Non-Traditional Wives With Traditional Husbands: Gender Ideology and Husband-to-Wife Physical Violence in Chinese Society

Adam Ka-Lok Cheung and Susanne Yuk-Ping Choi

Abstract
Feminist scholars have argued that husband gender traditionalism is one of the root causes of spousal violence against women. Using couple-level data from Hong Kong (N = 871 couples), this article argues that a second mechanism—couple gender value mismatch—also explains husband-to-wife physical assault. Our findings show that a husband’s gender traditionalism is positively associated with husband-to-wife physical assault only when the husband is coupled with a wife who has non-traditional gender attitudes. Similarly, egalitarian gender attitudes in wives are positively associated with husband-to-wife physical assault only when a non-traditional wife is coupled with a traditional husband.

Keywords
domestic violence, gender attitudes, value mismatch, Chinese society

Feminist scholars have long argued that gender traditionalism—gender attitudes that uphold male dominance and relegate women to a subordinate position both at home and in society—is one of the root causes of spousal violence against women. A review of qualitative studies also suggested that gender attitudes comprise one of the main themes in both perpetrators’ and victims’ narratives regarding husband-to-wife violence (Flynn & Graham, 2010). However, quantitative studies have found that the correlation

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between gender traditionalism and husband-to-wife violence is inconsistent across cultural contexts. Although a traditional gender attitude on the part of the husband has been found to be associated with an increased risk of husband-to-wife violence in the United States, Canada, and South Africa, this effect was not observed in Russia, among American Chinese populations, or in Hong Kong. In this article, we argue that the inconsistency between qualitative and quantitative findings, and the absence of any correlation between gender attitudes and violence in some quantitative studies, may be related to previous inattention to the interaction of couples’ gender attitudes. Although value homogamy is prevalent in marriages, there are many traditional men who are partnered with non-traditional women, and vice versa. Where a husband has traditional gender attitudes and his wife has embraced a more liberal ethos, value incompatibility may trigger conflict and result in violence. The pairing of a non-traditional wife with a traditional husband could also result in the wife challenging her husband’s status, which in turn could lead the husband to use violence as a means of silencing his rebellious wife and re-asserting his masculinity. Using couple-level data from Hong Kong (N = 871 couples), this study examines how gender attitude incompatibility between a husband and wife might shape husband-to-wife physical assault.

We aim to contribute to the current literature in three ways. First, this study will provide quantitative empirical evidence on the cultural hypotheses found in feminist literature pertaining to the Chinese context. Second, while a few past studies have examined the role of gender attitudes as an individual-level risk marker for husband-to-wife violence, this study extends the current literature by examining the role of gender attitude at the level of the couple. Finally, and most importantly, our study will add an additional dimension to the theoretical discussion on domestic violence: the role of gender value mismatch, in addition to gender traditionalism, in fomenting husband-to-wife violence. The study of couple gender value mismatch and husband-to-wife violence is particularly relevant for societies in which the status and position of women are changing rapidly, and where egalitarian values are replacing the traditional gender role values that favor men. In such societies, men with traditional gender role values may feel at odds with general social sentiments and under siege in personal relationships, particularly when their wives hold more liberal gender attitudes. Violence may thus be used by traditional men to reinforce their beliefs. Hong Kong provides an excellent case study for such a society. As a Chinese society, the majority of Hong Kong’s population is deeply influenced by the Confucian ethos. This places low value on women and stipulates a strict gender arrangement that consigns women to the domestic realm and a position subordinate to their husbands (Tang, Wong, & Cheung, 2002). However, Westernization and modernization over the past five decades have considerably improved the status of women in Hong Kong, particularly with respect to their educational and employment opportunities (Choi & Cheung, 2012).

Literature Review

Research on domestic violence has identified a wide range of risk factors for husband-to-wife violence. From the individual to the contextual level, and from distal to proximal
factors, there are multiple mechanisms that determine the risk of husband-to-wife violence (for a comprehensive review, see Ali & Naylor, 2013; Flynn & Graham, 2010; Schumacher, Feldbau-Kohn, Slep, & Heyman, 2001; Stith, Smith, Penn, Ward, & Tritt, 2004). On the individual level, perpetrators’ and victims’ education, income, family background, migration status, social capital, attitudes, personality, self-control traits, stress, alcohol abuse, and violence toward non-family members are correlates of husband-to-wife violence. On the level of the couple, couples’ relative income level as a share of household income, power arrangements, duration of marriage, communication styles, and marital conflict are also significant predictors of spousal violence. On the level of the household, the presence of a dependent child and conflicts with in-laws or other extended family members are related to the risk of violence. On the contextual level, neighborhood deprivation, a lack of collective efficacy, and cultural norms favorable to the use of violence against women are also related to a higher prevalence of domestic violence.

In literature relating to domestic violence, gender attitude is usually treated as an individual-level distal risk factor that provides motivation for men to use violence against a spouse, thus increasing the risk of husband-to-wife violence. In particular, traditional gender ideologies that uphold male dominance and traditional gender arrangements have been counted among the most important causes of husband-to-wife violence by feminist scholars (Dobash & Dobash, 1979; Yllo, 1993). Gender attitudes have been used to explain macroscopic differences in the prevalence of domestic violence. Yllo and Straus (1990) found that in the United States, there was a linear association at the state level between gender traditionalism and the prevalence of domestic violence; in states where average gender attitudes were skewed toward the most traditional, the rate of domestic violence was twice as high as in states with more egalitarian gender norms. Furthermore, Q. Xu and Anderson (2010) suggested that traditional gender ideology in Asian cultures, which favors male domination and female subordination, has perpetuated the problem of domestic violence in Asian communities.

