

## Risk factors of enacting spouse abuse in a sample of Iranian male adults

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### Abstract

**Background:** The aim of this study was to investigate the modelling of different processes that could account for the link between psychopathology, cognitive social and demographic risk factors and enacting assault by husband.

**Method:** This article reports a test using data on 230 males who participated in a family violence survey study. The sample was selected by a multiclustral sampling method from 4 different randomized regions of Tehran. All participants completed Conflict Tactic Scales, Personal and Relationship Profile, Marital Attitude Survey Questionnaire, Symptoms Checklist Inventory, Social and Demographic Measure. Logistics regression was used to estimate spouse abuse model for men.

**Results:** The findings were consistent with the theoretical model. The path from social-demographic, cognitive and psychopathological risk factors to enacting spouse abuse was demonstrated.

**Conclusion:** The implications of the findings for understanding spouse assaults, cognitive, psychopathological, social and demographic differences in male population are discussed.

**Keywords:** risk factors, enacting, spouse abuse, family, domestic violence

### Introduction

Spouse abuse is a widespread problem that occurs among all ages, genders, races, educational background and socioeconomic groups. It is now widely recognized that marital and other relationships between partners are often violent [1].

Partner abuse occurs when a person uses force to inflict injury, either emotional or physical, upon another person they have, or had a relationship with. Spouse abuse is the single largest cause of injury to women between the

ages of 14 and 44 in the United States, more than muggings, car accidents, and rapes combined. Each year between 2 million to 4 million women are battered and 2000 of these battered women will die of their injuries [2]. The rate of physical assault typically ranges from 25 to 40 percent [3].

Therefore, violence against women is an urgent public health problem with devastating consequences for women, children and families. Despite this importance, as [4] have indicated, "there is relatively little cross-national approach to family violence."

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Two types of risk factors are usually investigated in different studies: psychological and psychopathological risk factors beside social characteristic risk factors. Early psychiatric analysis of spouse battering emphasized on psychopathology, although principally on the part of victims [5]. Such reports suffered considerable criticism, in 1980s these were largely replaced by sociological analysis of domestic violence that emphasized social risk factors such as male dominance and conflict [6,7]. Many of these explicitly rejected psychopathology as a major aspect of the etiology of intimate partner violence, arguing that only a minute proportion of offenders manifested clinical level psychopathology. The belief that sociological factors were more important than psychological factors had wide acceptance among family violence researchers and formed the basis of most primary prevention and treatment programs.

More recently, however, the primacy of social risk factors has been challenged [8]. It seems that on an individual level, psychological risk factors, if not more important, are at least as important as social factors.

Straus in his recent study on dating violence in cross-national perspective [8] indicates that "there is controversy over the extent to which violence between intimate partners has its origins in the psychological characteristics such as depression and borderline personality, as compared to social characteristics of the setting or the relationship such as cultural norms permitting violence, or characteristics of the relationship such as dominance by one partner". He believes that some of the inconsistencies arise because the two types of risk factors are usually investigated in different studies. Therefore, this study aims to provide data on the issue by including both psychological and social risk factors so that they can be more readily compared.

Although several studies have mentioned the relationship between psychopathology, social risk factors and spouse abuse, there are only a

few researches that investigated processes, which have produced this relationship.

As Straus and Yodanis [9] state, "several processes are probably involved." This article tests theoretical models that incorporate three processes in spouse abuse: social norms justifying violence, psychopathology, and cognitive factors, social and demographic factors.

## Methods

### *Participants*

The subjects of the study were selected through a multiclustral sampling method. At first stage, four regions of Tehran were randomly selected as the main clusters of research. Public, entertainment centers and family courts of the 4 regions were recognized as the second-rank clusters. The final participants were selected randomly from above centers. Their age was 17 to 50 years ( $M= 37.76$  years,  $SD= 10.11$  years).

Researchers had been introduced to these centers. They invited couples to participate in research after describing the aim of the study. Data related to males is presented.

