., Garcia-Campayo et al., 2010). In the present study the alpha internal consistency reliability for the GAD-7 was .94.

Beliefs About Abuse—We assessed two sets of cultural beliefs about wife abuse. The first focused on wives' patriarchal beliefs about gender roles and the husband's right to be abusive towards the wife (Thuc & Hendra, 2010; Vung, 2008). This measure is based on the *WHO Multicountry Study on Women's Health and Life Experiences Questionnaire* (World Health Organization, 2000). The *Male Power* measure contains eight brief scenarios related to gender roles and assesses wives' beliefs that a husband has the right to hit or otherwise abuse his wife within each of these scenarios (e.g., not completing the housework to his satisfaction; refusing to have sex with him). Items are rated on a 1–5 Likert-type scale from *strongly agree* to *strongly disagree*. In the present data, the alpha internal consistency reliability was .84.

The second beliefs measure was developed specifically for the present study, and is based on what Tang and Lai (2008) in their review of IPV against women in China called “wife beating myths.” The measure was developed through a review of prior studies that had considered similar constructs (e.g., Tiwari et al., 2009), and a series of pilot interviews with 8 Vietnamese women (selected based on the same procedures for the main sample) regarding the reasons why husbands may abuse their wives, and why the women may tolerate abuse and not leave their husbands. On the *Beliefs About Abuse* (BAA) scale¹, women rate nine statements on a scale ranging from *strongly agree* to *strongly disagree*. An exploratory factor analysis with the main study sample identified three factors. The first BAA factor was labeled “*Husband's Behavior is Justified*” (alpha=.86), and included items such as “The husband usually has a reason for abuse” and “The wife has usually done something to deserve abuse.” The second BAA factor was labeled “*Nothing Can Be Done About Abuse*” (alpha=.68), and included items such as “Wives are financially dependent on their husbands”, and “All men beat their wives when drunk.” The third BAA factor was labeled “*Abuse is a Private Matter*” (alpha=.68), and included items such as “Family violence is a private matter” and “Abuse is an embarrassment, it should be kept private.”

Procedures

All the measures above have existing Vietnamese language versions, with the exception of the *Beliefs About Abuse* scale. The *Beliefs About Abuse* scale, which was created specifically for this study, was developed in Vietnamese.

Interviews were conducted by the first author, a female Vietnamese PhD clinical psychologist with a number of years of experience working with domestic violence victims. World Health Organization (2001) procedures for interviewing women in regards to IPV were followed in this study. After obtaining human subjects approval from the institutional review board (U.S. FWA #00018223) of the overseeing agency (School of Education, Vietnam National University), at each site we contacted the local People's Committee (district-level local authorities) and the Women's Union. We discussed the project with them, and solicited their permission and support for the project. In all instances local authorities gave their support. The population and marriage lists were then obtained from the People's Committee, and potential participants selected.

Next, a member of the local Women's Union accompanied the interviewer to the woman's house, introduced the interviewer to the potential participant, and then left. Following W.H.O. procedures, the interviewer first explained the general purpose of the project as a study of women's health, and only discussed the specific aspect of health upon which the studied focused (IPV) in private. If the woman was interested in participating, she went

¹English and Vietnamese versions of the *Beliefs About Abuse* scale are available from the second author, at Bahr.Weiss@Vanderbilt.edu.

through consent procedures. To ensure privacy, most interviews were scheduled at a later time and / or a different place of the participant's choosing.

The first part of the interview involved relatively casual conversation with the woman, discussing the study, her life and marriage in general, etc., with the purpose of enhancing rapport so that the woman would be as candid as possible. This typically lasted about half an hour. The remainder of the interview took on average about one hour. Participating women were paid the local equivalent of about \$2.75 for the interview.

Results

Rates and levels of IPV

Table 2 contains Pearson correlations for the study variables. Table 3 reports the percentage of women within each category of IPV who reported any IPV (i.e., had a score > 0 in the IPV category) as well as means and standard deviations for each category. For Total IPV, 91% of women reported scores greater than 0, indicating that 91% of the women had experienced some form of abusive behavior over the last year (ranging from being called names by the husband to being raped by the husband). The mean total score was .40 ($SD = .47$) on the 0–3 scale of the IPV scale indicating relatively low overall levels of IPV across all IPV domains. Thus, although the large majority of women reported abusive behavior from their husband, overall rates of IPV were relatively low.

Main analyses

Plan of analyses—The primary goal of the study was to identify moderator effects of cultural beliefs on relations between IPV and mental health functioning, and secondarily to describe in more precise detail relations between IPV and the specific mental health domains of anxiety and depression (rather than relations between IPV and emotional distress in general). Therefore, the plan for data analysis was first to analyze (a) total main effects for relations between the IPV domains, and anxiety, depression, and suicidal ideation; (b) then unique main effects between the IPV domains and the mental health domains, first controlling for other IPV domains, and then controlling for other mental health domains; and finally (c) test interaction effects. All analyses were conducted using SAS 9.3.

