

SPOUSE ABUSE & MARITAL SYSTEM BASED ON ENRICH

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ABSTRACT

This study examined spouse abuse from the ecological perspective using the data from a national sample of 20,951 couples that took the ENRICH couple inventory. ENRICH assessed three ecological areas –contextual and socio-cultural factors; individual traits and behaviors; and couple interaction processes. Using the ENRICH couple typology, devitalized couples had the highest level of abuse while vitalized couples had the lowest. Using ENRICH scales, abusive individuals/couples were identified with 84% of accuracy. Abusive individuals and couples showed significantly lower levels of relational functioning in all three ecological areas assessed by ENRICH. Clinical and research implications for using ENRICH are presented.

Spouse abuse has received much attention by family researchers and clinicians perhaps due to its high prevalence rate in the United States. According to a national survey conducted in 1995, about one fourth of women and one tenth of men in the United States were estimated to be raped and /or physically assaulted by a current or former spouse, cohabiting partner, or date in their life time (Tjaden & Thoennes, 1998). It was also estimated that 1.3 % of women (approximately 1.5 million women) and 0.9% of men (about 834, 000 men) over the age of 19 in the U.S. were raped and /or physically assaulted by their intimate partner during 1995 (Tjaden & Thoennes, 1998). Women have a good reason to be concerned with spouse abuse as one third of all murdered females in the U.S. were killed by their current or former partners in 1998 (National Victim Assistance Academy, 2000).

Most research on spouse abuse thus far can be categorized into three areas: the profiles of the abusers and their individual characteristics (Gortner, et al., 1997; Margolin, et al., 1998; Ragg, 1999); the profiles of the victims and their individual characteristics (Briere & Runtz, 1987; Campbell, 1991); and the intergenerational effects of spouse abuse on the abusers and the victims (Giles-Sims, Straus, & Sugarman, 1995; Langhinrichsen-Rohling, et al., 1995; Straus, 1994; Straus & Yodanis, 1996).

These studies have mostly examined how individual spouses were affected by spouse abuse, but they revealed only limited information about how spouse abuse was related to the couples' relational issues. Even when the dyad was used as a unit of analysis, the previous research on spouse abuse tended to focus on only a specific area of couples interaction patterns, including demand/withdraw by Bern, Jacobson, & Gottman, (1999) or responsibility attributional processes by Byrne & Arias, (1997). However, very little attention has been paid to how the presence of spouse abuse relates to overall couple functioning. While past studies have focused on the micro-interaction patterns, there is

need for a more comprehensive assessment of the relationship between spouse abuse and the couple system.

The purpose of the present study is to systemically examine spouse abuse issues from the ecological perspective (Larson & Holman, 1994) using the ENRICH Couple Inventory (Olson, 1997). The ecological perspective provides an overarching theoretical framework for examining couples functionality from a number of system levels, including the contextual, individual, and couple levels (Larson & Holman, 1994). The ENRICH Couple Inventory is a reliable and comprehensive assessment tool for a variety of couple relational issues at the contextual, individual, and couple levels (Olson, 1997).

The ENRICH Couple Inventory has not been used to study spouse abuse issues in the past, although its effectiveness in predicting couple relational satisfaction and functionality has been demonstrated (Fowers & Olson, 1989; Olson, 1997; Olson & Fowers, 1993). The newest revision of ENRICH (Version 2000) added several questions about abuse. Therefore, the abuse information can be correlated with other characteristics of the couple system assessed by ENRICH.

The present study also examines spouse abuse issues using the ENRICH's couple typology, and a variable-focused analyses based on the ENRICH's relational scales. The ENRICH couple typology (five types) are related to the various types of couple abuse. Finally, the clinical implications of using the ENRICH Inventory in working with couples with spouse abuse, as well as future research directions will be discussed.

AN ECOLOGICAL PERSPECTIVE ON SPOUSE ABUSE

An ecological perspective (Larson and Holman, 1994) will provide the conceptual framework for the current study, based upon the conceptualization by Bubolz and Sontag (1993). Larson and Holman (1994) concluded that in order to understand couples relationship quality and stability, we have to look at multiple levels of ecological systems because "one factor alone, such as personality or dyadic interaction, cannot by itself explain later marital outcomes." (Larson and Holman, 1994, p.229) We hope to more clearly describe and understand the complexity of spouse abuse by using the three ecological system levels proposed by Larson & Holman (1994): (a) the background and contextual factors, (b) the individual traits and behaviors, and (c) the couple interaction patterns. The following review will briefly summarize the past research on this topic.

Background and Contextual Factors

The background and contextual factors include family-of-origin effects and sociocultural factors (Larson & Holman, 1994). Research suggests that the way couples function currently could be directly or indirectly affected by how their family-of-origin functioned. Families are often referred to as "training grounds for violence" (Gelles, 1995, p.460), and abuse tends to happen between multiple members (Straus, 1994). The parent who batters a child is more likely to hit his or her spouse as well (Straus, 1994). Furthermore, children of abuse can become potential victimizers themselves as adults (Giles-Sims, Straus & Sugarman, 1995), and are as twice as likely to hit their spouses (Straus, 1994).

Another area for the background and contextual factors is the sociocultural factors such as age, education, income, gender, and race (Larson & Holman, 1994). For instance, gender often adds another layer of complexity to existing financial hardship for the couples. Some men who lack financial means and alternative resources might use violence to gain the dominant position in the family (Gelles, 1995). Unemployed men

were found to be twice as likely to physically abuse wives as employed men are (Steinmetz, 1987). However, MacMillian & Gartner (1999) emphasized that it is imperative that both spouses, not just husbands, have financial security of being employed in order to decrease violence in the relationship.

