

Patriarchal Ideology and Wife-Assault: A Meta-Analytic Review

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Using the framework of patriarchal theory, the present meta-analytic review examined the predicted relation between wife assault and the maintenance of a patriarchal ideology. This relationship was evaluated using three measures of patriarchal ideology: (1) attitudes toward violence, (2) gender attitudes, and (3) gender schemas. Overall, assaultive husbands reported more positive attitudes toward marital violence and lower scores on masculine and feminine gender schema scales than nonassaultive husbands. Methodological factors accounted for the significant heterogeneity among the gender attitude effect estimates for men. A nonsignificant average effect in the males' gender attitude emerged in studies which used husbands' self-report data and case-control comparison groups. In contrast to men, assaulted wives held more feminine gender schema and tended to exhibit more liberal gender attitudes than nonassaulted wives across studies. These meta-analytic findings offer limited support for the ideological component of the patriarchal theory of wife assault and are discussed with respect to their theoretical and methodological implications.

KEY WORDS: patriarchal ideology; wife-assault; gender schemas and role; violence attitudes.

INTRODUCTION

Feminist explanations of violence against women have emphasized a patriarchal system of "social relations among males which creates and maintains the domination of women" (Anderson, 1988, p. 8). Although different feminist perspectives exist about the development and maintenance

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of patriarchy, there is consensus that patriarchy, as a system of social organization, and its concomitant ideology perpetuate male violence against women (Pagelow, 1984; Smith, 1990; Walby, 1990; Yllo and Bograd, 1988).

Scholarly assessments of the relationship between patriarchy ideology and wife assault have offered one of two conclusions. On the one hand, reviewers have argued that assaultive husbands accept a patriarchal conception of the family and maintain a traditional gender belief system (Pagelow, 1984). On the other hand, others argued that due to the limited research, the formulation of any general conclusion would be difficult (Edelson *et al.*, 1985). It is clear that the degree to which either a husband's or a wife's patriarchal ideology can predict marital violence is still in dispute. In fact, the inconsistency of findings across wife assault studies led Hotaling and Sugarman (1986) to recommended that future reviews apply meta-analytic techniques for evaluating a research literature (Cooper and Hedges, 1994; Hedges and Olkin, 1985; Hunter and Schmidt, 1990; Light and Pillemer, 1984; Rosenthal, 1984). Based on the diverse conclusions that have emerged among narrative reviews (e.g., Edelson *et al.*, 1985; Hotaling and Sugarman, 1986; Pagelow, 1984; Stark and Flitcraft, 1988) and Hotaling and Sugarman's (1986) recommendation, the present study is a meta-analytic review of propositions derived from the ideological component of patriarchy theory (Dobash and Dobash, 1979; Kurz, 1989; Schechter, 1982). [Hotaling and Sugarman (1986) did not refer to the cluster of traditional gender attitudes and traits as representing a patriarchy ideology. They referred to these variables as representing sex-role expectations. The nomenclature of patriarchal ideology was applied by Smith (1990).]

PATRIARCHY IDEOLOGY AND WIFE ASSAULT

A patriarchal social structure is a system of social organization that creates and maintains male domination over women. Relations among and between men and women are understood to be shaped within a context of a patriarchal social organization (Anderson, 1988). Patriarchy ideology refers to the accompanying set of beliefs that justifies and maintains such social organization. According to Millett, patriarchy ideology is the multi-layered belief system that maintains and reproduces male authority "through all . . . political, social and economic forms . . ." (Millett, 1969, p. 25). Within this belief system, use of force is one way in which male dominance can be supported. This violence is justified on the premise that men have recognized power and authority over women. Many researchers of wife abuse speculate that acceptance of traditional gender ideals and expectations about women serves to maintain subordination of women and

is a primary source of violence against women (Dobash and Dobash, 1979; Kurz, 1989; Schechter, 1982).

In their review of the wife assault literature, Hotaling and Sugarman (1986) examined eight studies that tested the relationship between husbands' violence toward their partners and their gender expectations. Only two studies reported that traditional gender expectations were significantly associated with marital violence. A similar pattern of findings was revealed between the wife's traditional gender expectations and the likelihood of being assaulted. Overall, these findings offered limited support for the ideological component of a patriarchal approach to wife assault.

In a subsequent analysis of male patriarchal attitudes, Smith (1990) reexamined Hotaling and Sugarman's (1986) conclusions and argued that the reviewers needed to disentangle measures that assessed gender traits (e.g., BSRI, PAQ) from measures which assessed gender attitudes (e.g., Attitude Toward Women Scale [AWS: Spence and Helmreich, 1972; Spence *et al.*, 1973]). Smith (1990) posited that gender trait measures were inappropriate to assess patriarchal ideology because they measured personality traits, not attitudes or norms. Thus, Hotaling and Sugarman's (1986) review mistakenly combined studies that evaluated two divergent constructs. Focusing on the gender and violence research, Smith (1990) concluded that the relationship between husbands' marital violence and their patriarchal ideology was stronger than implied by Hotaling and Sugarman (1986).

ASSESSMENT OF PATRIARCHY IDEOLOGY

Millet (1969) viewed patriarchal ideology as composed of three interrelated components: temperament, status and role. Status was designated as the "political component, role as the sociological and temperament as the psychological" (p. 26). Furthermore, the interdependence of the components "is unquestionable and they form a chain" (p. 26). Our assessment of patriarchy ideology is based on Millet's approach and focuses on the interconnectedness between the social and psychological components. The political component refers to structural aspects of patriarchy, and its inclusion is beyond the scope of this paper.

In this article we are interested in the extent to which patriarchy ideology shapes the experiences of individuals in terms of domestic violence. Three distinct sets of measures are used to assess patriarchy ideology: attitudes toward violence, gender attitudes, and measures of gender schema.