Main effect relations between IPV and mental health functioning—Bivariate correlational relations between the different forms of IPV, and the three mental health functioning variables are reported in the top line of the three rows of Table 4. With the exception of Sexual IPV and suicidal ideation, all domains of IPV were significantly related to all of the mental health domains. We also assessed the unique effects of IPV, controlling for several different variables via partial correlations. We first assessed the unique effect of each form of IPV controlling for the other forms of IPV, to determine which specific types of IPV might be most important in relation to the mental health functioning. These analyses did not include Total IPV because Total IPV is comprised of all of the specific forms of IPV. Results are reported in the second line of the three rows Table 4. Most of the relations between IPV and the mental health variables became non-significant when controlling for other forms of IPV, indicating much of the observed relations between IPV and mental health functioning was non-specific in regards to the type of IPV. However, the relations between Emotional IPV and anxiety and depression, and between Sexual IPV and anxiety remained significant, suggesting that these two forms of IPV may be particularly important in terms of understanding the relations between IPV and mental health functioning.

We next controlled for anxiety (in relations with depression and suicidal ideation as the dependent variables) and for depression (in relations with anxiety and suicidal ideation as

the dependent variables), in order to assess the specificity in the relations between IPV and mental health functioning. As the bottom lines of the three rows in Table 4 indicate, all relations between IPV and the other mental health variables became non-significant when controlling for anxiety, but 60% of relations between IPV and anxiety remained significant when controlling for depression. This suggests that relations between IPV and mental health functioning may predominantly reflect relations with anxiety rather than with depression.

Moderator effects on relations between IPV and mental health functioning—

We next assessed the extent to which relations between IPV and mental health functioning were moderated by (a) the wife's beliefs why husbands abuse and why women tolerate the abuse (*Beliefs About Abuse*), and (b) the wife's beliefs about gender roles and male power (*Male Power*). A general linear models framework was used; SAS Proc Glm was used for these analyses. Anxiety, depression, and suicidal ideation served as the dependent variables, in separate models. Each of the five IPV variables was included (in separate models) as the first independent variable, then the potential moderators (the various wife beliefs, in separate models) as the second independent variable, and finally the interaction of these two independent variables. Significant interaction effects were described following Cohen, Cohen, West & Aiken's (2003) recommendations, by estimating the slope for the relation between the IPV and the mental health variable at -1 and $+1$ standard deviations from the mean of the moderator variable.

Beliefs About Abuse: As Table 5 shows, a number of interaction effects were significant, for all three of the *Beliefs About Abuse* factors. All of the effects for the first BAA factor (*Husband's Behavior is Justified*) showed the same pattern, with the magnitude of the relation between IPV and mental health symptoms increasing as the level of the BAA belief increased. That is, the more a woman believed that the husband is justified in abusive behavior, the larger the relation was between IPV and her mental health symptoms. For instance, the relation between Emotional IPV and depression for women one standard deviation below the mean on the *Husband's Behavior is Justified* was estimated as 0.30 whereas the relation for women one standard above the mean on the *Husband's Behavior is Justified* was 0.79.

The second BAA factor (*Nothing Can Be Done about Abuse*) also showed several significant interaction effects. All of the significant interaction effects were consistent, with the magnitude of relation between IPV and mental health symptoms decreasing as the level of the BAA factor increased. That is, the more a woman believed that there was nothing that could be done about an abusive husband, the smaller the relation was between IPV and mental health symptoms. For instance, the relation between Control IPV and anxiety for women one standard deviation below the mean on the *Nothing Can Be Done about Abuse* was estimated as 0.59 whereas the relation for women one standard above the mean on the *Nothing Can Be Done about Abuse* was 0.13.

The third BAA factor (*Abuse is a Private Matter*) also showed several significant interaction effects and all of these effects were consistent, with the magnitude of the relation between IPV and the mental health symptoms decreasing as the level of the BAA belief increased. That is, the more a woman believed that abuse is a private matter, the smaller the relation was between IPV and the mental health symptoms. For instance, the relation between Physical IPV and suicidal ideation for women one standard deviation below the mean on the *Abuse is a Private Matter* factor was estimated at 0.63 whereas the relation for women one standard above the mean on the *Abuse is a Private Matter* factor was 0.07.

Male Power: In contrast to the previous set of beliefs, *Male Power* had a very specific effect, vis-a-vis the type of IPV, on relations between IPV and mental health functioning.

Relations between all three mental health symptom domains and Sexual IPV were moderated by *Male Power* (see Table 6), but none of the other IPV domains were involved in significant interactions with *Male Power*. These interactions reflected the fact that the stronger the wife's beliefs that men have the right to be abusive, the smaller the relation was between Sexual IPV and anxiety, depression, and suicidal ideation. That is, for women who had high levels of beliefs of *Male Power* (that men have the right to be abusive), the relation between Sexual IPV and mental health functioning was smaller than the relation was for women who had low levels of beliefs about male power.

Summary of moderation results: Overall, 38% of interaction effects were statistically significant. Similar to our finding that unique effects of IPV were more closely related to anxiety than depression or suicidal ideation, 55% of the interaction effects involving anxiety were significant whereas 30% were significant for depression and suicidal ideation. There was somewhat less variability in regards to the percentage of interactions significant across IPV domains. Fifty percent of interaction effects involving Total IPV were significant, 42% for Control IPV, and 33% for Control, Emotional, and Sexual IPV. It is important to note that the direction of these interactions was consistent within the cultural belief involved in the interaction, but not consistent across the cultural beliefs. That is, for instance, all interaction effects involving BAA factor #1 (*Husband's Behavior is Justified*) showed the same pattern, with the magnitude of the relation between IPV and mental health symptoms increasing as the level of this BAA belief increased. In contrast, all interaction effects involving BAA factor #2 (*Nothing Can Be Done about Abuse*) were consistent with each other but these effects ran in the opposite direction from those of BAA factor #1, with the magnitude of relation between IPV and mental health symptoms decreasing as the level of the BAA factor increased.