However, as argued previously by Dutton (1994), it would be an ecological fallacy to infer, solely based on these aggregate-level findings, that households in which couples hold traditional gender attitudes are more likely to experience domestic violence. Individual-level findings are mixed. Qualitative studies have revealed that gender attitude is one of the main themes in both perpetrators’ and victims’ narratives of husband-to-wife violence (Flynn & Graham, 2010). Men who have committed violence against their spouse often hold traditional gender beliefs and use violence to “teach them a lesson” and to force their wives to fulfill their wifely obligations (Dobash & Dobash, 1979; Weldon & Gilchrist, 2012; Yllo, 1993). However, past quantitative studies have found that the correlation between men’s and women’s gender attitudes and domestic violence are inconsistent across social contexts. Studies have found a positive and statistically significant association between husbands’ traditional gender attitudes and husband-to-wife physical assault in the United States (Atkinson, Greenstein, & Lang, 2005; Salari & Baldwin, 2002), Canada (Lenton, 1995; Smith, 1990), and South Africa (Jewkes, Levin, & Penn-Kekana, 2002). In a meta-analytic review, Stith et al. (2004) found that traditional gender attitudes in men had a moderate
effect on the perpetration of intimate physical abuse of a partner. However, in a study conducted in Russia, gender attitudes were found to have no statistically significant effect on spousal abuse (Cubbins & Vannoy, 2005). Similarly, Yick (2000) found that gender attitudes were not significantly associated with marital violence in a sample of Chinese American families. In a study of a clinical sample of abused women in Hong Kong, K. L. Chan (2004) also found no significant relationship between the type and severity of violence against wives and the male perpetrators’ gender attitudes. Furthermore, Sugarman and Frankel (1996), in a meta-analytic review, found only limited support for a link between husband-to-wife physical violence and the husband’s gender attitudes.

Compared with the large body of research on men’s gender attitudes, the influence of women’s gender attitudes on the likelihood of husband-to-wife physical assault has only been examined peripherally. Past research has shown that non-traditional wives are eager to strive for increased bargaining power in the marriage (Firestone, Harris, & Vega, 2003), that they are more inclined to perceive greater inequality and unfairness in the existing division of household labor (Lavee & Katz, 2002), and that they are more likely to work outside the home (Corrigall & Konrad, 2007). A wife’s gender attitude has also been hypothesized to be a factor associated with husband-to-wife physical assault. A husband who holds traditional gender attitudes may interpret a non-traditional gender attitude in his wife as a challenge to the traditional gender arrangement; this can provoke such men to seek to put their wives “in line.” Therefore, conflicts may arise more frequently in such couples, and husbands may be more likely to act violently toward their wives to maintain their preferred household arrangements and to terminate the conflict. In line with this hypothesis, Harris, Firestone, and Vega (2005) found that non-traditional wives are more likely to be abused by their husbands in the United States. Similarly, in South Africa, women who hold non-traditional gender attitudes are more likely to be assaulted by their partners (Jewkes et al., 2002).

The studies mentioned above hypothesized that traditional husbands are more likely than non-traditional husbands to use force as a means of controlling their wives; non-traditional wives are also more likely than their traditional counterparts to be physically assaulted by their husbands, as a result of their husbands’ need to maintain a dominant position in the relationship. However, the underlying assumption of these studies—that husbands’ and wives’ gender attitudes are separate correlates of violence—is questionable. Let us imagine a hypothetical world in which all women believe they should behave according to traditional gender norms. Men, even those holding traditional gender norms, would have no obvious reason to beat their wives because their wives would already submit to their demands. In this hypothetical world, traditional husbands would not be more likely than non-traditional husbands to assault their wives. The association between men’s gender attitudes and husband-to-wife physical assault must therefore be conditional on the wives’ attitudes. Nevertheless, in most previous studies, men holding traditional gender attitudes have been assumed to be more likely to use physical force to control their wives, regardless of their wives’ attitudes. Some of the studies mentioned above, in spite of their focus on the effects of gender attitudes on husband-to-wife assault, neither explicitly include wives’ gender
attitudes in their analyses nor explore the interaction between husbands’ and wives’ gender attitudes. In a model for predicting physical spousal abuse, for example, Smith (1990) only included the husband’s socio-economic status and his gender attitudes. If the woman’s attitude is not formally specified, and any mismatch in the couple’s gender attitude is not fully delineated, the association between a man’s gender traditionalism and husband-to-wife violence is assumed to be the same for all husbands. This implicit assumption, however, contradicts previous authors’ assertions that traditionally minded husbands use violence to control their wives when their wives do not behave according to their expectations.