### *Instruments*

*1. Conflict Tactic Scales-Revised (CTS-2):* The CTS is the most widely used instrument for obtaining data on partner violence, and has sometimes been described as the standard instrument. It is the only instrument designed to differentiate between Minor and Severe aggression between partners and to have explicit procedures for doing so for each of the four aspects of partner violence. It is also the only standard instrument that provides data on the chronicity for each aspect of partner violence. The feature of the CTS is that it obtains separate data on both victimization and penetration [10]. Straus et al [10] reported that the reliability of CTS2 ranges from 0.79 to 0.95. All the scales had good internal consistency: negotiation ( $\alpha=0.86$ ), psychological aggression ( $\alpha=0.79$ ), physical assault ( $\alpha=0.86$ ), sexual coercion ( $\alpha=0.87$ ) and

Sample	n	Assault	Injury	Sex coercion	Negotiation	Psy Aggression
<i>Students</i>						
All students	6774	0.88	0.89	0.82	0.88	0.74
Male	1942	0.93	0.92	0.84	0.88	0.78
Female	4828	0.86	0.87	0.78	0.87	0.72
<i>Sites</i>						
M	33	0.87	0.87	0.81	0.85	0.73
SD	33	0.06	0.09	0.11	0.07	0.07
Range	33	0.72-0.95	0.57-0.98	0.44-0.91	0.63-0.97	0.53-0.83

Table 1. Alpha coefficient of reliability by gender.

injury ( $\alpha=0.95$ ) [10].

In a recent study the sample for psychometric data of CTS2 included students from 33 universities ( $N=7.179$ ). Table 1 shows the levels of reliability [11].

Straus [11] has reported 3 sets of evidence of validity for CTS2: 1) Correlation of Assault and Injury: The question of whether students at universities with high rates of students assaulting a dating partner also have high rates of injury inflicted by a dating partner is highly suited for examining construct validity, as defined above because, by definition, they are related. The correlations of 0.77 and 0.75 between assault and injury was, as expected, lower than the zero order correlation, and is a good evidence for construct validity. 2) Correlation of Corporal Punishment with Partner Violence: the larger the proportion of students who reported experiencing corporal punishment, the higher the percentage who had hit a dating partner in the past year. The correlations of 0.44 and 0.43 are much higher than the correlations typically found for the relation between childhood corporal punishment and violence as an adult. This result is consistent with many American studies, including prospective studies, which show that corporal punishment as a child is a risk factor for violence and therefore provides further data on the cross-cultural construct validity of the CTS2 Physical Assault Scale. 3) Dominance in Dating Relationships: the more dating relationships are characterized by the dominance of one partner, the greater the probability of violence. The correlations of 0.44 and 0.39

provide an additional bit of evidence for the construct validity of the CTS2 Physical Assault scale. This study presents alpha coefficients for all scales in significant level, from 0.79 for psychological aggression, physical assault 0.87, injury 0.89, sexual coercion 0.89, and the most for negotiation 0.91.

Research data of CTS-2 was used to divide the samples in to two groups (enacted and none enacted) based on calculated CTS-2 cut off point ( $SD\pm 2$ ). Then these two groups were compared based on their responses to research instruments [11].

*2. The Personal and Relationships Profile (PRP):* The PRP is a 23-scale instrument designed explicitly for research on partner violence [12]. One of the 23 scales is adapted from the Reynolds form of the Marlowe-Crowne Social Desirability Scale [13]. The 22 risk factor scales were selected based on review of research on the correlates of couple violence and theories concerning the etiology of couple violence, with attention to including scales that measure variables to test psychological theories and sociological theories of partner violence. The scales in the PRP are:

- Personal or Intrapsychic Scales
- ASP (Antisocial Personality Symptoms)
- BOR (Borderline Personality Symptoms)
- CH (Criminal History)
- DEP (Depression Symptoms)
- GHM (Gender Hostility to Men)
- GHW (Gender Hostility to Women)
- NH (Neglect History)

PTS (Post-Traumatic Stress Disorder)  
 SD (Social Desirability)  
 SI (Social Integration)  
 SUB (Substance Abuse)  
 STR (Stressful Conditions)  
 SAH (Sexual Abuse History)  
 VA (Violence Approval)  
 Relationship Scales (scales which include items that refer to behavior towards or beliefs about the partner):  
 AM (Anger Management)  
 CP (Communication Problems)  
 CON (Conflict)  
 DOM (Dominance)  
 JEL (Jealousy)  
 NA (Negative Attribution)  
 RC (Relationship Commitment)  
 RD (Relationship Distress)  
 The design of the PRP follows four principles.