Violence

Within a patriarchal theory framework, men are socialized "to be macho and are accustomed to using violence to settle disputes" (Walby, 1990, p. 134). The operationalization of this construct, thus, requires the assessment of those attitudes "that specifically condone wife beating" (Smith, 1990, p. 261) and other forms of violence against women (e.g., rape). Essentially, the high approval of the use of violence within an intimate relationship (e.g., Greenblatt, 1983) can be regarded as the context surrounding imposition of male authority. Consequently, violent husbands would be predicted to exhibit a higher approval levels for the use of violence within intimate relationships than nonviolent husbands would.

Gender Attitudes

The second component of patriarchy ideology is attitudes toward gender roles and prescribed behaviors. Traditional expectations about women include obedience, deference, and loyalty with regard to issues in all spheres of their lives. It is presumed that adherence to traditional gender roles "perpetuates a structure of male dominance and female subordination" (Ickes, 1993, p. 81).

Gender Schema

The third component, gender schema, is a measure of the extent an individual's self-description embodies cultural definitions of gender appropriate attributes (Bem, 1993). The phrase "gender schema" is used in place of the traditional constructs of gender orientation and gender traits. Gender schema denotes more than a static final product and includes the process of gender construction (Bem, 1993). The gender schema component is based on the assumption that cultural definitions are embedded in "discourses and social institutions," and that these cultural definitions reproduce male power (Bem, 1993, p. 6). According to Bem (1984), the Bem Sex-Role Inventory (BSRI) was developed specifically to "assess the extent to which the culture's definition of gender appropriateness is incorporated into an individual's self-description" (p. 194). Spence (1984, 1993) argued that scales such as the BSRI and the Personal Attribute Questionnaire (PAQ) needed to go further and assess more restricted gender-related domains (Spence, Helmreich and Stapp, 1974). Specific domains suggested were the male domain of instrumentality and the female domain of expressivity. The common theme expressed is a belief that the extent to which

males and females conform to cultural requirements is another means by which unequal power relationships between men and women are maintained.

META-ANALYTIC HYPOTHESES

Based on the ideological component of patriarchy theory, three hypotheses guided this meta-analysis with respect to males. First, assaultive husbands will report more positive attitudes toward use of violence in their interactions with women (e.g., perceiving the violence as more normative, the man as justified for using violence, and the wife as responsible for her own victimization) than nonassaultive husbands. Second, assaultive husbands will hold more traditional or conventional gender attitudes (e.g., married woman should primarily take care of the home and not earn money in a job outside the house) than nonassaultive husbands. Third, assaultive husbands will be more likely to be classified as possessing a traditional masculine gender schema (in contrast to feminine, androgynous, or undifferentiated gender orientations) than nonassaultive husbands. This third hypothesis implies that assaultive husbands will possess higher levels of masculinity and lower levels of femininity than nonassaultive husbands.

Although patriarchy theory has placed greater emphasis on the socialization processes which lead men to subordinate women, an examination of similar issues with respect to women seems essential for two reasons. The first reason focuses on the theoretical contention that the same socialization processes which influence men creates and maintains women in a subordinate role. Consequently, while men are socialized to value instrumental goals (e.g., task accomplishment, dominance, power attainment), society propels women toward interdependence or nurturant goals (e.g., caregiving, cooperation). The second reason for critically evaluating these issues involves the lack of specificity of previous reviews. In one review, Hotaling and Sugarman (1986) suggested that female characteristics are poor at discriminating between victimized and nonvictimized female partners. Because they did not use meta-analytic procedures, this may overstate the case. For example, of the six studies that attempted to differentiate assaulted and nonassaulted wives on gender traits and attitudes measures, three studies reported significant differences in the predicted direction (Hotaling and Sugarman, 1986). However, the three nonsignificant findings may have also been in the predicted direction, suggesting a different picture than that posed by Hotaling and Sugarman (1986). Thus, a quantitative or meta-analytic review is required to begin to clarify these empirical inconsistencies.

An evaluation of patriarchy theory, consequently, requires an assessment of the ability of these ideology measures to discriminate victimized wives from nonvictimized wives. Two specific hypotheses are examined. First, assaulted wives will hold more traditional gender attitudes than nonassaulted wives. Second, assaulted wives will more likely be classified as possessing a traditional feminine gender schema than nonvictimized wives. Assaulted wives, then, will report higher levels of femininity and lower levels of masculinity than nonvictimized women.

The present meta-analytic review evaluates five hypotheses which examine the ideological component of patriarchy theory at the individual level. To the extent that these hypotheses are confirmed by the data, we will indicate the level of support of this theoretical perspective as an explanation of domestic violence.

METHODS

Location of Research Studies

Several strategies were used to locate the studies within the research domain of domestic violence. First, a computerized database search of *Psychological Abstracts* and *Sociological Abstracts* was carried out. The conjunction of two sets of key words directed this search. The first set included the terms, "family violence," "domestic violence," "wife assault," "wife abuse," and "spouse abuse." The second set entailed the terms "sex-role attitudes," "gender attitudes," "gender orientation," "gender identity," and the conjunction of "attitudes" and "violence." The intersection of these two keywords sets produced 140 and 74 references from *Psychological Abstracts* and *Sociological Abstracts*, respectively. Second, we conducted a manual search of the *Family Violence and Sexual Assault Bulletin* database and the reference lists of major review articles (e.g., Hotaling and Sugarman, 1986; Pagelow, 1984). Third, we examined the reference section from each located study for other potential studies.