The same logic also applies to the association between wives’ gender attitudes and the risk of husband-to-wife physical assault. If a husband were to hold egalitarian gender attitudes, a non-traditional gender attitude in his wife would not constitute a risk factor because the husband would not be expecting his wife to comply with traditional gender norms. Consequently, there would be no motivation for the husband to use violence. Thus, the efforts of previous studies to characterize the gender attitudes of the husband or wife as risk factors per se may have been misplaced. This article argues that it is rather the interaction between husbands’ and wives’ gender attitudes that affects rates of husband-to-wife violence; family processes are not only determined by an individual’s characteristics but also by how individuals interact with each other. In one study relevant to this point, DeMaris, Benson, Fox, Hill, and Van Wyk (2003) examined the interaction effect of husbands’ and wives’ gender attitudes on domestic violence in the United States. The authors found that couples comprising a non-traditional wife and a traditional husband had a significantly higher risk of intense male-to-female violence than couples in which both partners held non-traditional gender attitudes. The present study will add to this area of research by demonstrating that “gender value mismatch” constitutes a second mechanism of husband-to-wife violence, in addition to “gender traditionalism.”

**Hypotheses of the Current Study**

Three hypotheses regarding the relationship between the gender attitudes of a husband and wife and the risk of husband-to-wife physical assault can be derived from the above literature review. In contrast to the hypotheses examined in most previous studies, which emphasize the effects on domestic violence of either the husband’s or the wife’s gender attitudes, this study examines the interaction effect between the husband’s and the wife’s gender attitudes.

**Interaction effect hypothesis:** The magnitude of the association between gender attitudes and husband-to-wife physical assault is moderated by the spouse’s gender attitude.

The interaction effect hypothesis states that the magnitude of the association between the husband’s gender attitudes and the risk of husband-to-wife physical assault is significantly different for couples in which the wife holds non-traditional
rather than traditional gender attitudes. Similarly, the magnitude of the association between the wife’s gender attitudes and the risk of husband-to-wife physical assault is also significantly different for couples in which the husband holds traditional rather than non-traditional gender attitudes. Based on the interaction effect hypothesis, two conditional effect hypotheses are derived.

**First conditional effect hypothesis:** A husband’s gender traditionalism is positively correlated with the risk of husband-to-wife physical assault only if the wife does not hold traditional gender attitudes.

This conditional effect hypothesis extends from the interaction effect hypothesis. For wives who have traditional gender attitudes, we argue that the risk of husband-to-wife physical assault should not vary with the husband’s gender attitude. However, for wives who have non-traditional gender attitudes, the risk of husband-to-wife physical assault increases according to the husbands’ level of gender traditionalism.

**Second conditional effect hypothesis:** A wife’s gender non-traditionalism is positively correlated with the risk of husband-to-wife physical assault only if the husband subscribes to traditional gender attitudes.

Similarly, we hypothesize that the risk of husband-to-wife physical assault is not associated with a wife’s gender attitudes in cases where the husband holds non-traditional gender attitudes. However, the risk of violence increases for non-traditional wives coupled with traditional husbands. Therefore, these combined hypotheses predict that the couples with the highest risk of violence are those comprising traditional husbands and non-traditional wives.

**Context of the Current Study: Hong Kong**

Since the early 2000s, media coverage of high-profile domestic violence cases has raised public concern over this issue in Hong Kong. The Domestic and Cohabitation Relationships Violence Ordinance in Hong Kong was amended in 2008 and 2009 in response to rising public concern. Meanwhile, an emerging body of literature has examined the structural determinants and behavioral correlates of spousal violence in Chinese population samples, including resources, immigrant status, power arrangements, family structures, alcohol use, and controlling behavior (Broadhurst, Bouhours, & Bacon-Shone, 2012; K. L. Chan, 2004; Cheung & Choi, 2013; Choi, Cheung, & Cheung, 2012; Tang, 1994, 1999a, 1999b; X. Xu, Campbell, & Zhu, 2001). A number of more recent studies have focused on context-specific correlates of wife abuse, including in-law conflicts and the perception of face-saving in the Chinese population (K. L. Chan, Brownridge, Tiwari, Fong, & Leung, 2008). However, whether couples’ gender attitudes—either independently or interactively—affect the risk of husband-to-wife physical assault in Chinese societies has seldom been empirically examined.
Hong Kong is an appropriate analytical site to test our stated hypotheses for several reasons. This former British colony has undergone rapid modernization and Westernization over the past five decades and has seen considerable improvements in the status of women, particularly with respect to their educational attainment and labor force participation (Mak, 2012; Ngo, 2012). In 1986, 13.0% of men and 9.4% of women had received post-secondary education. This gap has since narrowed continuously; in 2006, the figures for men and women were 24.8% and 21.4%, respectively (Hong Kong Census and Statistics Department, 2014). As a result of increasing educational opportunities for women, the female labor participation rate has risen, the income gap between men and women has narrowed, and more women have taken up managerial and professional positions in the workplace (Ngo, 2012). The labor force participation rate for women aged 30-34 increased from 55.4% in 1986 to 79.7% in 2009 (Hong Kong Census and Statistics Department, 2014). Yet, occupational segregation still exists: In 2007, only 21.9% of workers in the transport and storage industry were women, compared with 67.3% in the community, social, and personal services industry (Hong Kong Census and Statistics Department, 2014). Professional workers and managers are still predominantly male (66.8%), but the gender gap is narrowing. Furthermore, men and women who hold professional and managerial positions have a similar income level. In short, there has been a considerable improvement in women’s status in the public sphere, although gender stereotypes are still evident in occupational choices. The continuing improvement in women’s status in the economic realm has also led to a change in people’s perceptions of women’s roles in other spheres (H. M. Chan & Lee, 1995).