Individual Traits and Behaviors

Larson and Holman (1994) argued that individual traits, such as personality and mental health, play key roles in couples relational stability and functionality. For instance, dysfunctional beliefs that “bias a person toward filtering, processing, and appraising marital events in a dysfunctional manner,” (Kurdek, 1993, p.239, cited in Larson & Holman, 1994) often create marital dissatisfaction and instability.

Research has shown that victims of abuse often experience psychological distress such as fear, low self-esteem, depression, guilt, and avoidance (Arias, 1999; Arias & Pape, 1999; Campbell, 1991; Haj-Yahia, 2000; Katz & Arias, 1999; Olson & DeFrain, 2003). Golding (1999) conducted a meta-analysis to examine the prevalence of mental health issues among women who had a history of spouse violence. Among 18 studies reviewed, the prevalence rate of depression among the victims was close to 50 %. Posttraumatic stress disorder (PTSD) was highly prevalent among 11 studies with over 60 % of the victims experienced PTSD symptoms (Golding, 1999).

Often, personality traits and couple interpersonal issues are interrelated. This seems to be particularly true for the couples with spouse abuse issues, since abuse often distorts how a couple relates to one another. For instance, non-abusive couples are hypothesized to be those in which both partners are high in self-confidence and assertiveness, and low in partner dominance and avoidance, while abusive couples tend to create the negative cycle of high dominance and avoidance accompanied with low self-esteem and assertiveness (Olson & Olson, 1999).

Katz and Arias (1999) also found the interrelatedness between personality traits and couple interpersonal processes. Eighty-two female undergraduate students were studied for potential effects of psychological abuse (dominance/isolation) on their depressive symptoms. A hierarchical regression analysis revealed that psychological abuse by their dating partners predicted significant increases in later depressive symptoms of women as assessed by the Beck Depression Inventory. However, the effect was moderated by level of perceived interpersonal control by the victims. The victims who perceived themselves as having ability to significantly influence social and environmental events were less susceptible to depressive symptoms despite the presence of psychological abuse by their dating partners (Katz & Arias, 1999).

Couple Interaction Processes

Several couple interaction factors have been found to be associated with a couple’s relational quality and stability. First, the interpersonal similarity of attitudes, values, and beliefs between the couple is a good indicator of their marital quality and stability (Larson & Holman, 1994). Sharing egalitarian gender roles appears to be of great significance as it has been found to be associated with a couple’s greater sense of marital satisfaction, and with higher relational qualities (Olson & Olson, 2000)

On the other hand, research on spouse abuse continues to find the association between family violence and unequal decision-making power (Arias & Pape, 1999). The levels of violence against wives are significantly higher among husband-dominating patriarchal couples than among egalitarian couples (Straus, Gelles, & Steinmetz, 1980).

Larson & Holman (1994) identified three areas of couple interaction processes as key factors of the couple's relational quality and stability. These factors are communication, conflict resolution, and consensus building. Communication facilitated a couple's construction of their unique shared views of their relationship through consensus and ground rules building (Wamboldt & Reiss, 1989).

When a couple experiences longstanding abuse, they might create distorted views of how their relationship should and can be. It may never be completely clear whether poor communication and conflict resolution skills contribute to spouse abuse, or the presence of abuse hinders their collaborative consensus building processes. However, it is evident that at least there is a strong association between the presence of spouse abuse and the couple's inability to communicate and to reach agreement to build an egalitarian relationship (Olson, 1997).

In summary, it seems imperative that clinicians working with a couple with spouse abuse issues have access to the all three ecological levels of information including the background and contextual factors, individual traits, and the couple interaction processes.

RESEARCH QUESTIONS

The current study will test the following research questions aiming to examine spouse abuse issues from the ecological perspective using the ENRICH Couple Inventory.

- 1) *Are there any consistent patterns in how the presence of spouse abuse interfaces with other relational areas identified by the ENRICH couple typology (i.e., vitalized vs. devitalized couples)?*
- 2) *Do the ENRICH individual and couple scales have the ability to discriminate between abusive and non-abusive couples with a high level of accuracy?*
- 3) *Which of the ENRICH individual / couple scales are most predictive of couple abuse?*
- 4) *Are there differences between abusive couples and non-abusive couples with regard to three ecological factors (background and socio-cultural, individual traits and behaviors, and couple interaction processes)?*

ENRICH Couple Inventory

Relational Content Areas

The ENRICH Couple Inventory (Version 2000) is a 165-item multi-dimensional inventory that is a reliable and comprehensive assessment tool of a couple system. The ENRICH Couple Inventory contains 20 scales that are divided into the four major groups: personality assessment, intrapersonal, interpersonal, and interpersonal areas (Olson, 1997; Olson & Olson, 1999).

The four Personality Assessment Scales include *Self-Confidence*, *Assertiveness*, *Avoidance*, and *Partner Dominance*. The Intrapersonal area assesses personal beliefs and expectations, and personality traits through *Idealistic Distortion*, *Marriage Satisfaction*, *Personality issues* (tardiness, temper, moodiness, stubbornness, jealousy, and possessiveness), *Leisure Activities*, and *Spiritual Beliefs scales*.

The Interpersonal area includes *Communication*, *Conflict Resolution*, *Role Relationship* (gender role equality), *Sexual Relationship*, *Children and Parenting*, *Couple Closeness* (connectedness vs. independency, cohesion) & *Couple Flexibility* (how the couple copes with changes and adaptations in facing relational issues) *scales*.

External issues are outside factors that affect the couple's relationship. Relational scales included in this group are *Family and Friends* (the couple's relationship quality with their parents, relatives, and friends; social support and resources available to the couple), and *Financial Management* (how they deal with financial issues). In addition, *Family Closeness and Family Flexibility Scales* assess how the couple's family-of origin coped with connectedness vs. independency, and how they handled changes, adaptations, role allocation, and organizations in facing problems and other issues.