The items are almost all brief descriptions about the respondent or their partner such as “I have bad dreams about terrible things that have happened to me” (PTS symptoms scale) or “My partner doesn’t have enough sense to make important decisions” (Dominances scale).

The respondent is asked the degree to which agree that they are like statement.

Four response categories are used.

The items are at the 5th to 6th grade reading level.

#### *Reliability and Validity*

Considering the brevity of the scales, all 21 of the PRP substantive scales have at least a minimally adequate level of internal consistency reliability (0.60 to 0.69) for the student sample. About one-third has what we consider good reliability (0.70 to 0.79), and another third have high reliability (0.80 to 0.87). The mean reliability was 0.75. For the forensic sample, the reliability coefficients were slightly lower, with a mean of 0.70 and range of 0.54 to 0.84 [12].

Construct validity is suggested by the fact that almost all the scales differentiate signifi-

cantly between men and women, and that for the most part these differences are consistent with previous research on gender differences. Comparison of the mean scores of male students with male domestic violence offenders found significantly higher scores at the 0.05 level for the offenders on 92% (11 of the 12) of the substantive scales available for the male students. It suggests that, after adjusting the scores for social desirability response bias, the PRP is valid for use with domestic violence offenders [12].

In the present study, the reliability coefficients for all scales were higher than those presented by Straus and Mouradian [12], ranging from 0.68 to 0.87. The correlations between scores of SCL-90-R and PRP scores as the evidence for PRP construct validity were at significant level.

3- Symptom Check List (SCL-90-R): In this study, psychopathology was assessed by the Symptom Check List (SCL-90-R) inventory [14]. The SCL-90-R is a 90-item self-report symptom inventory and is designed primarily to reflect the psychological symptom patterns of psychiatric and medical patients. A preliminary version of the scale was introduced by Derogatis and his colleagues and was based on early clinical experiences and psychometric analysis was modified and validated in the present revised form. Each item of the “90” is rated on a 5-point scale of distress (0-4), ranging from “not-at-all” at one pole to “extremely” at the other. The “90” is scored and interpreted in terms of 9 primary symptom dimensions and 3 global indices of distress. These are labelled:

- I. Somatization
- II. Obsessive-Compulsive
- III. Interpersonal Sensitivity
- IV. Depression
- V. Anxiety
- VI. Hostility
- VII. Phobic Anxiety
- VIII. Paranoid Ideation
- IX. Psychoticism

X. Global Severity Index (GSI)

XI. Positive Symptom Distress Index (PSDI)

XII. Positive Symptom Total (PST)

Reliability measures concerning the 9 primary symptom dimensions of the SCL-90-R are quite satisfactory ranging between a low of 0.77 for psychoticism to a high of 0.90 for Depression. About the validation of SCL-90-R, Derogatis [14] indicates that "by demonstrating positive correlations between scale values and external criteria felt to be good reflection of the construct, validation is initiated." Several studies have contrasted the SCL-90-R with other established multidimensional measures of psychopathology. Derogatis [14] contrasted the dimension scores of the "90" with scores from the MMPI. Each dimension has its highest correlation with a like contrast, except in the case of O-C for which there is no directly comparable MMPI scale. Results of the study reflected a high degree of convergent validity for the "90" which represent a very important step in the validation program.

Houssaini et al [15] based on Global Severity Index of psychopathology symptom reported high reliability (0/86) for SCL-90-R. Noorbala et al [16] presented evidences of sensitivity (0/080.9) and specificity (0/092.7) for SCL-90-R.

4. *Marital Attitude Survey (MAS)*: At the present study MAS was administered for assessing the attributions and expectations of subjects as psychological factors [17]. MAS is designed to evaluate specific content of attributions in couple relationships and contains eight scales:

1. Perceived ability of couple to change relationship.
2. Expectancy of improvement in the relationship.
3. Attribution of causality to own behavior.
4. Attribution of causality to own personality.
5. Attribution of causality to spouse's behavior.
6. Attribution of causality to spouse's person-

ality.