According to a survey conducted by the Women’s Commission (2011), men are no longer expected by most Hong Kong people to be the sole income earner for the family. While women are now expected to contribute to household income, however, the same survey revealed that more than half of the population believes that “women should focus more on family than work” (Women’s Commission, 2011, p. 7). On one hand, surveys suggest that attitudes toward gender in Hong Kong are becoming more liberal. On the other hand, traditional gender role ideology still has a strong influence on society. A household survey revealed that Hong Kong people were still “very stereotypic regarding gender relationships” (Fung & Ma, 2000, p. 67). Overall, Hong Kong’s population tended to hold attitudes favoring arrangements based on traditional gender norms. Lee (2000) also found that most people in Hong Kong thought that families suffered if women took full-time jobs. In 2008, only 38% of respondents surveyed in a representative study accepted a family arrangement whereby women were the breadwinners while men stayed at home to take care of the family (Chow & Lum, 2008). Compared with the past, therefore, the notion of women working outside the home is now more widely accepted, but the majority of people still expect women to assume traditional responsibilities within the home. As a result, division of domestic labor in Hong Kong still follows traditional patterns: Women are still responsible for most of the housework and tend to spend more time than men on domestic chores (Hong Kong Census and Statistics Department, 2003).
This gap between structural arrangements in the public sphere and norms concerning the gender roles in non-economic spheres is not unique to Hong Kong; it is also evident in some Western societies (England, 2010). Based on the patterns observed in Western societies, traditional gender attitudes in Hong Kong will probably decline over time. However, in the interim, women are likely to outpace men in adopting non-traditional gender attitudes (Bolzendahl & Myers, 2004; Brewster & Padavic, 2000). Given that a shift from traditional to non-traditional gender attitudes is currently underway in Hong Kong (Chow & Lum, 2008), and that the traditional Chinese cultural norms and modern Western influences co-exist and interact in this society (H. M. Chan & Lee, 1995; Choi, Au, et al., 2012), it is an opportune time to examine the relationship between couples’ gender attitude incompatibility and the risk of husband-to-wife physical assault. Our results will shed light on possible future trends in domestic violence, not only in Hong Kong but also in other societies undergoing transformations that are likely to affect gender attitudes, such as industrialization, cultural modernization, political democratization, and Westernization.

Method

Data

The data analyzed in this study are from a project titled “Hurting Each Other: Marital Inequality, Social Capital and Spousal Aggression in Hong Kong,” funded by the Research Grants Council of Hong Kong. For this project, a household survey was conducted in 2007 in a northwestern district of Hong Kong. The sampling frame for the survey was the Frame of Quarters maintained by the Hong Kong Census and Statistics Department. This frame is continuously updated by the government and contains the most complete and up-to-date register of residential addresses in Hong Kong. From this register, a probability sample of addresses was selected and participants were contacted via mail and home visits to make appointments for interviews. Only one of the couples in the household was randomly selected for interview if more than one couple lived in the selected quarter.

The ethical and safety procedures established by the World Health Organization (García-Moreno, Jansen, Ellsberg, Heise, & Watts, 2005) were adopted in the data collection process. Because of the sensitivity of the topic, the study was introduced as a “Study of Family Relations.” Other than the Revised Conflict Tactics Scale used in the survey, most items in the questionnaire related to different aspects of personal and family life, including migration history, demographic background, length of the relationship, household arrangements, marital satisfaction and conflict, life satisfaction, in-law relations, economic stress, and attitudes toward gender roles. Both members of the couple were contacted but interviews were conducted separately and in different time slots to ensure that the respondents had no knowledge of their spouses’ questions and answers. The interviews were conducted face-to-face by well-trained interviewers at the respondents’ home or in a safe environment. However, sensitive questions, including all questions related to
domestic violence, were listed in a separate, self-administered questionnaire. After completion, the self-administered questionnaires were placed in a sealed envelope in front of the respondent to further ensure confidentiality. This measure was designed to protect the respondents’ privacy and to maximize trust in the interviewers to encourage disclosure. The interviewers were trained to interrupt the conversation or change the topic if they suspected that a respondent’s partner could have overheard any sensitive questions. The interviewers were also instructed on safety concerns and the possibility of causing distress to respondents. In total, 871 couples (1,742 respondents) completed the survey; the response rate was 72%. To ensure the representativeness of the sample, we compared the demographic characteristics of our study population with the 2006 Hong Kong By-census, as outlined in the “Results” section.

Measures

Husband-to-wife physical assault. In this study, husband-to-wife physical assault was measured using items from the Revised Conflicts Tactics Scale (CTS2) developed by Straus, Hamby, Boney-McCoy, and Sugarman (1996). The scale used includes items from the minor physical assault subscale (i.e., throwing something, pushing, grabbing, shoving, slapping, and spanking) and from the severe physical assault subscale and injuries subscale (including kicking, biting, hitting with a fist, hitting or trying to hit with something, beating up, threatening with a gun or knife, and causing burns, sprains, bruises, small cuts, or injuries requiring medical attention or hospitalization). For each CTS2 item, the respondents were asked to indicate whether they had committed the act against their spouse and whether their spouse had committed the act against them in the past year. Data analysis revealed a noticeable discrepancy in the reporting of husband-to-wife physical assault between husbands and wives. Given that previous studies have suggested that couple data provide more accurate prevalence estimates than data based on only one member of a couple (Szinovacz & Egley, 1995), responses from both the husband and the wife were combined to construct our dependent variable of husband-to-wife physical assault. This variable is dichotomous, with “0” indicating that neither the husband nor the wife reported any incidence of physical violence, and “1” indicating either that the woman reported the use of violence against her by her partner, that the man reported using violence against his wife, or that both reported husband-to-wife violence. After crosschecking the data reported from both husbands and wives, the prevalence of husband-to-wife physical assault over the past year was 10.4% in our analytic sample. The percentage of husbands who underreported violence perpetration was 22.6%. The percentage of wives who underreported violence victimization was 20.4%.