Discussion

The present study is one of the first in Asia, or elsewhere in the world, to assess cultural beliefs as moderators of relations between IPV and mental health functioning. Prior studies have found significant main effect relations among these factors (e.g., Ismayilova, 2009). However, following basic cognitive theory that posits that individuals' interpretations of events are key to their reactions to the events (in our case, IPV), in the present study we focused on moderator relations among these factors. This cognitive perspective was supported by the relatively large number of significant statistical interactions that we found involving the four sets of IPV-related cultural beliefs based in Confucianism and collectivism. Underlying our four separate scales may be a fundamental belief that as a wife, one's individual welfare is subordinate to the overall welfare of the family, which would be more threatened by directly opposing the husband, even when he is abusive. Causal conclusions are limited given the cross-sectional nature of our data, but our results do suggest that fundamental beliefs such as this may influence on how wives interpret, and react, to their husband's abusive behavior.

Specifically, in regards to BAA factor #1, *Husband's Behavior is Justified*, results indicated that the more a woman believed that husbands are justified in their abusive behavior, the larger the relation was between the woman's experience of IPV and her mental health symptoms. This possibly reflects that if the wife believes that abuse is justified because the wife (i.e., oneself) generally has done something to deserve the abuse, then not only do you have to suffer the direct harmful effects of the abuse but the abuse also carries the implication that you are failing in your role as a wife (Tiwari et al., 2009). Self-blame for negative life events has been found to be related to higher levels of mental health symptoms (e.g., Garnefski & Kraaij, 2009). Thus, if you believe that it is your fault that abuse occurs,

effects of abuse may be particularly strong as they not only include the direct negative effects of the abuse but also the effects of self-blame for the abuse.

Considering the other potential causal direction in regards to this statistically significant interaction, it is possible that mental health symptoms are more likely to provoke abuse from husbands of women who believe that wives are to blame for the abuse. Depressive and anxious behaviors can be experienced as aversive by other people and can result in various forms of social and interpersonal rejection (e.g., Blote, Bokhorst, Miers & Westenberg, 2012; Joiner, 1996). Thus, it is possible that a husband who is exposed to aversive stimuli (in this case, his wife's depressive and anxious behaviors) may be more likely to respond aggressively to the aversive stimuli if his wife believes that she is to blame for the abuse. In essence, this belief may give the husband permission to be abusive. It is important to note that it is not possible to choose between these alternatives (abuse causes mental health symptoms, or mental health symptoms increase the risk for abuse) or others because our data are cross-sectional.

In regards to the second BAA factor, *Nothing Can Be Done about Abuse*, the interaction effect ran in the opposite direction. That is, the more a woman believed that nothing can be done about an abusive husband, the smaller the relation was between IPV and mental health symptoms. It is possible this effect reflects positive (at least vis-a-vis immediate mental health functioning) effects of acceptance of abuse that is seen as inevitable. Acceptance of unchangeable negative circumstances has been found in some circumstances (e.g., pain associated with cancer; Gauthier et al., 2009) to be associated with better mental health functioning, in part through a greater focus on positively living one's life as best as one can rather than focusing ones effort, and repeatedly failing, on changing something that is not changeable (Gauthier et al., 2009). The key issue here is, of course, whether in Vietnam being abused by one's husband is truly unchangeable or not.

Considering the other potential causal direction, it is possible that mental health symptoms such as anxiety and depression are more likely to provoke abuse among husbands with wives who have a less resigned attitude towards abusive behavior. A less resigned attitude may be perceived as or associated with attempts by the wife to change the husband, resulting in psychological reactance (Brehm & Brehm, 1981) on the part of the husband. As part of this reactance, the husband may behave aggressively to preserve his sense of behavioral freedom that he feels is threatened by his wife's desire or expectation for change. This psychological reactance in conjunction with depressive and anxious behaviors that may be experienced as aversive by other people (e.g., Blote, Bokhorst, Miers & Westenberg, 2012; Joiner, 1996) may be a particularly potent stimulus for the husband's abusive behavior. Again, of course, with cross-sectional data it is not possible to choose between these (and other) alternative explanations.

The third BAA factor, *Abuse is a Private Matter*, showed a similar pattern to the second BAA factor. That is, the more a woman believed that abuse is a private matter, the smaller the relation was between IPV and mental health symptoms. In this case, it may be that women who believe that abuse is a private matter also believe that mental health symptoms are private, and are less inclined to report mental health symptoms during the interview, thus reducing the correlation between mental health symptoms and IPV. However, if this were the case, one might expect that the more a wife believed that abuse was a private matter, the less inclined she would be to report IPV, producing a negative correlation between this BAA factor and IPV. Yet three of the four correlations between the *Abuse is a Private Matter* factor and the specific IPV factors were non-significant, and the one significant correlation ran in the opposite direction. More substantively, this interaction may reflect the possibility that believing that abuse is not a private matter, within the context of a culture that believes

that abuse should be kept private and generally does not support women who have experienced abuse (Vung, 2008), may increase stress (i.e., anxiety). In such circumstances a woman deciding whether to discuss abuse outside the family must consider the shame and lack of support, etc. she may face when other people find out about the abuse.