Criteria for Inclusion of the Study in the Meta-analysis

To be included in the present meta-analysis, a study had to meet several criteria. First, the study had to have a primary focus on physical violence between spouses. Research on dating violence was not included because these studies often did not disaggregate by gender of respondent or the respondent's role in the violence (see Sugarman and Hotaling, 1989,

for review). Also, studies that focused on sexual violence or psychological abuse within marriage were excluded on an *à priori* basis; however, the computerized literature search located no empirical research that examined the relationship between these forms of violence and the components of a patriarchal ideology. Second, the study must have assessed the relationship between patriarchal ideology and wife assault. This required the measurement of patriarchal ideology and wife assault and an evaluation of the relation between these two variables. Of the located references from all sources, 33 studies met these two criteria. We were able to obtain copies of all except one study, and sufficient statistical information was presented for computation of effect sizes for 29 of these studies. These studies are marked by an asterisk in the reference list.

Coding of the Studies

Two researchers familiar with the family violence literature independently read and coded each research study. For each study, the appropriate statistical information was obtained in order to calculate Cohen's (1977) d effect size estimate. The relevant statistical information for computing effect size estimates were group means, standard deviations, and sample sizes. Calculation of the Cohen's (1977) d effect size estimates involved the subtraction of the mean of one group (e.g., nonviolent husbands) from the mean of the second group (e.g., violent husbands) and dividing this difference by the pooled standard deviation of the two groups.

A total of 55 effect size estimates was calculated. Each effect was coded so a positive effect size estimate indicated support for the patriarchal hypothesis. For example, the effect size calculated from a study reporting a greater acceptance among violent spouses than nonviolent spouses of the use of violence within marriage, was coded as a positive estimate. Each study also was coded on a series of potential moderator variables (e.g., year of publication, study source, type of comparison group, and type of scale used to assess patriarchal ideology). These moderator analyses are particular important given the mixed research quality in this literature. The inter-coder agreement was very high across these variables, ranging from 92% to 100%. In those few cases in which disagreement occurred, a discussion between the authors culminated in a final decision. The effect size estimates are presented in the Appendix (Table AI). All effect size computations and data analyses were conducted using D-STAT (Johnson, 1989).

RESULTS

Analysis Strategy

Evaluation of the three hypotheses contrasting assaultive and nonassaultive husbands was conducted first and was followed by an examination of the two hypotheses that compared assaulted and nonassaulted wives (see Table I). To evaluate each of these hypotheses, a three-step analytic strategy was used. The first step was to obtain and statistically evaluate an overall effect size estimate for a set of studies. This involved the computation of the average d effect size estimate (weighted for sample size) and the 95% confidence interval associated with this average d statistic. The average d estimate provided the mean effect size across studies. Averaging across effect size estimates overemphasized those studies that reported multiple de-

Table I. Summary of Average Effect Sizes for Components of Patriarchal Ideology Comparing Assaultive and Nonassaultive Husbands and Comparing Assaulted and Nonassaulted Wives

Component	Mean $d \pm 95\% \text{ CI}^a$	N	Homogeneity Test
Assaultive versus Nonassaultive husbands			
Violence attitudes	.70 ± .08	10	10.78
Attitudes toward women	.54 ± .08	10	206.56*
Gender orientation	-.20 ± .09	14	224.20*
Masculine Scales	-.14 ± .18	4	29.50*
Femininity Scales	.22 ± .17	4	2.71
Androgyny Measures	-.70 ± .15	4	108.43*
Bipolar Scales	.30 ± .27	2	1.65
Assaulted versus Nonassaulted Wives			
Attitudes toward women	-.36 ± .14	5	110.19*
Gender orientation	.38 ± .08	16	33.21*
Masculinity Scales	.35 ± .14	5	7.38
Femininity Scales	.28 ± .14	5	10.53*
Androgyny Measures	.51 ± .17	4	5.23
Bipolar Scales	.62 ± .29	2	3.04

^aPositive effects represent the direction predicted by patriarchy theory. Violent spouses are predicted to exhibit more positive attitudes toward violence, more conservative attitudes toward women, and a more traditional gender orientation. With respect to the specific indicators of gender orientation, positive effects denote that assaultive husbands reported higher masculinity scores, lower femininity scores, and lower androgyny scores. Assaulted wives were expected to report more conservative attitudes toward women and a more traditional gender orientation. With respect to specific indicators of gender orientation, positive effects denote that assaulted wives reported higher femininity scores, lower masculinity scores, and lower androgyny scores.

* $p < .05$, effect sizes are heterogeneous.

pendent measures. To correct for this problem of nonindependence, effect estimates from the same study were averaged and then the average d statistic across studies was recomputed. Findings of these study-level analyses agreed with the effect-level analyses and thus provided no additional information. Consequently, only the effect-level findings are presented.

The homogeneity of the average d estimate also was evaluated. The Q_w statistic was used to evaluate how adequately a set of effects was described by the average d statistic. A significant Q_w indicates a large amount of variance among the effects and, therefore, leads to the rejection of the assumption of effect size homogeneity. If the assumption was rejected, then a moderator analysis was conducted to account for the variability among the effect estimates.

The second step, a moderator or categorical analysis, involved the examination of study or design variables (e.g., type of comparison group used in the study, year of publication) which could account for the observed variance among the observed effect sizes. A test of the homogeneity between the effect categories, Q_b , indicated whether one set of effect sizes was significantly different from a second effect size set. Greater confidence in these between-category effects (Q_b) could be held when the homogeneity assumption within each categories, Q_w , was accepted. The third analysis step was an outlier analysis. This strategy was used only when the analysis of potential moderator variables did not account for the significant variation among the effect size estimates. The procedure involved reducing the set of effect sizes by elimination of effects contributing to the heterogeneity. After each elimination, the average d and the homogeneity of the estimates were evaluated. The limitation of this strategy is that it inflates a Type-I error.

Assaultive versus Nonassaultive Husbands

Attitudes Toward Violence

Five studies containing 10 effects were used to evaluate the hypothesis that assaultive husbands have more positive attitudes toward the use of violence in their marital interactions than nonassaultive husbands. The analysis yielded a significant effect size in the predicted direction (mean $d = .71$, $p < .001$) and a nonsignificant test of homogeneity ($Q_w(9) = 10.78$, $p = .29$). This finding supports the hypothesis that assaultive men report more positive attitudes toward the use of violence than nonassaultive husbands.