Linking Ecological Systems and ENRICH Couple Scales

The relationships of the ecological perspective (Larson & Holman, 1994) and the ENRICH Couple Inventory (Olson, 1997) are well matched. The congruence of the two approaches is evident as the ENRICH Couple Scales represent all three domains described in the ecological model, the background and contextual factors, individual traits and behaviors, and the couple interaction processes.

The background and contextual factors are assessed by the ENRICH's external factors including background items (age, income, education, and ethnicity), *Family and Friends, Family Closeness, Family Flexibility, Financial Management, and Leisure Activities scales*. The individual traits and behaviors factors can be analyzed using the ENRICH's intrapersonal factors including, *Personality Assessment (Assertiveness, Avoidance, Partner Dominance, and Self-confidence), Personality Issues, Idealistic Distortion, Leisure Activities, and Spiritual Beliefs scales*. Finally, the couple interaction processes factors are examined through the ENRICH's interpersonal factors: *Children and Parenting, Communication, Conflict Resolution, Couples Closeness, Couple Flexibility, Role relationship, Sexual Relationship scales*.

ENRICH Couple Typology

Typological analyses have seldom been used in studying spouse abuse issues. Another unique feature of the ENRICH Couple Inventory is its ability to classify couples into different types based upon couple system dynamics. The five couple types, using a cluster analysis method, were identified by Olson & Fowers (1993) based on a previous study of 6,267 married couples who took ENRICH.

Vitalized couples are the happiest couples who have the highest positive couple agreement (PCA) scores. They have many strengths and few growth areas and least likely to divorce.

Harmonious couples have rather high PCA scores in most areas except Financial Management and Children & Parenting. They tend to be generally happy and are at low risk for divorce.

Traditional couples have lower PCA scores in the Interpersonal areas (Communication, Conflict Resolution) but higher scores in the more traditional areas such as Children & Parenting, Family & Friends, and Spiritual Beliefs. Many of them stay together although they tend to be unhappily married.

Conflicted couples have the low PCA scores across many content areas, and tend to disagree on many issues. They tend to be at high risk for divorce and commonly seek marital therapy.

Devitalized couples have the lowest PCA scores across many of the content areas. They tend to be unhappily married and often are at the highest risk for divorce. This type also commonly seeks marital therapy.

These ENRICH couple scales and the couple typology will be used to demonstrate how the ENRICH Couple Inventory can provide more comprehensive information about spouse abuse and its interconnectedness with the ecosystems as well as the couple system (couple functioning).

METHOD

Sample

Participants in this study were from a national sample of 21,501 married couples who took the ENRICH Couple Inventory during 1998 and 1999 (Olson & Olson, 2000). About 550 couples were excluded from this study due to some missing background data, thus leaving 20,951 couples for the study. The couples in the current study participated in the marriage enrichment programs or were seen in marital therapy, and the sample represented all fifty states. The sample for this study is characterized as a convenient sample.

The majority of couples were Caucasian (85.2%), with a small percentage representing African American (5.7%), Hispanic/Latino (3.7%), or other races and/or mixed (5.6%). The average mean of age of sample was about 35 years for males and 32 years for females. With regard to age distribution, the national survey included a wide range of age groups, with 30% of the couples being 30 years of age or younger, 38% of the couples ranging from 31 to 40 years old, and 32% of the sample being 41 years of age or older.

The sample showed a wide range of diversity for length of marriage. About two fifths (42.4 %) of the couples had been married for less than 5 years, while about one fifth of the couples (20.8%) had been married for 6 to 10 years, and another two fifths (about 37 %) had been married for over 10 years.

Educational backgrounds of the sample showed a similar trend for both males and females. The sample was fairly well educated as only 19.4% of males and 18.6 % of females had a high school (or less) education. About 34.1 % of males and 37.8% of females had some college education. About one fourth of the sample (22.3 % for males and 24.7% of females) had the four-year college education, while about 24 % of males and 19% of females had a graduate level of education.

Annual incomes of the sample showed a sharp discrepancy between males and females. Overall, the males had higher annual incomes than females as about one third (32 %) of males had the annual income of \$ 50,000 or more, while only about 13 % of the females had the equivalent amount of income. Over 40 % of females had the annual income of \$ 20,000 or less, but only about 13 % of males had that income level.

Measures

Psychometric properties of the ENRICH couple inventory. Research has demonstrated the strong psychometric properties of the ENRICH Couple Inventory with high levels of reliability, validity, and clinical utility (Olson, 1997). Reliability for ENRICH scales ranged from .75 to .90 (n=1,542; average= .82), demonstrating its internal consistency within scales. In terms of test-retest reliability, the inventory ranged from .77 to .92 for a sample using ENRICH (n=115; average= .86) (Olson, 1997). The alpha reliabilities of the new personality subscales were at an acceptable level: Assertiveness (.71), Self Confidence (.82), Avoidance (.71), and Dominance (.73), based on a sample of 2,766 individuals (an equal number of males and females) (Olson, 1997).

In terms of its discriminant validity, the ENRICH inventory proved to have a high ability to discriminate happily married couples from unhappily married couples with 90% accuracy (Fowers & Olson, 1989).

Individual and couple abuse scores. The definition of spouse abuse is more inclusive rather than exclusive in order to capture the complex forms of spouse abuse. Spouse abuse is defined as the presence of any one of the following forms of abuse in the relationship: verbal, emotional, physical, or sexual abuse.