Only one interaction between Sexual IPV and the three BAA factors was significant whereas *Male Power* moderated the relation between Sexual IPV and all three domains of mental health functioning. For women who had high levels of beliefs that husbands have the right to be abusive with their wives under a variety of circumstances (*Male Power*), the relation between Sexual IPV and mental health symptoms was smaller than the relation was for women who had lower levels of *Male Power* beliefs. In interpreting this result, it is important to note that the *Male Power* measure assesses women's beliefs that the husband has the right to be abusive in a variety of situations, including situations involving sex (e.g., if the wife refuses to have sex with the husband), which may help to explain the close linking between *Male Power* and its moderating effects with Sexual IPV in particular.

One possible explanation for this interaction is that beliefs that the world is predictable and logical may result in reduced effects of negative life events on mental health functioning (e.g., Schmidt & Lerew, 2002; Zvolensky, Eifert, Lejuez, Hopko, & Forsyth, 2000). In regards to IPV, beliefs that a husband's abuse of the wife is a logical and predictable consequence, of the wife's behavior, may result in reduced anxiety and depression. Negative events that reoccur in a manner that is seen as predictable may generate less emotional distress and arousal than those seen as unpredictable because during periods when the negative event is at low subjective probability, less defensive emotional arousal occurs (Seligman, 1992). Considering the other potential causal direction, it is possible that women with fewer symptoms of anxiety and depression are more able to maintain cognitions that ordinarily are healthy (e.g., that events follow logically and predictably from one's behavior) in the face of IPV as opposed to women with higher levels of depression, anxiety, etc., who may be more likely to develop cognitions that the world is unpredictable and unfair (e.g., Clark & Beck, 2010).

A limitation of previous international IPV studies is that they have used well validated but non-specific measures of emotional distress such as the SRQ-20 to assess mental health functioning (e.g., Ellsberg et al., 2008). Because the causes and treatments for different forms of emotional distress (i.e., anxiety and depression) do not fully overlap (Clark & Beck, 2010), a secondary purpose of the present study was to investigate mental health functioning in more detail, differentiating anxiety and depression. Our results do support the importance of considering mental health functioning in some detail. Although IPV was significantly related to anxiety, depression, and suicidal ideation in our sample, only anxiety had unique relations to IPV, and anxiety showed almost twice as many significant interactions with cultural beliefs as depression. Although suicidal ideation did not show unique relations to IPV, given its independent clinical significance its relation to IPV remains of primary importance.

Overall, the present study found relatively high prevalence rates of current (past year) IPV among a diverse sample of Vietnamese women, relative to other studies of Vietnamese women and more generally across the world (cf., Garcia-Mareno et al., 2006). Thuc and Hendra (2010), for instance, reported that 6% of women in their Vietnamese sample had experienced physical violence in the past year, whereas our rate was approximately six times higher, 37%. However, Nguyen (2006) reported an even higher rate, with 47% of Vietnamese men in his sample reporting having used physical violence against their wives in the past year. One possible reason for our relatively high rates is that the project interviewer was a female clinical psychologist with extensive experience working with female IPV

survivors, and thus was skilled at putting the women at ease in discussing IPV. In addition, the first thirty minutes of the interview involved relatively unstructured discussion with the participant about her life and marriage, with the intention of developing rapport. Thus, our relatively high rates of IPV may reflect our success in creating a safe atmosphere allowing participants to be as forthright as possible, which reinforces the importance of developing rapport during IPV assessment interviews (Holtzworth-Munroe, Beck & Applegate, 2010).

With the exception of the relation between Sexual IPV and suicidal ideation, all four forms of IPV (Physical, Sexual, Emotional, Control) showed significant relations to all three mental health domains. However, only Emotional IPV and Sexual IPV showed unique relations to the mental health domains. This suggests that relations between other forms of IPV (Physical IPV and Controlling IPV) and mental health may be through Emotional and Sexual IPV. Thus, Sexual and especially Emotional IPV may be particularly important to consider when focusing upon IPV, at least with regards to mental health functioning, perhaps because they are more personal and thus more directly affect how the woman feels about herself.

This study has several limitations that are important to consider in interpreting the findings, and that suggest directions for future research. The first, as mentioned above, is that the data were cross-sectional. Thus, although the data suggest certain relations of interest, or lack of relations, they contain no information about the order of effects or causal directions. To select among the various (and possibly other) alternative explanations discussed above will require longitudinal data. Thus, the various possible explanations discussed above are speculative but still important in that they suggest potential future directions for research. A second limitation of the study is that we only focused on the wife's perspective and did not assess that of the husband (cf., Nguyen, 2006). Although wives' cognitions and beliefs likely are relatively proximal to their mental health functioning, they undoubtedly are influenced by the husband's beliefs. For instance, the effects of a wife's beliefs may vary as a function of the match or mismatch between her and her husband's beliefs (Alio et al., 2011). Third, the study focused on married women and did not include divorced women, whom might have had higher rates or have experienced more severe IPV (Vatnar & Bjorkly, 2012). However, divorce rates in Vietnam and similar LMIC are low (Central Population and Housing Census Steering Committee, 2009; United Nations Statistics Division, 2009). More importantly, because of its focus on current mental health functioning the study assessed abuse over the past year. Thus, women who had divorced more than a year prior to the study data collection would have not been appropriate for inclusion in the study. A final limitation that should be mentioned is that the present study was based on a relatively small sample size, 105 women. The data were, however, collected from five diverse sites in five provinces across Vietnam, and the sample size was large enough to produce sufficient power for a number of moderator effects to be statistically significant.