The prevalence of husband-to-wife violence recorded in this study is higher than the rates reported in the International Violence Against Women Survey (IVAWS) 2006 Hong Kong. The latter was a telephone survey led by Broadhurst et al. (2012), which estimated the 1-year prevalence of spousal violence at approximately 1.5%. Around the same time, a territory-wide face-to-face household survey found that 1-year
prevalence of spousal violence in Hong Kong was slightly less than 10% (K. L. Chan, 2005). A previous face-to-face community survey also found a 1-year prevalence of approximately 10% (Tang, 1999b). We believe that the rates recorded in the present study are similar to those reported by K. L. Chan (2005) and Tang (1999b) but significantly higher than those found in the IVAWS (Broadhurst et al., 2012) because of the different survey methodologies used. It is possible that respondents in Hong Kong are more willing to disclose sensitive information in the setting of a face-to-face household survey than in a telephone survey.

**Gender attitude.** Husbands’ and wives’ gender attitudes were measured using a six-item scale. Respondents were asked how much they agreed with the following items relating to traditional gender expectations: “men should pay for women, even if they have the same income levels”; “men should work outside the home, while women should take care of the housework”; “women should try harder than men to avoid premarital sex”; “it is more difficult to accept women, rather than men, who get drunk”; “it is more inappropriate for a woman than a man to use the foul language”; and “a woman working as a truck driver is as ridiculous as a man knitting sweaters.” A 5-point Likert-type scale (from strongly disagree to strongly agree) was used to record the responses to each item. Responses to the items were aggregated into a composite score ranging from 0-24. The mid-point of the scale was 12 (i.e., neutral to all items); higher scores correspond to a more traditional gender attitude (Cronbach’s α = .69). Similar items were also used in other family and social surveys but, in this case, were tailored to a Hong Kong context (for a review of items used to measure gender attitude in other surveys, see Davis & Greenstein, 2009). The alpha reliability for the gender attitude scale used in this survey is comparable with similar scales used in previous studies in other social contexts (Cubbins & Vannoy, 2005; DeMaris et al., 2003; Harris et al., 2005). Factor analysis shows that all items load onto one factor. Dropping any item from the scale results in lower internal reliability (i.e., a lower Cronbach’s α score).

**Control variables.** Our analysis included several socio-demographic characteristics as control variables because these variables have been shown to correlate with both gender traditionalism (Davis & Greenstein, 2009) and domestic violence (Schumacher et al., 2001). Husbands with lower incomes and lower levels of education, for instance, have been found to be more likely to hold traditional gender attitudes and to assault their wives. Our analysis includes the following control variables: both the husband’s and the wife’s age (measured in years), their highest level of educational attainment (measured in eight ordered categories), and their income level (measured in 10 ordered categories). The husband’s and wife’s employment statuses were included as variables in the initial analysis but were subsequently dropped because they were highly correlated with the couples’ income level ($r = .83$ for husbands, $r = .88$ for wives). However, inclusion of the employment status in the models would not have altered the findings of this study.
Analytic Strategy

Couple-level data were used in this study. In line with the standard practice of previous studies using couple-level data (such as Atkinson et al., 2005; Greenstein, 1996), couples were considered the unit of analysis because the dependent variable (husband-to-wife physical assault) is a couple-level outcome, although the individual characteristics of both husbands and wives are predictors. Logistic regression models were fitted to predict the log-odds of husband-to-wife physical assault in the previous 12 months. Logit coefficients and standard errors are reported in the “Results” section. We then derived the predicted probabilities based on the results in the final models, controlling for relevant covariates at their sample means.

Cases with at least one missing value for any of the analytical variables were excluded from the sample. In total, 21 cases (2.4%) were excluded, none of which had missing values for the dependent variable. All of the excluded cases had missing values for the independent variables. We conducted multiple imputation analyses to account for missing cases in our final model. Given that the results from our final model and the conclusions we derived did not vary substantially between the imputed data and the raw data, we chose to report the results from the analysis without the imputed missing values for simplicity (results with multiple imputations are available from the authors upon request).