Reflecting this definition of spouse abuse, the individual and couple abuse scores were created for this study using one item from the ENRICH inventory: “Have you ever been abused (verbally, emotionally, physically, or sexually) by your partner?” The item has a corresponding a 5-point scale with its responses ranging from (1) “never”, (2) “seldom”, (3) “sometimes”, (4) “often” to (5) “very often”. Individual abuse scores were calculated by analyzing the husband’s response and the wife’s response to the item separately. Thus, the individual scores for husbands and wives can range from 1 (never) to 5 (very often). Couple abuse scores were computed by adding the husband’s response and the wife’s response. Therefore, the couple abuse scores can range from 2 ([H=1 + W=1]) to 10 ([H=5 + W=5]).

Couple abuse types. The couples were then classified into four types based on their couple abuse scores and how each person responded to the abuse item (see above). *Non-abusive couples* were classified when both husbands and wives answered either “never” (1) or “seldom” (2) to the item, thus making their scores range from 2 to 4.

Husband-abusing couples showed more evidence of abuse by the husbands. The wives of the husband abusing couples responded that they have been abused by their husbands either “sometimes” (3), “often” (4), or “very often” (5), while their husbands responding to the same item with either “never” (1) or “seldom” (2). The scores for this couple abuse type range from 4 to 7.

Wife-abusing couples displayed more abuse by the wives, with their scores also ranging from 4 to 7. The husbands of the wife-abusing couples acknowledged that they have been abused by their wives either “sometimes” (3), “often” (4), or “very often” (5), while their wives reporting of less abuse by their husbands as shown with their responses of either “never” (1) or “seldom” (2).

The last couple type, *Volatile couples*, was where both husbands and wives reported being abused by their partners, with their scores ranging from 6 to 10. The couples responded to the item saying they have been abused by their partners either “sometimes” (3), “often” (4), or “very often” (5). The term volatile was used to describe this type since both partners perceived themselves as a victim and were perceived as a perpetrator by their spouse at the same time.

Over 61% of the couples (n=12,935) belonged to the non-abusing couples, while 16.8% belonged to the husband-abusing couples (n=3,516), 13.4% to the volatile couples (n=2,830), and 8% to the wife-abusing couples (n=1,670) ($\chi^2 = 5314$, $df = 16$, $p \leq .000$).

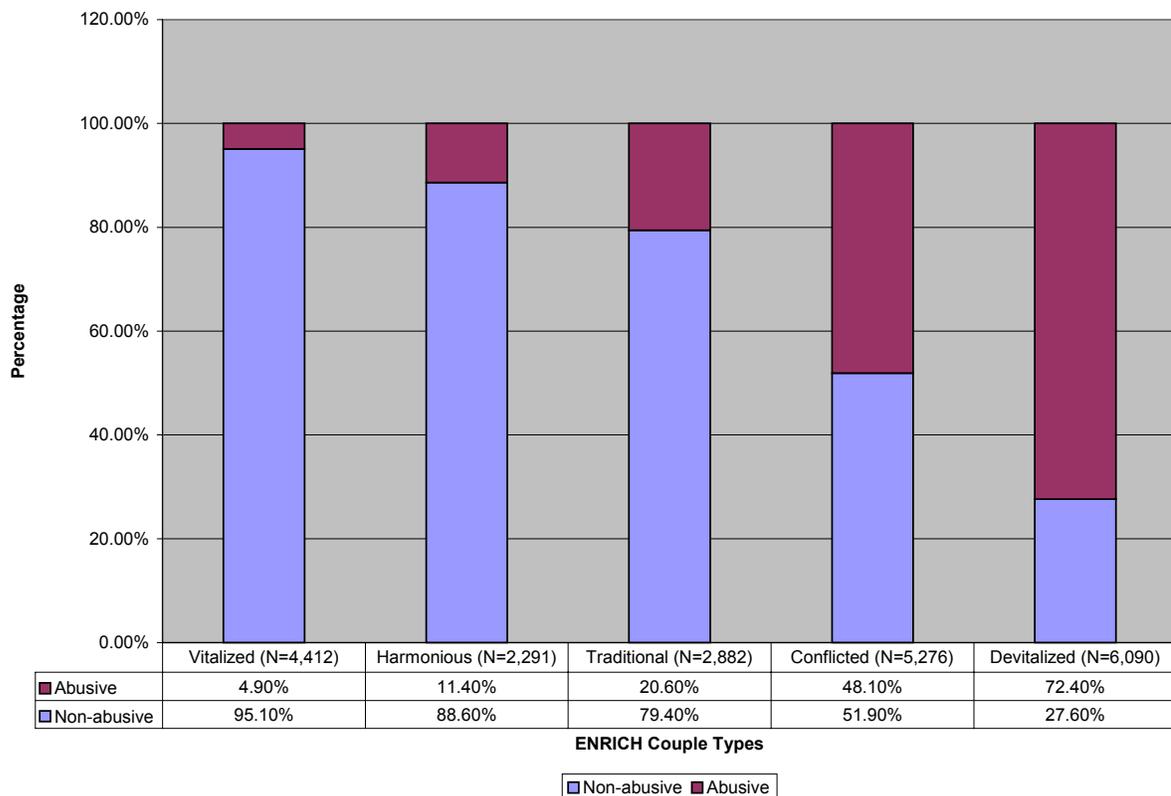
RESULTS

Typological Analyses: Spouse Abuse and ENRICH Couple Typology

The ENRICH Couple typology (*Vitalized, Harmonious, Traditional, Conflicted, Devitalized*) was compared with the abusive and non-abusive couples by grouping each ENRICH couple type with abusive and non-abusive groups. The three types of abusive couples (husband-abusing; wife-abusing; and volatile couples) were combined to create the abusive group. There were 12,935 couples in the non-abusive group and 8,016 couples in the abusive group. The results of a chi-square analysis showed dramatic contrasts between non-abusive couples and abusive couples in relation to their classification in the five ENRICH couple types (see Figure 1).