Gender Attitudes

Ten studies consisting of 10 effects assessed the hypothesis that assaultive husbands have more traditional gender attitudes than nonassaultive husbands. These studies showed a moderate effect size (mean $d = 0.54$, $p < .001$) in the predicted direction. However, the test of homogeneity indicated that the composite effect size did not adequately describe the studies ($Q_w(9) = 206.56$, $p < .001$).

To account for the heterogeneity of the average effect estimate, two categorical analyses were conducted. The results are presented in Table II. The first categorical analysis compared studies in which husbands reported on their own gender attitudes ("self-reports") with studies that relied on the wives' reports of their husbands' gender attitudes ("partner-reports"). The analysis revealed a significant difference between the two groups ($Q_b(1) = 110.42$, $p < .001$). Partner-report studies exhibited larger effect sizes (mean $d = .80$) than self-report studies did (mean $d = -.14$). When female partners reported about their spouses' attitudes about women, a larger relationship was found between these attitudes and wife assault than if husbands reported on their own attitudes regarding women.

A second categorical analysis found a significant difference between studies using a "normative" comparison group versus a "case-control" comparison group ($Q_b(1) = 10.94$, $p = .001$). Studies with a "normative" comparison group used scores of violent males and compared them to scores from a sample of nonviolent males obtained for the study. Studies that used a "case-control" comparison group compared scores of violent males to those of the male sample which had been used to develop the scale norms. Studies using a "normative" comparison group showed a greater tendency to support the hypothesis (mean $d = .72$) compared to studies with a "case-control" comparison group (mean $d = .44$). However, tests of within-cell homogeneity (Q_w) were significant indicating that the variation among these effect size estimates is greater than would be expected on the basis of chance alone.

Further examination of the joint influence of these two methodological factors involved grouping the ten studies into four categories based on the referent of the scale (self versus partner) and the type of comparison group (normative versus case-control). These results, presented in Table III, suggest several points. First, a comparison between self-reports of violent husbands to self-reports on nonviolent husbands showed a nonsignificant average effect size (mean $d = .11$, $p = .26$) and a nonsignificant test of homogeneity ($Q_w(5) = 8.42$, $p = .13$). These findings do not support the hypothesis that violent husbands have significantly more conservative attitudes towards women than nonviolent husbands. Second, when husbands'

Table II. Categorical Analysis of Husband's Gender Attitude Effects Using Scale Referent and Type of Comparison Group as a Moderator Variable

Moderator	N	$d \pm 95\% \text{ CI}$	Within Category		Between Category	
			Test of Homogeneity	Q_w	p	Q_b
Referent of Scale						
Self	7	-0.14 ± 0.15	20.42	.005	110.42	<.001
Partner	3	+0.80 ± 0.09	75.72	<.001		
Comparison Group Type						
Case-control Group	8	+0.44 ± 0.10	22.80	.004	10.94	.001
Normative Group	2	+0.72 ± 0.12	172.82	<.001		

Table III. Estimates of Husband's Gender Attitude Effects Aggregating Studies based on Scale Referent and Type of Comparison Group

Referent of Scale	Type of Comparison Group	Mean		Within Category Test of Homogeneity	
		N	$d \pm 95\% \text{ CI}$	Q_w	p
Self	Normative	1	-0.41 ± 0.21	N/A	
Self	Case-control	6	$+0.11 \pm 0.20$	8.43	ns
Partner	Case-control	2	$+0.53 \pm 0.12$	1.63	ns
Partner	Normative	1	$+1.43 \pm 0.18$	N/A	

attitudes were reported by their partners in case-control studies, a significant and more substantial effect size resulted (mean $d = .53$, $p < .001$). Third, the largest effect size estimates occurred when use of a normative comparison group was combined with having women report on their partners' attitudes ($d = 1.43$, $p < .001$). Finally, examination of the confidence intervals indicated that these four categories of studies were significantly different from one another. These findings suggest that the two methodological factors independently impact on the observed relationship between husband's gender attitudes and marital violence.

Gender Schema

The third hypothesis predicted that assaultive husbands would be more likely to possess a traditional masculine gender orientation than nonassaultive husbands. Fourteen effects from seven studies showed an overall weak mean effect size in the opposite direction than predicted (mean $d = -.20$, $p < .001$). A test of homogeneity revealed significant variation among the effects ($Q_w(13) = 224.20$, $p < .001$). Since multiple measures of gender schema were used within the same study, a portion of this variance may have been a function of the assessment of divergent dimensions.

A categorical analysis of four gender schema dimensions was conducted: masculinity, femininity, bipolar, and androgyny (See Table I). Results indicated significant variation among the four dimensions of gender orientation ($Q_b(3) = 81.92$, $p < .001$) suggesting further analysis for each dimension separately. In contrast to nonassaultive men, assaultive men

were expected to score higher on masculinity scales, lower on femininity scales, lower on androgyny scales, and more masculine on bipolar scales.

Four effects from four studies assessed a masculinity construct and yielded an overall weak mean effect in the direction contrary to prediction (mean $d = -.14$, $p = .13$). The test of homogeneity was significant. Due to the small number of effects, an outlier analysis was conducted. The test of homogeneity was nonsignificant after the elimination of one effect ($Q_w(2) = 4.34$, $p = .11$). The overall mean effect size increased slightly (mean $d = -.30$, $p < .001$) and remained in the direction opposite to prediction. The eliminated effect was unique in its use of the Comrey Personality Scale (Comrey and Schiebel, 1983) while the other three effects used either the BSRI or the PAQ measures of masculinity. Overall, assaultive husbands obtained lower scores on masculinity scales than nonassaultive husbands.