7. Attribution of malicious intent to spouse.

8. Attribution of lack of love to spouse.

The Alpha coefficients for scales vary from 58% to 93%. The mean reliability coefficient in a sample of Iranian population was 78% [18]. Baucom and Epestrein (1990) reported acceptable evidences for validity of MAS [17].

Participants also determined their age, job, educational and socio economic status, residence status (low level, middle and high level) as demographic factors and violence approval as a social factor.

## Results

As presented in Table 2 logistic regression using enacting violence as dependent variable, found nine significant independent variables (low level residence status, violence approval, depression symptoms, sexual abuse history, gender hostility, dominance, relationship distress, and attribution of lack of love to spouse).

This research focused on understanding the process by which psychopathology, cognitive and demographic risk factors lead to spouse violence in male participants.

Figure 1 displays the results of Table 2 in the form of a path diagram. The diagram follows the conventions for path analysis based on OLS regression, but because they are based on the logistic regression results, the numbers on the path are the odds ratios. Only paths that are statistically significant at the  $P < 0.05$  level (one-tailed test) are shown. Although the odds ratios that appear on some of these paths may seem small, the effects accumulate across each level of the independent variable.

Figure 1 diagrams the model estimated for men, using assaults by husbands as the dependent variable. The upper path shows a direct relationship between residence status and enacting husband to wife violence. The odds ratio of 0.335 shows that each increase of one category in the three-category residence index multiplies the odds ratio by 0.335 or 35%.

Independent variables	Odds ratios for			
	Relationship/interpersonal risk factors in PRP		Marital attitude factor in MAs	Enacting violence
	Conflict	Relationship distress	Attribution of lack of love to spouse	
Residence status (low level)	0.847	0.514	0.898	0.335**
Violence approval (social factor)	0.369*	0.825	0.648	0.847
Depression symptoms (in PRP)	0.588	1.071*	0.951*	1.071
Sexual abuse history (in PRP)	0.935*	1.060*	1.001	1.079*
Gender hostility to women (in PRP)	0.517	0.893**	0.953**	1.003
Anxiety (in SCL-90-R)	0.979	1.033	0.901	1.033*
Conflict (in PRP)	-	-	-	1.078*
Relationship distress (in PRP)	-	-	-	0.930*
Attribution of lack of love to spouse (in MAS)	-	-	-	0.930**
Model $\chi^2$	31.21*	34.21*	22.51*	32.27*

N=230, \*P≤0.05, \*\*P≤0.01, \*\*\*P≤0.001

Table 2. Regression models testing direct and indirect paths.

Moving down figure 1 reveals a significant indirect path from approval of violence to Dominance. The odds ratios on these paths show that each increase of 1 unit of violence Approval multiplies the odds of Dominance by 0.369 or 36%. Similarly, the odds of Enacting Violence are multiplied by 1.078 for each increase of 1 unit in Dominance. On the other hand, the significant odds ratio of 0.369 on the path from Violence Approval to Dominance, coupled with the odds ratio of 1.078 for the path from Dominance to Enacting Violence.

The role of Relationship Distress in enacting violence is supported by the paths linking Depression symptoms to enacting violence through Relationship Distress. Each increase of one category in Depression Symptoms in this study multiplies the odds of being high in Relationship Distress by 1.071.

Attribution of lack of love to spouse was the third mediating variable which related Depression Symptoms (OR=0.951) and Gender Hostility (OR=0.953) to enacting violence.

Anxiety had a direct relationship to enacting violence. Each increase of this index multiplied the odds ratio by 1.033.

### Conclusion

The results of the current study suggest that spouse abuse in male adults is associated with

the presence of multiple risk factors. The most important risk factor domains that may contribute to this process include: 1) Individual psychopathology, and psychological characteristics. 2) Relationship and social characteristics (e.g. violence approval) and some demographic variables (low socio-economic status).