The association between the five ENRICH couple types and the level of abuse was mostly in the expected direction. The analyses of the *Vitalized types and Harmonious types* revealed the most dramatic contrast between abusive and non-abusive couples. The *Vitalized types* of couples had the highest percentage of the non-abusive couples (over 95 %) and the lowest percentage of abusive couples (less than 5 %). The *Harmonious types* of couples also had a high percentage (over 88%) of non-abusive couples and a small percentage (11.4 %) of abusive couples. The *Traditional types* also appeared to show less evidence of couple abuse as they had a fairly high percentage (almost 80%) of non-abusive couples.

Figure 1:
Five Couple Types (ENRICH) and Non-Abusive vs. Abusive Couples



The *Devitalized types*, on the other hand, had the highest percentage of abusive couples (over 72%) and the lowest percentage of non-abusive couples (less than 28%). The analysis of the *Conflicted types* of couples showed mixed results. Although the *Conflicted types* still had the second highest percentage of abusive couples (48.1 %), about half of the *Conflicted couples* also belonged to non-abusive couples.

ENRICH Scales and Couple Abuse

Discriminant analyses were conducted to examine the ENRICH scales' discriminant ability, using individual or couple ENRICH scores as predictors and the abusive and non-abusive groups as a criterion. Twelve ENRICH scales were included as predictive variables in the analyses, representing three ecological areas. Three scales were indicators of **Background and Contextual Factors**, including *Family and Friends*, *Family Closeness*, *Family Flexibility*, and *Financial Management*. The indicators of **Individual Traits and Behaviors** were *Personality Issues* (tardiness, temper, moodiness, stubbornness, jealousy, and possessiveness), and *Spiritual Beliefs scales*. The scales that were indicators of **Couple Interaction Processes** were *Communication*, *Conflict Resolution*, *Sexual Relationship*, *Role Relationship*, *Couple Closeness*, and *Couple Flexibility*. Discriminant analysis and cross validation were completed using a total of 20,951 couples (12,935 non-abusive couples and 8,016 abusive couples).

First, a stepwise discriminant analysis was conducted to test the ability of the ENRICH scales to discriminate between abusive and non-abusive groups. The maximum significance of F to enter into the equation was .05 and the minimum significance of F to be removed out of equation was .10. Then, the sample was randomly split into two groups to conduct a cross-validation analysis. The original discriminant function equation was used for the cross-validation group.

The results, using the individual ENRICH scores, were that overall 72.2% of the male spouses and 75.1% of the female spouses in the original sample were correctly classified into non-abusive or abusive groups (see Table 1). Using couple PCA (Positive Couple Agreement) scores, 76.2% of the couples in the original sample were correctly classified. The cross-validation procedure revealed nearly identical results, except for minor differences in the female's abusive group and overall classification.

The results were even more impressive when looking at classification of the abusive groups. The individual and couple ENRICH scales predicted abusive individuals/couples with about 84 % of accuracy.

Table 1: Discriminant Analysis: Percent Correctly Classified

Criterion	Male		Female		Couple	
	Original	Cross-Validated	Original	Cross-Validated	Original	Cross-Validated
Abusive/abused	83.5%	83.5%	84.6%	84.5%	83.9%	83.9%
Non-abusive/Non-abused	69.1%	69.1%	70.9%	70.9%	71.5%	71.5%
Overall	72.2%	72.2%	75.1%	75.0%	76.2%	76.2%

Significant Predictors of Couple Abuse

The next analysis was to determine which ENRICH couple scales have the predictive values in predicting the levels of individual / couple abuse. The significant predictors of couple abuse were identified using the Standardized Cannon Discriminant Function Coefficients (see Table 2).

Six of the husband's ENRICH scales and seven of the wife's ENRICH scales were significant predictors of abuse in the individual spouse discriminant analysis. When

couple scores were used, eight out of twelve ENRICH scales were significant predictors of abuse. It appears that family and friends, personality issues, communication, and conflict resolution were the most significant predictors for both individual and couple abuse. These scales represented all the ecological levels including background and contextual factors, individual traits, and couple interaction processes.

Table 2:
Significant Predictors of Couple Abuse based on Discriminant Analysis

Male	Female	Couple
Personality Issues .380*	Personality Issues .387*	Couple Closeness .315*
Communication .317*	Family & Friends .238*	Communication .311*
Family & Friends .244*	Conflict Resolution .190*	Family & Friends .299*
Couple Flexibility .120*	Communication .175*	Personality Issues .202*
Conflict Resolution .092*	Role Relationship .149*	Couple Flexibility .143*
Family Closeness .074*	Couple Closeness .119*	Conflict Resolution -.135*
	Family Closeness .043*	Financial Management .060*
		Family Closeness .037a

*All significant at $p \leq .000$ level, except a: ($p \leq .002$)

Couple closeness was the best predictor of abuse when using couples as a unit of analysis. Couple flexibility was another scale that contributed significantly in predicting couple abuse, as well as husband abuse but not in predicting wife abuse. Role relationship, on the other hand, was a significant predictor of wife abuse and couple abuse to a lesser extent ($p \leq .039$), but it was not a predictor of husband abuse. Finally, family closeness was also included in all three groups (at couple level, $p \leq .002$) although it was a weak predictor with coefficients less than .10.