Overall, our results highlight the importance of considering mental health functioning in relation to IPV in some detail, and of considering how culturally-related beliefs regarding IPV may function as moderators of relations between IPV and mental health functioning. The results suggest, for instance, that in attempting to counter what Tang and Lai (2008) have called "wife beating myths" (e.g., that nothing can be done about abuse), it will be important to consider that the beliefs may have survival value and hence serve positive functions that must be considered in order when attempting to counter such "myths". For example, the belief that nothing can be done about abuse may be more than misinformation that can be corrected by simply providing correct information. Rather, this belief may reduce the wife's current short-term emotional distress by decreasing her focus on the negative aspects of her marital relationship and her hoping to change her relationship and repeatedly failing; that is, this belief may be negatively reinforced by reduction in current emotional

distress. Thus, to effectively counter this and similar beliefs at both the individual and public health levels and to increase women's help-seeking behavior, it will be important to understand what factors help to maintain the beliefs, and how these beliefs interact across diverse cultures with IPV and mental health symptoms.

Acknowledgments

We very gratefully acknowledge the support of: the Vietnamese Women's Union; the women who participated in the survey; and the U.S. National Institutes of Health Fogarty International Center, in particular grants D43-TW009089, D43-TW007769, and R21-TW008435.

References

- Adewuya AO, Ola BA, Afolabi OO. Validity of the patient health questionnaire (PHQ-9) as a screening tool for depression amongst Nigerian university students. *Journal of Affective Disorders*. 2006; 96:89–93.10.1016/j.jad.2006.05.021 [PubMed: 16857265]
- Alio AP, Clayton HB, Garba M, Mbah AK, Daley E, Salihu HM. Spousal concordance in attitudes toward violence and reported physical abuse in African couples. *Journal of Interpersonal Violence*. 2011; 26:2790–2810.10.1177/0886260510390951 [PubMed: 21156681]
- Beck, AT. *Cognitive therapy and the emotional disorders*. Oxford: International Universities Press; 1976.
- Blote AW, Bokhorst CL, Miers AC, Westenberg PM. Why are socially anxious adolescents rejected by peers? The role of subject-group similarity characteristics. *Journal of Research on Adolescence*. 2012; 22:123–134.10.1111/j.1532-7795.2011.00768.x
- Brehm, SS.; Brehm, JW. *Psychological Reactance: A theory of freedom and control*. NYC: Academic Press; 1981.
- Central Intelligence Agency. *World Fact Book - Vietnam*. Washington, DC: Author; 2009.
- Central Population and Housing Census Steering Committee. *The 2009 Vietnam population and housing census: Major findings*. Hanoi: United Nations Population Fund; 2009.
- Clark, DA.; Beck, AT. *Cognitive therapy of anxiety disorders: Science and practice*. NYC: Guilford Press; 2010.
- Cohen, J.; Cohen, P.; West, SG.; Aiken, LS. *Applied multiple regression / correlation analysis for the behavioral sciences*. 3. Mahwah, NJ: Erlbaum; 2003.
- Ebrey, PB. Confucianism. In: Browning, DS.; Green, MC.; Witte, J., editors. *Sex, marriage, and family in world religions*. NYC: Columbia University Press; 2006. p. 367-450.
- Ellsberg M, Jansen HAFM, Heise L, Watts CH, Garcia-Moreno C. Intimate partner violence and women's physical and mental health in the WHO multi-country study on women's health and domestic violence: An observational study. *The Lancet*. 2005; 371:1165–1172.10.1016/S0140-6736(08)60522-X
- Gao E, Zuo X, Wang L, Lou C, Cheng Y, Zabin LS. How does traditional Confucian culture influence adolescents' sexual behavior in three Asian cities? *Journal of Adolescent Health*. 2012; 50:S12–S17. doi: dx.doi.org/10.1016/j.jadohealth.2011.12.002. [PubMed: 22340851]
- Garcia-Campayo J, Zamorano E, Ruiz MA, Pardo A, Pérez-Páramo M, López-Gómez V, Freire O, Rejas J. Cultural adaptation into Spanish of the generalized anxiety disorder-7 (GAD-7) scale as a screening tool. *Health and Quality of Life Outcomes*. 2010; 8:8.10.1186/1477-7525-8-8 [PubMed: 20089179]
- Garcia-Moreno C, Jansen HAFM, Ellsberg M, Heise L, Watts C. Prevalence of intimate partner violence: Findings from the WHO multi-country study on women's health and domestic violence. *The Lancet*. 2006; 368:1260–1269.10.1016/S0140-6736(06)69523-8
- Garnefski N, Kraaij V. Cognitive coping and psychological adjustment in different types of stressful life events. *Individual Differences Research*. 2009; 7:168–181.
- Gauthier LR, Rodin G, Zimmermann C, Warr D, Moore M, Shepherd F, Gagliese L. Acceptance of pain: A study in patients with advanced cancer. *Pain*. 2009; 143:147–154.10.1016/j.pain.2009.02.009 [PubMed: 19321264]