Results

Descriptive Statistics and Bivariate Associations

Table 1 reports the sample means and standard deviations of the variables used in our analysis. Approximately 10% of the couples in our sample had experienced husband-to-wife physical assault in the previous year. The average ages of husbands and wives in our sample were 47.2 and 40.8 years, respectively. On average, husbands and wives had attained junior secondary level education. Husbands tended to earn more than wives (median employment income was HK$8,000-HK$9,999 per month for husbands, compared with less than HK$4,000 per month for wives). The wives’ median monthly income level was substantially lower than the husbands’ in the sample, mainly because more than half of the women were either full-time homemakers, retired, unemployed, or not in the labor force for other reasons. The mean scores for husbands’ and wives’ gender attitudes were 14.4 ($SD = 2.9$) and 14.3 ($SD = 3.0$), respectively. There is no statistically significant difference between these mean scores, implying that the men and women in the sample were, on average, similarly traditional with respect to their gender attitudes (above the mid-point of the scale). In terms of the compatibility of couple gender attitudes, 39.9% of couples held the same score on the attitude scale. While 30.6% of the sampled women were more traditional than their husbands, 29.5% of the sampled husbands were more traditional than their wives.

For comparison with the district population, we analyzed 5% micro-data from the 2006 By-census provided by the Hong Kong Census and Statistics Department. All
Violence Against Women never-married, divorced, widowed, and non-Chinese residents were excluded from the By-census sample. For the Chinese men and women who were married, the mean ages were 47.8 and 43.4 years, respectively. The average education level attained in the population was Secondary 3 (junior secondary level) for both men and women. According to the By-census data, the median income for married men and women in 2006 was HK$8,500 and HK$0, respectively. Women’s income was low because 57.9% of married women in the district population were not employed. The sample characteristics of our couple data are therefore similar to the characteristics recorded in the By-census.

### Results of the Logistic Regression Models

Table 2 reports the results of the logistic regression models predicting husband-to-wife physical assault in the previous year. Of the control variables, the wife’s age and the husband’s income were negatively and significantly correlated with the log-odds of husband-to-wife physical assault across all four models. Couples comprising older wives and husbands with a higher income were less likely to have experienced husband-to-wife physical assault in the preceding year. In Model 1, in which only the husband’s gender attitude and control variables were included, the husband’s gender attitude was positively associated with the log-odds of physical assault, but the association was only marginally significant at the $p < .1$ level (logit coefficient $= 0.078$, $p = .055$). In Model 2, in which the husband’s gender attitude was not controlled, the

### Table 1. Descriptive Statistics and Bivariate Associations: Couples’ Gender Attitudes, Demographic Variables, and Husband-to-Wife Physical Assault ($n = 850$).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Whole sample ($n = 850$)</th>
<th>Physical assault reported ($n = 88$)</th>
<th>No physical assault reported ($n = 762$)</th>
<th>$p$ value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender attitudes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Husband’s gender attitude</td>
<td>14.4 (2.9)</td>
<td>15.1</td>
<td>14.3</td>
<td>.022*</td>
</tr>
<tr>
<td>Wife’s gender attitude</td>
<td>14.3 (3.0)</td>
<td>14.5</td>
<td>14.3</td>
<td>.499</td>
</tr>
<tr>
<td><strong>Demographic variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Husband’s age</td>
<td>47.2 (10.0)</td>
<td>45.9</td>
<td>47.3</td>
<td>.197</td>
</tr>
<tr>
<td>Wife’s age</td>
<td>40.8 (9.0)</td>
<td>38.2</td>
<td>41.0</td>
<td>.005**</td>
</tr>
<tr>
<td>Husband’s education</td>
<td>3.1 (1.2)</td>
<td>3.0</td>
<td>3.1</td>
<td>.574</td>
</tr>
<tr>
<td>Wife’s education</td>
<td>3.0 (1.1)</td>
<td>3.0</td>
<td>3.0</td>
<td>.939</td>
</tr>
<tr>
<td>Husband’s income</td>
<td>3.6 (2.1)</td>
<td>2.9</td>
<td>3.7</td>
<td>.001***</td>
</tr>
<tr>
<td>Wife’s income</td>
<td>1.1 (1.8)</td>
<td>1.0</td>
<td>1.1</td>
<td>.626</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01. ***p < .001.
wife’s gender attitude was not significantly correlated with the log-odds of physical assault at the $p < .05$ level. However, when both the husband’s and the wife’s gender attitudes were included, the husband’s gender attitude was positively associated with the incidence of husband-to-wife physical assault (logit coefficient = 0.122, $p < .05$), whereas the wife’s gender attitude was negatively but not significantly related to husband-to-wife physical assault ($p > .05$).

In Model 4, we considered the interaction effect of couples’ gender attitudes on husband-to-wife physical assault. We found that the association between the couple’s gender attitudes and husband-to-wife physical assault was moderated by the interaction term of the couple’s gender attitude (logit coefficient for the interaction term = −0.031, $p < .05$). Thus, our results support the interaction effect hypothesis.

**Interpreting the Interaction Effect**

To illustrate the interaction effect in Model 4, the interaction effect of couples’ gender attitudes on husband-to-wife physical assault is plotted in Figures 1 and 2. In Figure 1, the line represents the size of the logit coefficient of the husband’s gender

---

**Table 2. Logistic Regression Models: Couples’ Gender Attitudes and Husband-to-Wife Physical Assault in the Previous Year.**