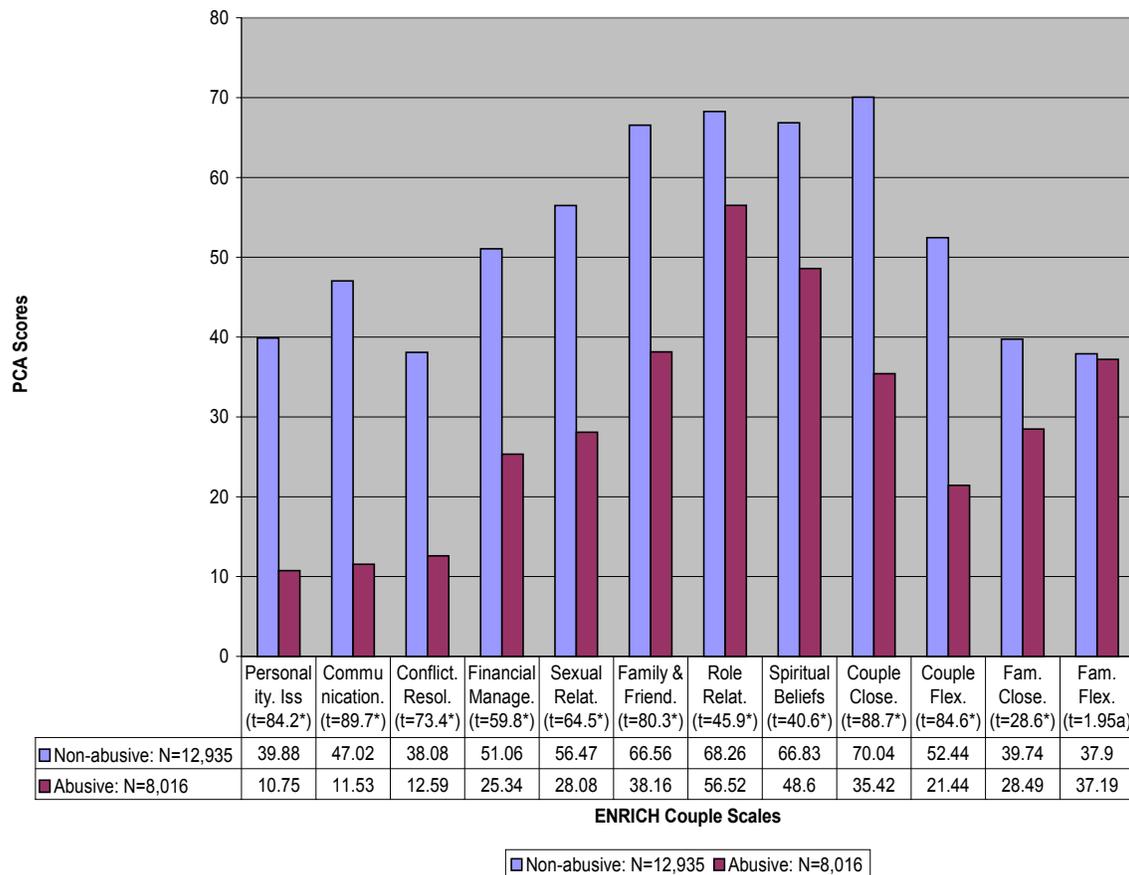
ENRICH Scales and Abusive vs. Non-abusive Group Means

The next step was to evaluate if there were significant and consistent differences between abusive and non-abusive groups in how they scored on each ENRICH scale. The group means of abusive and non-abusive groups were compared on each ENRICH scale to see if non-abusive couples demonstrated higher relational functioning than the abusive counterparts.

There was a significant difference, when entered simultaneously, between the abused and non-abused group means on all the ENRICH scales using the Wilks' lambda ($\Lambda = .661$, $X = 8683$, $df = 10$, $p \leq .000$). Thus, follow-up independent samples t-tests were warranted for each ENRICH scale to examine the equality of abusive and non-abusive group means.

Figure 2 shows that positive couple agreement (PCA) scores were significantly higher among non-abusive groups than abusive groups for all the ENRICH scales ($p \leq .000$), except for the *family flexibility* scale ($p \leq .052$). That is, non-abusive couples showed significantly higher levels of positive relating as demonstrated by their high scores on most of the ENRICH scales than the abusive counterparts. Furthermore, since the ENRICH scales are representative of all three ecosystems (contextual, individual, and couple), the differences in relational quality were evident across all three eco-systemic levels.

Figure 2: PCA Mean Scores on ENRICH between Non-Abusive vs. Abusive Couples



ENRICH Scales	P. I.	C	C.R.	F. M	S.R.	F.F.	R.R.	S.B.	C.C.	C.F	F.C.	F.F
Standard Deviation	28.2	32.7	27.4	32.8	33.9	28.5	18.9	32.8	32.2	29.9	28.2	25.5
Effect Size	1.03	1.08	.93	.80	.83	1.0	.62	.56	1.08	1.04	.40	.003

* *t*-test all significant at $p \leq .000$, except Family Flexibility: a) $p \leq .052$

The differences in relational functioning between and abusive and non-abusive groups were mostly substantial as shown in large effect sizes ($d \geq .8$) (Cohen, 1988) among *communication* (1.08), *couple closeness* (1.08), *couple flexibility* (1.04), , *personality issues* (1.03), *family & friends* (1.0), *conflict resolution* (.93), *sexual relationship* (.83), and *financial management* (.80) scales. Once again, these scales represented all three ecological systems levels. Two scales showed medium effect sizes ($d \geq .5$): *role relationship* (.61) and *spiritual beliefs* (.56). Finally, *family closeness* scale (.40) indicated a small to medium effect size ($.2 \leq d \leq .5$), and the effect size of *family flexibility* scale (.003) was negligible.

Both the discriminant analyses and *t*-tests demonstrated that individual spouses and couples who scored high on the ENRICH scales (or those with high relational functioning in all ecological relational areas) were less abusive and less likely to be abused than those who scored lower on the ENRICH scales.