- George, D.; Mallery, P. SPSS for Windows step by step: A simple guide and reference. Boston: Allyn & Bacon; 2003.
- Ghuman S. Attitudes about sex and marital sexual behavior in Hai Duong Province, Viet Nam. *Studies in Family Planning*. 2005; 36:95–106.10.1111/j.1728-4465.2005.00047.x [PubMed: 15991647]
- Hofstede, G.; Hofstede, GJ.; Minkov, M. Cultures and organizations: Software of the mind. 3. NYC: McGraw-Hill; 2010.
- Holtzworth-Munroe A, Beck CJA, Applegate AG. The Mediator's Assessment of Safety Issues and Concerns (MASIC): A screening interview for intimate partner violence and abuse available in the public domain. *Family Court Review*. 2010; 48:646–662.10.1111/j.1744-1617.2010.001339.x
- Hwang, KK. Foundations of Chinese psychology: Confucian social relations. NYC: Springer Science; 2012.
- Iacoviello BM, Grant DA, Alloy LB, Abramson LY. Cognitive personality characteristics impact the course of depression: A prospective test of sociotropy, autonomy and domain-specific life events. *Cognitive Therapy and Research*. 2009; 33:187–198.10.1007/s10608-008-9197-7 [PubMed: 20216915]
- Ismayilova, L. Unpublished doctoral dissertation. Columbia University; New York City, NY: 2009. Intimate Partner Violence in three former Soviet Union countries (Azerbaijan, Moldova, and Ukraine): Prevalence, risk factors, and women's reproductive health.
- Joiner TE. Depression and rejection: On strangers and friends, symptom specificity, length of relationship, and gender. *Communication Research*. 1996; 23:451–471.10.1177/009365096023004006
- Kroenke K, Spitzer RL, Williams JBW. The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine*. 2001; 16:606–613.10.1046/j.1525-1497.2001.016009606.x [PubMed: 11556941]
- Kroenke K, Spitzer RL, Williams JBW, Löwe B. The Patient Health Questionnaire somatic, anxiety, and depressive symptom scales: A systematic review. *General Hospital Psychiatry*. 2010; 32:345–359. [PubMed: 20633738]
- Martin A, Rief W, Klaiberg A, Braehler E. Validity of the Brief Patient Health Questionnaire Mood Scale (PHQ-9) in the general population. *General Hospital Psychiatry*. 2006; 28:71–77.10.1016/j.genhosppsych.2005.07.003 [PubMed: 16377369]
- McLeod, MW.; Dieu, NT. Culture and customs of Vietnam. Westport, CN: Greenwood Press; 2001.
- Nguyen TD. Prevalence of male intimate partner abuse in Vietnam. *Violence against Women*. 2006; 12:733–740.10.1177/1077801206291555
- Prospero M, Dwumah P, Ofori-Dua K. Violent attitudes and mental health symptoms among mutually violent Ghanaian couples. *Journal of Aggression, Conflict and Peace Research*. 2009; 1:16–23.10.1108/17596599200900009
- Rambo, AT. Searching for Vietnam: Selected writings on Vietnamese culture and society (Kyoto Area Studies on Asia). Kyoto, Japan: Kyoto University Press; 2005.
- Schmidt NB, Lerew DR. Prospective evaluation of perceived control, predictability, and anxiety sensitivity in the pathogenesis of panic. *Journal of Psychopathology and Behavioral Assessment*. 2002; 24:207–214.10.1023/A:1020795114296
- Seligman, MEP. Helplessness: On depression, development, and death. NYC: W H Freeman; 1992.
- Spitzer RL, Kroenke K, Williams JBW, Lowe B. A brief measure for assessing generalized anxiety disorder: The GAD-7. *Archives of Internal Medicine*. 2006; 166:1092–1097.10.1001/archinte.166.10.1092 [PubMed: 16717171]
- Tang CSK, Lai BPY. A review of empirical literature on the prevalence and risk markers of male-on-female intimate partner violence in contemporary China, 1987–2006. *Aggression and Violent Behavior*. 2008; 13:10–28.10.1016/j.avb.2007.06.001
- Taylor, KW. The Birth of Vietnam. Berkeley, CA: University of California; 1991.
- Thuc, D.; Hendra, J. Results from the National Study on Domestic Violence against Women in Viet Nam. Hanoi, Vietnam: United Nations; 2010.
- Ting-Toomey S, Kurogi A. Facework competence in intercultural conflict: An updated face-negotiation theory. *International Journal of Intercultural Relations*. 1998; 22:187–225. doi: [http://dx.doi.org/10.1016/S0147-1767\(98\)00004-2](http://dx.doi.org/10.1016/S0147-1767(98)00004-2).