Four studies containing four effects were used to evaluate a femininity construct. The overall effect was weak (mean $d = .22$, $p < .01$) and the test of homogeneity was nonsignificant ($Q_w(3) = 2.71$, $p = .44$). Findings support the prediction that assaultive husbands would report lower levels of a feminine schema than nonassaultive husbands.

Four effects from three studies examined the hypothesis that assaultive husbands would be less androgynous than nonassaultive spouses. Results showed a moderately strong effect size in the opposite direction (mean $d = -.70$, $p < .001$). The test of homogeneity indicated significant variability among the effects. An outlier analysis led to elimination of a single effect and resulted in a nonsignificant test of homogeneity ($Q_w(2) = .16$, $p = .92$). The eliminated effect was unique in that it involved a continuous measure of androgyny (Kalin, 1979) instead of using a median split classification system (Bem, 1977). Elimination of this effect was associated with a dramatic decrease in the average mean effect size (mean $d = -.08$, $p = .29$). The findings suggest that assaultive husbands are not less androgynous than nonassaultive husbands.

Together, these findings suggest that violent husbands are more likely to exhibit an undifferentiated gender orientation (low scores on both masculinity and femininity scales). To evaluate this hypothesis directly, the three studies that used the median-split cross-classification system were reviewed and rescored to generate effect size estimates to assess this hypothesis. The analysis showed a moderate effect in the predicted direction (mean $d = .41$, $p < .001$) with a nonsignificant test of homogeneity ($Q_w(2) = 3.42$, $p = .18$). Findings support the hypothesis that assaultive husbands are more likely to have an undifferentiated gender orientation than nonassaultive husbands.

Finally, two studies examined the hypothesis that assaultive husbands would have higher masculinity scores on bipolar masculinity-femininity scales than nonassaultive husbands. This prediction was supported with a weak, but significant effect (mean $d = .30$, $p = .03$). The test of homogeneity was not significant which indicated little variability between the effects ($Q_w(1) = 1.65$, $p = .20$).

Assaulted Versus Nonassaulted Wives

Gender Attitudes

Five studies, consisting of five effects, tested the hypothesis that battered women would have more traditional gender attitudes than nonbattered women. The analysis yielded an average effect size in the opposite direction from the prediction (mean $d = -.36$, $p < .001$), and a significant test of homogeneity ($Q_w(3) = 110.19$, $p < .001$). The type of gender attitude scale (Attitude toward Women Scale versus other gender attitude scales) was used as a between-group factor in a categorical analysis. Studies using the Attitude toward Women Scale (AWS) (mean $d = -.67$) revealed stronger effect sizes ($Q_b(1) = 62.32$, $p < .001$) than studies using other attitude scales (mean $d = -.55$) such as Mason's (1975) or Kalin and Tilby's (1978) scales. An evaluation of the effect size estimates for studies that did not use the AWS indicated a significant homogeneity test ($Q_w(2) = 47.18$, $p < .001$). A further examination of these effects revealed a single outlier ($d = 1.68$, $p < .001$) whose elimination resulted in a nonsignificant average effect size ($d = -.18$, $p = .26$) and a nonsignificant test of homogeneity ($Q_w(1) = .62$, $p < .43$). Based on these findings, battered wives report more liberal attitudes toward women than do nonbattered women. However, this effect may be moderated by methodological factors such as the type of gender attitude scale used to assess traditional attitudes.

Gender Schema

Eight studies evaluated the prediction that battered women would exhibit a more traditional feminine gender schema in contrast to nonbattered women. Sixteen effects showed a weak to moderate mean effect size in the predicted direction (mean $d = .38$, $p < .001$). A test of homogeneity revealed a significant amount of between-study variation ($Q_w(15) = 33.21$, $p = .004$). As noted with the husband data, this variance may be a function of different gender schema dimensions. A categorical analysis of the four

gender schema dimensions was conducted (see Table IV). Specifically, it was expected that in contrast to nonassaulted wives, assaulted wives would score higher on femininity scales, lower on masculinity and androgyny scales, and more feminine on bipolar scales. The average effect sizes associated with each of the gender schema scales tended to be significantly different from each other ($Q_b(3) = 7.04, p = .07$). Within each of these four dimensions, the average effect size was significant and in the predicted direction. Furthermore, tests of homogeneity were nonsignificant in all but the femininity scales. This heterogeneity was attributed to the use of normative data for comparative purposes ($Q_b(1) = 4.70, p = .03$). The two studies which used normative comparison data exhibited significantly larger effect sizes (mean $d = .35, p < .05$) than the three studies in which case-control groups were used (mean $d = .11, p = \text{ns}$). Effect size estimates for the bipolar scales and androgyny scales showed stronger average effect estimates than effect size estimates with either the masculinity or femininity scales. Overall, results indicate that assaulted wives maintain a more "traditional" gender schema or identity than nonassaulted wives.

DISCUSSION

The present meta-analytic review evaluated a series of hypotheses derived from the ideological component of patriarchy theory regarding correlates of wife assault. One set of hypotheses predicted that maritally violent men, in contrast to maritally nonviolent men, would report more positive attitudes toward the use of marital violence, more conservative gender attitudes and a more traditional masculine schema. These hypotheses were partially supported. Studies with measures of violence attitudes showed a moderate to strong effect in support of patriarchal theory. The effect estimates were consistent across studies. However, the gender attitudes studies revealed a weak to moderate effect exhibiting significant inter-study variability. The analysis of gender schema measures uncovered effect sizes that were weak and in the opposite direction. In contrast to nonviolent husbands, maritally violent men tended to be underrepresented in the "traditional male gender" category and overrepresented in the undifferentiated gender orientation category.

A second set of hypotheses focused on ideological factors which discriminated assaulted and nonassaulted wives. It was expected that assaulted women would report a traditional feminine gender schema and more conservative gender attitudes than nonassaulted women would. While a significant but weak effect was found for the gender schema hypothesis, the gender attitude findings did not seem to align with prediction. It was sug-

gested that the women's attitude effects were affected by methodological factors.