One might have to consider that the influence of above risk factors may be modified or changed by some mediating factors (like cognitive variables) in marital relationships that may encourage the development of spouse abuse.

The model presented at figure 1 assumes that there are a series of paths which may act as effective determinants for violence of males against their wives.

As we found, residence status of the family was directly related to spousal assault. Consistent with many other studies [19] it had a significant role in spouse abuse.

Barnet & Hamberger [20] reported that family assaulted men are more depressed than non-family assaulted persons. As we found, depression can simply intensify the distress in marital relationships and cause violence against wife. Dutton [21] indicates that assaulting men have significantly different personality characteristics including high levels of hostility, and depression. Their increased agitation is associated with over-controlling strategies and more rela-

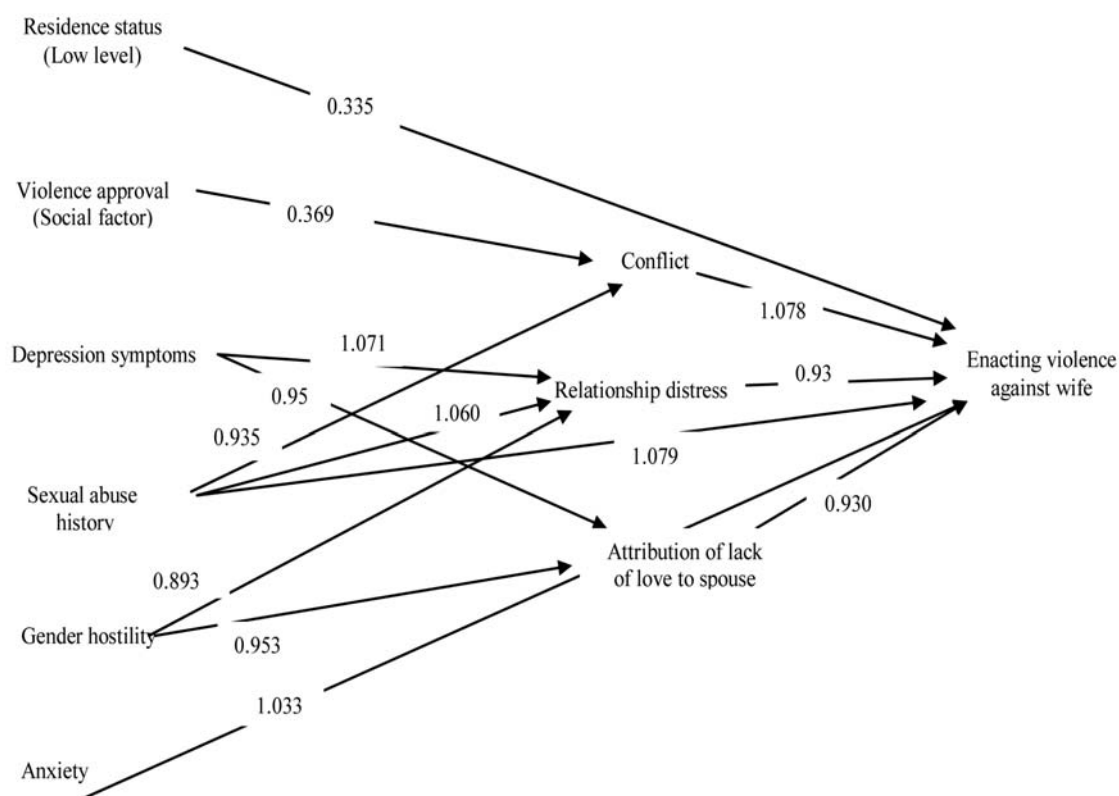


Fig. 1. Path diagram for enacting violence against wife based on logistic regression.

relationship distress [22].

Foo & Margolin [23] have indicated the role of experiencing sexual abuse in future marital aggression of men. The effect of sexual abuse history at the present study was demonstrated directly and indirectly (by the paths from dominance and relationship distress) to enacting violence.

The results of this research suggest that the reduction in psychopathology (depression and anxiety) of subjects would have a beneficial impact on spouse abuse. As Straus and Yonadis [9] indicated mood disorders account for more use of mental health services than any other psychiatric disorders.

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