- Tiwari A, Wong J, Brownridge DA, Chan KL, Fong DYT, Leung WC, Ho PC. Psychological Intimate Partner Abuse among Chinese Women: What we know and what we still need to know. *The Open Social Science Journal*. 2009; 2:32–36.10.2174/1874945300902010032
- Tran, NT. Discovering the identity of Vietnamese culture. 3. Ho Chi Minh City, Vietnam: Ho Chi Minh City Publishing House; 2001.
- United Nations Statistics Division. Demographic Yearbook, 2009. 2009. Downloaded June 12, 2012 from <http://unstats.un.org/unsd/demographic/products/dyb/dyb2009-2010/Table24.pdf>
- Vatnar SKB, Bjorkly S. Does separation or divorce make any difference? An interactional perspective on intimate partner violence with focus on marital status. *Journal of Family Violence*. 2012; 27:45–54.10.1007/s10896-011-9400-6
- Vung, ND. Unpublished doctoral dissertation. Karolinska Institute; Stockholm, Sweden: 2008. Intimate partner violence against women in rural Vietnam: Prevalence, risk factors, health effects and suggestions for interventions.
- World Health Organization. WHO Multicountry Study on Women's Health and Life Experiences Questionnaire (version 9). Geneva, Switzerland: Author; 2000.
- World Health Organization. Putting women first: Ethical and safety recommendations for research on domestic violence against women. Geneva: Author; 2001.
- Ying DG, Jiang S, Yang H, Zhu S. Frequency of generalized anxiety disorder in Chinese primary care. *Postgraduate Medicine*. 2010; 122:32–38.10.3810/pgm.2010.07.2173 [PubMed: 20675969]
- Zvolensky MJ, Eifert GH, Lejuez CW, Hopko DR, Forsyth JP. Assessing the perceived predictability of anxiety-related events: A report on the perceived predictability index. *Journal of Behavior Therapy and Experimental Psychiatry*. 2000; 31:201–218.10.1016/S0005-7916(01)00006-4 [PubMed: 11494957]

Table 1**Demographic Characteristics**

	Wife	Husband
Education (highest level achieved)		
Graduated elementary school (5 th grade)	19.3%	22.4%
Graduated middle school (9 th grade)	21.6%	24.7%
Graduated high school (12 th grade)	27.3%	22.5%
Some college, technical school, etc.	31.8%	29.4%
Occupation		
Housewife	15%	--
Fishing	2%	3%
Farming	13%	16%
Manual / day labor	0%	5%
Self-employed small business (e.g., sales in market)	18%	0%
Motorbike taxi	0%	12%
Small boat transportation	0%	5%
Factory worker	9%	12%
Government employee	32%	34%
Office worker	9%	7%
Teacher	0%	2%
Retired	2%	4%
Unemployed	0%	4%

Notes: Percentages may not total to 100% because of rounding.

Table 2

Correlation matrix for study variables

	IPV Tot	IPV Phys	IPV Sexual	IPV Emo	IPV Control	BAA #1	BAA #2	BAA #3	Male Power	GAD-7	PHQ-9	Suicidal Ideation
IPV Tot	1.00	0.89	0.51	0.90	0.74	-0.08	0.52	0.20	0.11	0.50	0.47	0.31
IPV Phys	0.89	1.00	0.24	0.76	0.51	-0.08	0.44	0.18	0.05	0.38	0.39	0.25
IPV Sexual	0.51	0.24	1.00	0.36	0.38	0.10	0.36	0.06	0.09	0.40	0.31	0.18
IPV Emo	0.90	0.76	0.36	1.00	0.53	-0.03	0.52	0.26	0.14	0.50	0.47	0.27
IPV Cont	0.74	0.51	0.38	0.53	1.00	-0.22	0.29	0.04	0.07	0.32	0.28	0.28
BAA #1	-0.08	-0.08	0.10	-0.03	-0.22	1.00	0.32	0.44	0.24	0.20	0.10	-0.01
BAA #2	0.52	0.44	0.36	0.52	0.29	0.32	1.00	0.58	0.33	0.30	0.20	0.09
BAA #3	0.20	0.18	0.06	0.26	0.04	0.44	0.58	1.00	0.19	0.06	0.01	-0.07
Male Power	0.11	0.05	0.09	0.14	0.07	0.24	0.33	0.19	1.00	0.25	0.19	0.09
GAD-7	0.50	0.38	0.40	0.50	0.32	0.20	0.30	0.06	0.25	1.00	0.76	0.43
PHQ-9	0.47	0.39	0.31	0.47	0.28	0.10	0.20	0.01	0.19	0.76	1.00	0.56
Suicidal Id	0.31	0.25	0.18	0.27	0.28	-0.01	0.09	-0.07	0.09	0.43	0.56	1.00

Notes: IPV Tot=Total IPV; IPV Phys=Physical IPV; IPV Sexual=Sexual IPV; IPV Emo=Emotional IPV; BAA=Beliefs About Abuse factor. Correlations in bold = $p < .01$. For $|r| > .25$, $p < .01$; $|r| > .32$, $p < .001$; $|r| > .37$, $p < .0001$.