Attitudes Towards Violence

The meta-analytic findings on husbands' attitudes toward violence pose a number of issues that have to be confronted by family violence theorists, in general, and patriarchy theorists, in particular. The first issue involves the attitude-behavior relationship. While patriarchy theory would predict a direct relationship between violence attitudes and violent behavior, the causal direction of this relationship is difficult to ascertain because of the reliance on nonexperimental research designs. Consequently, three models may adequately describe the relationship between the husband's use of physical violence toward his wife and his attitude toward this violence. Some theorists propose that these attitudes have causal priority over the violent behavior (Riggs and O'Leary, 1989). Others opt for the conceptualization that attitude and behavior are reflective of the cultural standard suggesting a correlational, not causal, relationship between these variables (Dibble and Straus, 1980). Finally, these findings can represent a behavior-to-attitude causal connection (Bem, 1972). This final model would maintain that a patriarchal belief structure can constitute a form of post-hoc accountmaking used to protect self-esteem or maintain self-consistency.

Although each of these three attitude-behavior models can be supported by the present findings, future research needs to focus on testing these competing perspectives within the domestic violence context. Researchers need to examine the direct impact of altering men's violence attitudes on their violent behavior. Furthermore, other specific hypotheses may be generated from the attitude-behavior literature (Eagly and Chaiken, 1992). For example, if one assumes that attitudes derived from direct experience are more predictive of behavior (Fazio and Zanna, 1981), one would predict that attitudes towards violence of men who witnessed or experienced family violence as a child will be more predictive of their violent behavior towards their partners than attitudes of men who did not witness violence.

Gender Attitudes

Smith (1990) posited that gender attitude scales will better discriminate between violent and nonviolent husbands than other gender-related scales (e.g., BSRI). This prediction was not supported based on two sources

of evidence: (1) the considerable variability of male gender attitude effect estimates, and (2) the unexpected findings from the analysis of gender attitudes of assaulted versus nonassaulted wives.

With respect to the relationship between marital violence and male gender attitudes, methodological differences among the studies accounted for a significant proportion of the effect variance, suggesting that these observed effects may be artifactual. More extreme effects emerged with studies that used normative scale data for comparative purposes rather than a group of maritally nonviolent men. Use of normative data for comparative purposes in this context may be inappropriate for two reasons. First, since the normative control group's scores were obtained during different sociohistorical periods, observed effects may be attributed to historical differences. Second, composition of the normative sample makes it difficult to draw strong inferences regarding differences with maritally violent males. For example, the normative sample may have been composed of men who are different on demographic factors such as age and marital status (i.e., unmarried college males) than the maritally violent sample.

A second methodological factor contributing to the gender attitude findings was the informant of the husband's beliefs. Studies that relied on the male's own report of his attitude exhibited nonsignificant weak effects. In contrast, when a wife served as the informant of her husband's gender attitude, a significant moderate effect was uncovered. This finding raises the critical issue of the accuracy of these reports. On the one hand, husbands' self-reports may offer a more accurate portrait of their attitudes because they lack the additional level of inference associated with wives' reports. On the other hand, wives' reports may be deemed more valid because the men may be motivated to self-present themselves as holding more "appropriate" liberal attitudes.

While both husbands' and wives' perspectives are important and offer qualitatively different views of marital violence, the present meta-analytic findings do not offer supporting evidence for the husbands' self-presentation hypothesis since one would expect this hypothesis to apply to other socially undesirable attitudinal domains as well. Yet, assaultive husbands are more willing to report holding more positive attitudes toward marital violence than nonassaultive husbands are. This husband's self-presentation hypothesis, consequently, has a difficult time accommodating both sets of results. In addition, researchers have had limited success at discriminating assaultive and nonassaultive husbands on measures of social desirability (Browning, 1984; Dutton and Hemphill, 1992; Goldstein and Rosenbaum, 1985). While the self-presentation hypothesis is not supported by the husbands' violence attitude findings, evidence of husbands' self-justification of

their violence has been noted in the attribution literature (Holtzworth-Munroe, 1992).

Applying the self-presentation argument to the domestic context also is limited in that the violent male is not the only account-maker (Harvey *et al.*, 1990; Lyman and Scott, 1970) of the incident. Self-protective and self-consistency motives can also be used to explain the assaulted women's more negative reporting of their husbands' attitudes. Since an account's coherence has an influence on the account's success to explain an event to the self and others (Read, 1992), the facts of the account have to exhibit an internal consistency. Consequently, women attempt to maintain a level of consistency between their experiences of the men's behaviors and their inferences about the men's attitudes regarding women and their role in society. Victimized women, therefore, could bring their perceptions of the perpetrator's attitudes into agreement with the observed behavior.

The second set of evidence against Smith's (1990) hypothesis of the usefulness of gender attitude scales also focuses on discriminating between assaulted and nonassaulted wives. Based on patriarchy theory, we expected that battered wives would have more conservative gender attitudes than nonbattered wives. Counter to expectations, battered wives were more likely to hold more liberal gender attitudes on the AWS scale. Two interpretations can be attributed to this finding. First, one can infer that women who hold a relatively liberal gender attitude are at-risk of domestic assault. This view can be integrated within a patriarchy framework. For example, Yllo (1983) has suggested that those women who hold more conservative attitudes are less likely to be victims of their spouse's violence because the men will not have to maintain their control through force. Alternatively, these more liberal attitudes may have been the result of attempts to struggle with battering experiences (e.g., escaping to shelters, making it on one's own) and subsequent empowerment.