Personality Assessment Scales and Four Couple Abuse Types

A series of univariate analyses of variance (ANOVAs) were run to examine systemic interrelatedness between four personality scales of *Partner dominance, Avoidance, Self-confidence, Assertiveness* and four types of couple abuse: *Non-abusive; Husband-abusing; Wife-abusing; and Volatile*. Since both husband's and wife's scores from the personality scales were used in the analysis, gender comparisons were also possible. As shown in Table 3, all eight of the ANOVA tests revealed a significant difference among the four couple types' means of personality scales ($p \leq .000$).

Table 3:
ANOVA Tests of Group Means of Personality Scales among Couple Abuse Types

COUPLE ABUSE TYPES (N=20,951)						
	Non-abusive Couples (n=12,935)	Husband Abusing Couples (n=3,516)	Wife Abusing Couples (n=1,670)	Volatile Couples (n=2,830)	F (df=3)	Sig. P
Negative Traits						
Wife Partner Dominance	40.8*	73.6*	59.9*	78.5*	3395.7	.000
Husband Partner Dominance	41.7*	60.6*	72.4*	77.1*	2993.0	.000
Wife Avoidance	33.9*	61.9a	45.5*	62.3a	1807.2	.000
Husband Avoidance	37.1*	50.1*	61.6b	62.8b	1264.2	.000
Positive Traits						
Wife Assertiveness	70.4*	43.4*	54.2*	39.4*	2039.7	.000
Husband Assertiveness	68.7*	51.6*	45.7*	40.8*	1616.9	.000
Wife Self- Confidence	67.5*	45.8*	52.0*	43.6*	914.9	.000
Husband Self- Confidence	69.2*	53.8c	51.8c	47.7*	717.7	.000

Note: * Bonferroni's multiple mean comparisons all significant at $p \leq .000$ level, except a: ($p \leq 1.000$), b: ($p \leq .671$), c: ($p \leq .069$)

Non-abusive couples (both wives and husbands) have significantly lower negative trait scores of partner dominance and avoidance, and significantly higher positive trait scores of assertiveness and self-confidence than the three types of abusive couples. Volatile couples, on the other hand, had the highest mean scores on negative traits of partner dominance and avoidance, and had the lowest mean scores on positive traits of assertiveness and self-confidence for both husbands and wives.

Comparisons between husband-abusing couples and wife-abusing couples shed light on how personality issues play out within a couple's dynamics, specifically in a perpetrator - victim relationship. As shown in Table 3, the wives of husband-abusing couples (victims) reported significantly higher avoidance and partner dominance than the wives of wife-abusing couples (perpetrators). The husbands of wife-abusing couples (victims), on the other hand, reported significantly higher avoidance and partner

dominance than the husbands of husband-abusing couples (perpetrators). Therefore, the abused spouses reported significantly higher negative traits (partner dominance and avoidance) than the abusing spouses, regardless of their gender.

In terms of the positive traits, Wives' mean scores on self-confidence and assertiveness were significantly higher among wife-abusing couples (perpetrators) than husband-abusing couples (victims). Husbands' assertiveness was significantly higher among husband-abusing couples (perpetrators) than wife-abusing couples (victims). Husbands' self-confidence did not significantly differ between wife-abusing and husband-abusing couples (see note c of Table 3). Thus, the abused spouses had significantly lower positive trait scores (assertiveness and self-confidence) than the abusing spouses except for self-confidence among husbands.

Both male and female abusing spouses, when compared to non-abusing, still had significantly higher negative trait scores (partner dominance and avoidance) and significantly lower positive trait scores (self-confidence and assertiveness) than non-abusive spouses.

DISCUSSION

The results of the present study shed light on how the ENRICH Couple Inventory can provide an eco-systemic relational assessment of spouse abuse issues. The eco-systemic areas included the contextual and socio-cultural factors, individual traits and behaviors, and couple interaction processes.

Interface with ENRICH Couple Typology

When the couple is in an abusive relationship, other areas of the relationship are clearly affected. As described in the typological analysis, the presence of abuse also interfaced with the couple's overall functioning. Many abusive couples belonged to problematic couple types (Conflicted and Devitalized couples) that are characterized as having very few strength as a couple. Non-abusive couples, on the other hand, tended to belong to couple types (Vitalized and Harmonious couple types) with many strengths. They also generally viewed their marriage as more satisfying.

It is important to note that about half of the Conflicted couples in this study were still able to maintain a non-abusive relationship. There may be two possible explanations for the results with the *Conflicted types*. These results may indicate that many couples with high conflict are still able to remain non-abusive and non-violent. Some conflicted couples might also have tendency to avoid conflicts since some ENRICH items for the conflict resolution scale measure how open and constructively the couple deals with conflicts. Thus, while their conflicts may not lead to abuse, their issues still remain unresolved. In summary, having conflict does not always appear to make their marriage abusive if the couple is able to deal effectively with their disagreement through a consensus-building approach (Wamboldt & Reiss, 1989).

ENRICH's Predictive Ability of Spouse Abuse

The ENRICH scales proved to have the ability to distinguish abusive individuals and couples from non-abusive individuals and couples with a high level of accuracy (overall 75%). In classifying abusive group, ENRICH was able to correctly discriminate abusive group with 84 % of accuracy. As demonstrated through the high percentage of correct classification, the discriminant validity of the ENRICH scales predicting non-abusive or abusive groups was supported, using both individual and couple ENRICH scores.

There were significant differences between abusive and non-abusive couples in their relationship quality in all three ecological areas. Non-abusive couples scored higher on the ENRICH scales and demonstrated significantly higher levels of couple functioning than abusive counterparts at contextual, individual, and couple levels. Furthermore, the differences in mean PCA scores are substantial as indicated by the large effect sizes ($d \geq .8$) among most of ENRICH scales.