Table 3

Rates and means for IPV domains

Type	Percent	Mean (SD)
Any IPV	91%	0.40 (.47)
Control	64%	0.51 (.64)
Emotional	77%	0.64 (.69)
Physical	37%	0.27 (.59)
Sexual	49%	0.24 (.39)

Table 4
Total and unique effects (correlations and partial correlations) of IPV with mental health functioning

Mental health variable • Covariate	IPV variable			
	Total IPV	Control IPV	Emotional IPV	Physical IPV
Anxiety				
• IPV	0.50****	0.32**	0.50****	0.38****
• Depression	---	0.01	0.38**	0.03
	0.25*	0.16	0.25*	0.14
Depression				
• IPV	0.47****	0.28**	0.47****	0.39****
• Anxiety	---	-.01	0.34*	0.10
	0.17	0.07	0.16	0.17
Suicidal ideation				
• IPV	0.31**	0.28**	0.27**	0.25*
• Anxiety	---	0.17	0.12	0.05
• Depression	0.06	0.17	0.07	0.10
		0.16	0.01	0.03

Notes: Estimates in the upper line of the rows are total effects (i.e., bivariate correlations). Estimate in lower lines are unique effects (i.e., partial correlations), controlling for listed covariate.

* <.05,
** <.01,
*** <.001,
**** <.0001.

Table 5

Moderating effects of *Beliefs About Abuse* (BAA) on relations between IPV and mental health functioning

BAA factor	Type IPV	Mental health outcome	Standardized estimate for interaction term	t (for interaction term)	β @ -1/+1 SD
#1	Total	Anxiety	.24	2.58*	0.39 / 0.86
		Depression	.27	2.89**	0.33 / 0.88
		Suicidal ideation	.20	1.87	
	Control	Anxiety	.01	0.06	
		Depression	-.09	-.79	
		Suicidal ideation	.09	0.80	
	Emotional	Anxiety	.19	2.10*	0.37 / 0.74
		Depression	.24	2.67**	0.30 / 0.79
		Suicidal ideation	.14	1.34	
	Physical	Anxiety	.05	0.56	
		Depression	.14	1.53	
		Suicidal ideation	.11	1.19	
#2	Sexual	Anxiety	-.01	-.11	
		Depression	.00	0.01	
		Suicidal ideation	-.02	-.24	
	Total	Anxiety	-.32	-4.17****	1.00 / 0.37
		Depression	-.17	-2.14*	0.80 / 0.45
		Suicidal ideation	-.17	-1.91	
	Control	Anxiety	-.23	-3.26**	0.59 / 0.13
		Depression	-.17	-2.24*	0.50 / 0.16
		Suicidal ideation	-.11	-1.41	
	Emotional	Anxiety	-.31	-3.66***	0.91 / 0.30
		Depression	-.14	-1.58	
		Suicidal ideation	-.14	-1.36	

BAA factor	Type IPV	Mental health outcome	Standardized estimate for interaction term	t (for interaction term)	β @ -1/+1 SD
#3	Physical	Anxiety	-.38	-4.68****	1.13 / 0.37
		Depression	-.22	-2.46*	0.85 / 0.41
		Suicidal ideation	-.25	-2.71**	0.80 / 0.29
	Sexual	Anxiety	-.01	-.10	
		Depression	-.04	-.48	
		Suicidal ideation	-.01	-.08	
#3	Total	Anxiety	-.21	-3.00**	0.73 / 0.31
		Depression	-.05	-.69	
		Suicidal ideation	-.23	-2.96**	0.58 / 0.13
	Control	Anxiety	-.28	-3.38***	0.59 / 0.03
		Depression	-.16	-1.87	
		Suicidal ideation	-.28	-3.36**	0.56 / 0.00
	Emotional	Anxiety	-.22	-2.92**	0.79 / 0.34
		Depression	-.02	-.24	
		Suicidal ideation	-.15	-1.69	
	Physical	Anxiety	-.26	-3.29**	0.71 / 0.20
		Depression	-.10	-1.24	
		Suicidal ideation	-.28	-3.50***	0.63 / 0.07
	Sexual	Anxiety	-.13	-1.79	
		Depression	-.08	-1.11	
		Suicidal ideation	-.19	-2.47*	0.41 / 0.03

Notes: BAA factor #1="Husband's behavior is justified"; BAA factor #2="Nothing can be done about abuse"; BAA factor #3="Abuse is a private matter".

* <.05,

** <.01,

*** <.001,

.1000>

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Table 6

Moderating effects of Wife Beliefs about Male Power on relations between IPV and mental health functioning

Type IPV	Mental health outcome	Estimate (for interaction term)	t (for interaction term)	β @ $-1/+1$ SD
Total	Anxiety	0.11	1.23	
	Depression	0.13	1.44	
	Suicidal ideation	-.01	-.09	
Control	Anxiety	-.05	-.60	
	Depression	-.03	-.39	
	Suicidal ideation	-.04	-.41	
Emotional	Anxiety	0.05	0.61	
	Depression	0.09	1.08	
	Suicidal ideation	0.03	0.37	
Physical	Anxiety	0.10	1.24	
	Depression	0.12	1.46	
	Suicidal ideation	-.02	-.20	
Sexual	Anxiety	-.24	-2.65**	0.67 / 0.20
	Depression	-.25	-2.73**	0.62 / 0.11
	Suicidal ideation	-.31	-3.24**	0.56 / -.06

Notes:

*
<.05,**
<.01,***
<.001,****
<.0001.