Gender Schema

The research that examined the impact of one's gender schema on wife assault revealed an unexpected finding that points to the role of undifferentiated gender identities in discriminating assaultive husbands from nonassaultive ones. These "undifferentiated" husbands are capable of bringing only a minimal level of instrumental and expressive capabilities to marital interactions (Ickes, 1985). Consequently, these men have relatively limited interpersonal resources to use in maintaining the relationship and reducing conflict. Alternatively, undifferentiated males may develop a de-

fensive masculinity which involves adopting a behavioral pattern that is aligned with their conception of society's image of a "macho" man (Rosenbaum, 1986). In contrast to the men's data, assaulted wives are more likely to possess a "traditional" feminine gender identities; although care in not overgeneralizing this finding needs to be taken given the limited effect found on the femininity scale. Still, while research generally suggests the positive relationship between marital partners' femininity scores and marital satisfaction (Baucom *et al.*, 1990), this need not always be the case. In maritally distressed relationships, a traditional feminine wife has a lower likelihood of terminating a negative communication sequence with her spouse (Burger and Jacobson, 1979; Sayers and Baucom, 1989 as cited in Baucom *et al.*, 1990). Thus, potential for the relationship to cycle toward a violent conclusion may result from this combination of female interpersonal persistence and male social ineptness.

General Implications

Overall, the present findings give partial support for the ideological component of patriarchy theory when assessed at the individual level. While assaultive males are more accepting of the use of violence against their wives, evidence linking this violence to issues of "traditional" gender attitudes or gender schema is limited. Essentially, the only component of patriarchy ideology that consistently predicts wife assault is the man's attitude toward violence. Given inconsistencies among these observed effects, further research needs to replicate and investigate these findings and conclusions with other forms of family and nonfamily violence.

Several limitations of the present analysis do restrict the confidence one can have in these findings. First, one has to face the issue of construct validity. Although the measures used in this meta-analysis have been posited to assess components of a patriarchal ideology (e.g., Bem, 1993; Smith, 1990), this assumption may be questionable. One may reasonably argue that these measures do not clearly articulate an adequate assessment of this construct. Researchers have noted only a small relationship between measures of gender attitude and gender orientation (see Archer, 1989 for review). Similarly, gender orientation measures may be more related to measures of self-esteem. Masculine and androgynous individuals report higher levels of self-esteem than feminine or undifferentiated individuals do (Cate and Sugawara, 1986; Gauthier and Kjervik, 1982; Whitley and Gridley, 1993). Consequently, differences between violent and nonviolent husbands and between victimized and nonvictimized wives on gender orientation measures may reflect differ-

ences in self-esteem which have been noted in the marital violence literature (Hotaling and Sugarman, 1986). Researchers need to direct more attention at specifying this construct at both a theoretical and methodological level.

A second limitation centers on the restricted sample of studies. All of the included studies were conducted in North American countries, that are characterized by a patriarchal social organization, as are most modern societies. This makes the patriarchal social structure and its associated ideology more connative of a constant rather than a variable. Such limitation suggests important directions for future research. First, subsequent meta-analytic evaluations of patriarchy theory should focus on societal and familial structures which are hypothesized to maintain violence against women. Second, future research on the patriarchal ideology and domestic violence relationship needs to have a cross-cultural or comparative perspective which attempts to evaluate the theory's predictions more directly (e.g., Levinson, 1989; Yllo and Straus, 1990).

Beyond the theoretical issues, the present meta-analysis raises methodological concerns as well. Clearly, varying methodologies can have a tremendous influence on effect size estimates. Specifically, the type of scale used, the type of comparison group used, and the type of violence group used are factors which seem to influence the results. Because of the limited number of available studies, only preliminary conclusions can be made regarding moderating factors.

These methodological differences raise the question of how to improve or expand our design and methodology in this research area. First, the need for multiple measures of theoretical constructs (Campbell and Fiske, 1959; Houts *et al.*, 1986; Webb *et al.*, 1966) seems essential, both for measures of intimate violence and for its risk factors. The assessment of risk factors (e.g., personality trait or attitude) through the combined use of several methodologies (e.g., an actor's self-report measure, a partner's other-report measure of the actor, and, even, a naive observer's assessment of the actor) could clarify many of the conflicting findings in the literature. One need not assume, however, that these various methods would lead to convergence of findings (Moskowitz, 1986).

A second design issue requiring attention involves the comparison group employed in the study. For example, contrasting of the scores of a group of battering husbands to scores of unmarried college males on whom the scale was normed a decade earlier suffers from a number of threats to internal validity (see Campbell and Stanley, 1966; Cook and Campbell, 1979). One cannot ascertain whether the intimate violence variable is associated with the risk factor construct, the varying historical periods, or some other extraneous variable. Similarly, observed differences

between a group of alcoholic men and a group of maritally violent men on a risk factor measure may be associated with presence of alcoholism, presence of marital violence or both. Consequently, use of an inappropriate comparison group may obscure more than clarify.

One final implication of the present findings is the need for further meta-analytic work in the area of family violence. Given the effect which this domain of research may have on public policy, it is essential that future literature reviews use strategies that systematically integrate the research literature. However, these reviews require that specific summary statistics be presented by the original researcher. This places the burden on primary researchers to recognize that their findings may be incorporated into meta-analytic reviews. They need to present adequate statistical information (e.g., zero-order correlation matrix, cell means, standard deviations, and sample sizes) so effect sizes can be estimated even when the effect is evaluated as statistically nonsignificant.

Overall, our meta-analytic review found limited support for the ideological component of patriarchy theory. Only two of the five predicted effects received support. First, assaultive husbands were more likely to perceive use of marital violence as acceptable than nonassaultive husbands. Second, assaulted wives were more likely to be classified as having a "traditional" feminine gender schema than their nonassaulted counterparts. Contrary to prediction, assaultive husbands were more likely to be classified as having an "undifferentiated" gender schema than nonviolent husbands. When the impact of methodological factors on the findings were taken into account, violent husbands held similar attitudes towards women as nonviolent husbands did. Finally, assaulted women unexpectedly held more liberal gender role attitudes than did nonassaulted women.