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$ (SE)</td>
<td>$B$ (SE)</td>
<td>$B$ (SE)</td>
<td>$B$ (SE)</td>
</tr>
<tr>
<td>Husband’s gender attitude</td>
<td>0.078 (0.041)</td>
<td>0.122** (0.053)</td>
<td>0.568*** (0.200)</td>
<td></td>
</tr>
<tr>
<td>Wife’s gender attitude</td>
<td>0.010 (0.038)</td>
<td>-0.065 (0.050)</td>
<td>0.410* (0.205)</td>
<td></td>
</tr>
<tr>
<td>Husband’s Gender Attitude × Wife’s Gender Attitude</td>
<td>-0.031* (0.013)</td>
<td>-0.037 (0.134)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Husband’s age</td>
<td>0.000 (0.019)</td>
<td>0.002 (0.019)</td>
<td>-0.001 (0.019)</td>
<td>-0.004 (0.020)</td>
</tr>
<tr>
<td>Wife’s age</td>
<td>-0.064*** (0.022)</td>
<td>-0.067*** (0.022)</td>
<td>-0.064*** (0.022)</td>
<td>-0.063*** (0.023)</td>
</tr>
<tr>
<td>Husband’s education</td>
<td>-0.003 (0.131)</td>
<td>-0.018 (0.131)</td>
<td>-0.008 (0.132)</td>
<td>-0.037 (0.134)</td>
</tr>
<tr>
<td>Wife’s education</td>
<td>0.079 (0.135)</td>
<td>0.067 (0.135)</td>
<td>0.079 (0.136)</td>
<td>0.055 (0.136)</td>
</tr>
<tr>
<td>Husband’s income</td>
<td>-0.286*** (0.064)</td>
<td>-0.291*** (0.064)</td>
<td>-0.289*** (0.064)</td>
<td>-0.297*** (0.065)</td>
</tr>
<tr>
<td>Wife’s income</td>
<td>-0.038 (0.072)</td>
<td>-0.056 (0.072)</td>
<td>-0.043 (0.073)</td>
<td>-0.034 (0.073)</td>
</tr>
<tr>
<td>Intercept</td>
<td>0.030 (1.116)</td>
<td>1.136 (1.093)</td>
<td>0.356 (1.144)</td>
<td>-5.965* (2.987)</td>
</tr>
<tr>
<td>$n$</td>
<td>850</td>
<td>850</td>
<td>850</td>
<td>850</td>
</tr>
<tr>
<td>(McFadden’s) Pseudo-$R^2$</td>
<td>.066</td>
<td>.059</td>
<td>.069</td>
<td>.079</td>
</tr>
<tr>
<td>Likelihood-Ratio Chi-squares (df)</td>
<td>37.19 (7)***</td>
<td>33.51 (7)***</td>
<td>38.87 (8)***</td>
<td>44.85 (9)***</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01. ***p < .001.
traditionalism on husband-to-wife physical assault for different levels of the wife’s gender traditionalism. The shaded area indicates the 95% confidence interval for the size of the logit coefficient. As illustrated in Figure 1, the association between the husband’s gender attitude and husband-to-wife physical assault is only positive and statistically significant at the $p < .05$ level when wives score at or below the mean value for gender traditionalism. The association becomes statistically non-significant when wives have relatively more traditional gender attitudes (i.e., the wife’s gender traditionalism score is 15 or above). This finding supports our first conditional effect hypothesis that a man’s gender traditionalism is positively correlated with husband-to-wife violence only if the wife does not hold traditional gender attitudes.

In Figure 2, the line represents the size of the logit coefficient indicating the magnitude of the association between a wife’s gender traditionalism and husband-to-wife physical assault under different levels of the husband’s gender traditionalism. The shaded area indicates the 95% confidence interval for the logit coefficient. As illustrated in Figure 2, the association between a woman’s gender attitudes and husband-to-wife physical assault is only negative and statistically significant at the $p < .05$ level when the husband has a traditional gender attitude (approximately 1 standard deviation above the mean score). The association becomes statistically non-significant when husbands are not very traditional (i.e., the husband’s gender traditionalism score is 16 or below). This finding is consistent with our second conditional effect hypothesis that a
wife’s gender traditionalism is negatively correlated with husband-to-wife physical assault only if her husband subscribes to traditional gender attitudes. In other words, holding non-traditional gender attitudes is risky (or holding traditional gender attitudes is protective) only for wives with traditional husbands.

To clarify the implications of the model, Table 3 presents the predicted probabilities of husband-to-wife physical assault derived from the interaction effect model reported in Table 2. If a husband and wife both have relatively non-traditional gender attitudes (i.e., the gender attitude score is 11, which is approximately 1 standard deviation below the sample mean), the probability of physical assault is low (5.5%) compared with other combinations of couples’ gender attitudes. The combination associated with the highest risk of husband-to-wife assault is a traditional husband coupled with a non-traditional wife (18.4%). By comparison, if both the husband and the wife are traditional, the risk of husband-to-wife assault is significantly lower (9.9%). This table shows the importance of taking the combined gender attitudes of the couple into consideration when predicting the prevalence of husband-to-wife violence.

**Discussion and Conclusion**

This article examines the interaction effect of husbands’ and wives’ gender attitudes on the risk of husband-to-wife physical assault in a Chinese society. Our results show that
husbands with traditional gender attitudes are, on average, more likely to perpetrate violence against their wives. However, this association is conditional upon their wives’ attitude. If wives hold traditional gender attitudes, the husbands’ gender attitudes are not significantly related to the risk of husband-to-wife physical assault. If their spouses are relatively non-traditional, however, traditional husbands are more likely to perpetrate spousal violence relative to non-traditional husbands. Similarly, non-traditional wives have a higher risk of being physically assaulted by their husbands only if their husbands are traditional.