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APPENDIX

Table A1. Summary of Effect Sizes, Sample Sizes, and Scales Used

Author (Year)	<i>d</i>	<i>N</i>	Scale ^a
Examination of husband perpetration			
Violence attitudes			
Browning (1983)	.53	54	ASB
Browning (1983)	.57	54	AVS
Eisikovitz <i>et al.</i> (1991)	.85	120	IBWB
Saunders <i>et al.</i> (1987)	.69	719	IBWB-Wife gains from beating
Saunders <i>et al.</i> (1987)	.67	719	IBWB-Help should be given
Saunders <i>et al.</i> (1987)	.69	719	IBWB-Offender responsible
Saunders <i>et al.</i> (1987)	.85	719	IBWB-Offender should be punished
Saunders <i>et al.</i> (1987)	.91	719	IBWB-Beating is justified
Smith (1991)	.67	604	AVS
Barnett and Sweet (1986)	.26	144	HYPER
Gender attitudes			
Browning (1983)	.19	54	SRS
Carrillo (1984)	.49	58	ATW
Crossman <i>et al.</i> (1990)	- .32	115	SRE
Johnston (1988)	.17	61	ATW
LaViolette <i>et al.</i> (1985)	-.41	808	ATW
Margolin (1988)	.15	45	MASON
Neidig <i>et al.</i> (1986)	.37	77	ATW
Rosenbaum and O'Leary (1981)	.80	92	ATW
Smith (1991)	.52	604	PBI
Walker (1984)	1.43	677	ATW
Gender orientation			
Masculinity measures			
Barnett <i>et al.</i> (1982)	1.21	60	COMREY
Coleman <i>et al.</i> (1980)	.00	60	BSRI
La Violette <i>et al.</i> (1984)	-.29	576	BSRI
Rosenbaum (1986) 2611	-.84	47	PAQ
Femininity measures			
Barnett and Sweet (1986)	.04	143	CPI-Modified ^b
Coleman <i>et al.</i> (1980)	.00	60	BSRI
LaViolette <i>et al.</i> (1984)	.29	576	BSRI
Rosenbaum (1986)	.49	47	PAQ
Androgyny measures^c			
Coleman <i>et al.</i> (1980)	.00	60	BSRI/Bem
LaViolette <i>et al.</i> (1984)	-1.69	576	BSRI/Kalin
LaViolette <i>et al.</i> (1984)	-.10	576	BSRI/Bem
Rosenbaum (1986)	-.03	47	PAQ/Bem
Bi-polar measures			
Barnett and Hamberger (1992)	.22	177	CPI
Caesar (1985)	.73	34	MMPI

Examination of wife victimization				
Gender attitude				
Apt and Hurlbert (1993)	1.68	120	SRI	
Hofeller (1980)	-.27	100	TRAD	
Margolin (1988)	.04	45	MASON	
Rosenbaum and O'Leary (1981)	-.51	92	ATW	
Walker (1984)	-.70	624	ATW	
Gender orientation				
Masculinity measures				
Coleman <i>et al.</i> (1980)	.00	60	BSRI	
Gravdal (1982)	.06	119	BSRI	
Long (1986)	.60	281	BSRI	
Lopez (1981)	.29	120	BSRI	
Moore (1983)	.41	467	BSRI	
Femininity measures				
Coleman <i>et al.</i> (1980)	.46	60	BSRI	
Gravdal (1982)	.13	119	BSRI	
Long (1986)	.01	281	BSRI	
Lopez (1981)	.09	120	PAQ	
Moore (1983)	.53	467	BSRI	
Androgyny measures ^c				
Coleman <i>et al.</i> (1980)	.00	60	BSRI/Bem	
Lopez (1981)	.43	120	PAQ/Bem	
Moore (1983)	.62	467	BSRI/Kalin	
Warren and Lanning (1992)	.65	66	BSRI/Bem	
Bipolar measures				
Gellen <i>et al.</i> (1984)	-.12	20	MMPI	
Semmelman (1982)	.71	168	CPI	

^aAttitudes Toward Violence Scales: Acceptance of violence scale (AVS: Burt, 1980); Adversarial sexual belief scale (ASB: Burt, 1980); Approval of marital violence scale (AMV: Stith, 1986); Approval of violence scale (AVS: Smith, 1990); Hypermasculinity scale (HYPER: Mosher and Sirkin, 1984); Inventory of Beliefs about Wife Beating (IBWB [with five subscales]: Saunders *et al.*, 1987).

^bGender Attitude Scales: Attitude towards Woman Scale (ATW: Spence and Helmreich, 1972; Spence *et al.*, 1973); Burt sex-role stereotype scale (SRS: Burt, 1980); Mason sex-role attitude scale (MASON: Mason, 1975); Patriarchy Belief Index (PBI: Smith, 1990); sex-role egalitarianism scale (SRE: Beere *et al.*, 1984); sex-role ideology scale (SRI: Kalin and Tilby, 1978); Traditionalism scale (TRAD: Hofeller, 1980).

^cGender Orientation Scales: Bem Sex-Role Inventory (BSRI: Bem, 1974); California Psychological Inventory (CPI: Baucon, 1976; Gough, 1957); Comrey Personality Inventory (COMREY: Comrey and Schiebel, 1983); Minnesota Multiphasic Personality Inventory (MMPI: Hathaway and McKinley, 1975); Personal Attribute Questionnaire (PAQ: Spence *et al.*, 1974).

^bThe modification of the CPI scale resulted in a separate femininity scale.

^cTwo strategies were used in assessing androgyny. The cross-classification method used median splits on the masculinity and femininity scales permitting the differentiation of individuals into the four gender orientations (Bem, 1977). Alternatively, Kalin (1979) suggested a continuous measure involving the subtraction of the masculinity score from the femininity score.

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