Previous studies have held gender traditionalism as a root cause of domestic violence without further theorizing about the differential effects of men’s and women’s gender attitudes, and the interaction between a husband’s and wife’s attitudes in the relationship. Our study shows that while men’s and women’s gender attitudes are important in determining the risk of violence, the real risk lies in couples with gender value mismatch. Thus, our study uncovers gender values mismatch as the second mechanism linking gender attitudes to spousal violence. Ignorance of this second mechanism may have resulted in past quantitative studies finding non-significant relationships between gender values and spousal violence. Models that do not include the interaction term, for example, overestimate the prevalence of husband-to-wife violence for couples in which both the husband and the wife hold traditional attitudes. Our findings highlight the fact that spousal violence, like all other intimate dynamics, is both a process and an outcome of interactions between the partners. The results obtained echo studies on the interaction effect of couples’ gender attitudes on family outcomes (Greenstein, 1996) and, therefore, connect the domestic violence literature with a broader framework that is gaining popularity in the field of family sociology. This study also demonstrates the strength of couple-level data that encompass attitudinal information from both husbands and wives, thereby providing a rich resource for researchers to explore the effects of value homogamy (or heterogamy/incompatibility) on relationship dynamics and outcomes.

With economic modernization and the rise of individualism, previously published literature has documented an increasing trend in marriage homogamy, and

### Table 3. Comparing Predicted Probabilities of Husband-to-Wife Physical Assault With Different Levels of Husband’s and Wife’s Gender Attitudes.

<table>
<thead>
<tr>
<th>Husband’s gender attitude</th>
<th>11</th>
<th>14</th>
<th>17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wife’s gender attitude</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>5.5%</td>
<td>10.3%</td>
<td>18.4%</td>
</tr>
<tr>
<td>14</td>
<td>6.7%</td>
<td>9.6%</td>
<td>13.6%</td>
</tr>
<tr>
<td>17</td>
<td>8.1%</td>
<td>8.9%</td>
<td>9.9%</td>
</tr>
</tbody>
</table>

Note. Predicted probabilities are derived from the final model in Table 2. Other covariates are held at their sample means.
heterogamous couples are often hypothesized to have poorer relationship quality (Schwartz, 2013). However, in the literature on assortative mating, attention has predominantly been paid to status homogamy based on race, ethnicity, and educational level, while value homogamy (or heterogamy) is not as well studied. At the couple level, the findings of this study suggest that attitudinal dissimilarity and mismatch (with respect to gender attitudes) may be related to poorer relationship outcomes. These findings also highlight the potential benefits of premarital counseling that allows couples to examine their expectations of one another. At the macroscopic level, the findings also indicate that the general social attitudes of a particular society may determine whether a husband’s gender attitude is a significant risk factor for husband-to-wife violence. In societies undergoing transition, gender value mismatch may be more likely to occur. This may partially explain the inconsistent results regarding gender attitudes as correlates of husband-to-wife violence across different contexts.

This study also contributes to the literature on domestic violence by showing that gender attitudes are related to the risk of domestic violence in the Chinese context. It provides an empirical foundation for the use of couples’ gender attitudes in combination to predict the risk of domestic violence for couples in the Chinese context. This prediction, in turn, could help policy makers design better-targeted prevention and intervention programs.

Previous studies have already found that other proximal or behavioral risk factors, such as controlling behavior and emotional abuse, are strongly correlated with the risk of intimate physical violence against women (e.g., Broadhurst et al., 2012). As a distal risk factor, the magnitude of association between gender attitudes and spousal violence is not as strong as the association between controlling behavior and violence. However, gender attitudes are more widely measured in general social and family surveys. Some repeated cross-sectional surveys, such as the World Values Survey and International Social Survey Programme, also cover similar items and continuously track changes in gender attitudes over time. The findings of this study help us connect the issue of spousal violence to the trend of gender attitudes. In contrast, some other important behavioral predictors, such as controlling behavior and emotional abuse, are important but may be too sensitive to be included in general population and opinion surveys.

Despite these contributions, the limitations of the study should not be overlooked. First, this study shows that the associations between couples’ gender attitudes are conditional, but we cannot generalize our findings to explain changes in the prevalence of domestic violence over time because of the nature of these cross-sectional data.

Second, the scale used in this study (CTS2) does not take into account the different contexts of violence, rendering the distinction between two discrete types of violence—common couple violence and intimate terrorism—somewhat difficult (Johnson, 1995). It remains unclear whether the analytical framework of this study is helpful in predicting the prevalence of both types of violence, which differ in their patterns and motivations. Arguably, incidents of domestic violence captured in representative household surveys predominantly represent common couple violence, which involves less systematic and less severe forms of abuse. Further studies with a more
comprehensive design and a more sophisticated conceptualization of domestic violence are needed to investigate whether couples’ gender attitudes have similar patterns of association in both common couple violence and intimate terrorism.

Declaration of Conflicting Interests
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Note
1. The ordinal forms of education and income levels were included as control variables. However, for the robustness check, different specifications were used. This involved collapsing the variables into fewer categories, inputting multiple dummy variables into the models, and converting the variables into the absolute number of school years and amount of income. The results of this study are robust to different specifications of the control variables. For parsimony, we only report results of the current model specification.

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