In terms of ENRICH's predictive ability, all three factors from the ecological perspective were found to be significant predictors of individual /couple abuse. Overall, *couple closeness, personality issues, communication, conflict resolution, and family and friends scales* were the most significant predictors for both couple and individual abuse.

Family & friends and *family closeness scales* were the two contextual and sociocultural factors that contributed significantly in predicting the level of couple abuse. Research has shown that social isolation and lack of support systems tend to aggravate already existing abuse (i.e., Gelles & Cornell, 1990; Nielsen et al., 1992; Straus, 1990). When the couple is able to get along well with their spouse's family and friends, and also is able to draw support and resources from them, they may be better able to cope with life issues without engaging in abusive and disruptive behaviors. Furthermore, how the couple's family of origin coped with independence and connectedness (cohesion) among family members (*family closeness*) appears to influence the couple's ability to cope with similar issues.

The personality issues scale contributed significantly in predicting the level of abuse among the couples. Thus, when the couple has more compatibility and shared values in their personality traits including temper, moodiness, jealousy, and possessiveness, they appear to be better able to build a relationship that is based on non-abusive and consensus building.

Understanding the couple's interaction processes seems to be equally important in assessing their level of abuse. The couple's interpersonal qualities such as communication, and conflict resolution were found to affect how the couple copes with difficult issues. These results are in accordance with most past research which focused on couple communication and conflict resolution as key interpersonal factors of couple relational qualities (Larson & Holman, 1994).

The current study demonstrated, however, that there are additional couple interaction factors that contributed to spouse abuse dynamics. The two scales that are derived from the Circumplex Model of Marital and Family Systems (Olson, 1997), *the couple closeness and couple flexibility* were as significantly associated with the levels of spouse abuse as the couple's communication and conflict resolution skills. Effective communication and conflict resolution skills, accompanied with their ability to maintain appropriate closeness and flexible attitudes in facing differences, appear to be keys in the couple's constructive and productive negotiation processes.

In addition, role relationship was found to be a significant factor of wife abuse. Thus, the couples with more egalitarian role arrangements appear to be less likely to engage in wife abuse.

Personality Assessment Scales and Four Types of Couple Abuse

There was an obvious interconnection among the personality traits using four personality subscales. Non-abused individuals and couples tended to engage in a positive cycle, where both spouses use assertiveness, which creates more self-confidence, thus further increasing their ability to problem-solve without engaging in a coercive or abusive behavior.

Individuals who belong to abusive couples, on the other hand, typically engaged in a negative cycle. Abused individuals, regardless of their gender, perceived their partners as dominating them (high on *the Partner dominance scale*), and had a tendency to avoid underlying issues (high on *the Avoidance scale*). As abused individuals used more avoidance, their partners became more dominant. In extreme cases, both spouses expressed being abused by their partners (volatile couples). Both partners created a negative cycle of high avoidance and partner dominance. Their negative cycle was further reinforced by their inability to be assertive and maintain self-confidence.

Limitations of the Study

There are several limitations for the current study. First, the study was based on self-report data. Since couples tend to underreport their abuse incidents (National Victim Assistance Academy, 2000), clinicians should not rely solely on the couple's report on their spouse abuse. Clinicians must engage in multiple ways to collect data including a through family history taking from both spouses independently, and observing couple interaction patterns, paying special attention to any signs of suspected abuse no matter how trivial it might seem. Another limitation is that the sample of this study was mainly Caucasians (85%). This study should be replicated with other ethnic groups to determine if the same findings are obtained.

Lastly, the results of the current study must be interpreted carefully due to its large sample because even small differences can be statistically significant. Conventional wisdom would say having a large sample is generally a strength of a study. However, the large sample also might generate significant yet not so meaningful results. The current study demonstrated the large size effects, indicating group mean differences of the ENRICH relational scales between abusive and non-abusive couples were substantial and meaningful. Also, a typology analysis indicated dramatic differences in their overall relational functions between abusive and non-abusive couples in relation to which couple typology they belonged (vitalized vs. devitalized).

RESEARCH IMPLICATIONS

The results of this study demonstrated the linkage between a couple's dynamics and the couple's level of abuse. One of the unique aspects of the current study is its broad definition of spouse abuse. Abuse takes place in a variety of forms and patterns. The scope of abuse included in the current study is intentionally broad and includes: verbal, emotional, physical and sexual abuse.

The respondents were simply asked if they have been suffered any one of these forms of abuse in their current relationship. The current study's intention was to ask the participants' perception of the levels of spouse abuse from the abuser's perspective. The rationale behind using this method is the incident of spouse abuse tends to be underreported (National Victim Assistance Academy, 2000), and the perspective of the abused tends to be more accurate than those of the abuser (Olson, 1997). In fact, almost 40 % of the couples (N=8,016) in this study identified spouse abuse to be an issue in their relationship. While this format does not allow the results to be specifically correlated with each kind of abuse, this way we believed the respondents were freer of biases surrounding what constitutes of spouse abuse. In other words, if the respondent defines their verbal abuse as real, it should be real in their relationship dynamics.

Future research directions may include: a) further specifying couple abuse into different types (i.e., emotional, verbal, physical, and sexual) and systematically

examining similarities and differences among these types; b) designing clinical intervention strategies which are abuse type specific; and c) evaluating outcomes of clinical interventions using the ENRICH Inventory.

CLINICAL IMPLICATIONS

This study demonstrated that the ENRICH Couple Inventory can be a useful assessment and intervention tool that can be used by couple therapists working with the couple with abuse and other problems. First, ENRICH contains 15 abuse background items that deal with verbal, emotional, physical and sexual abuse, and alcohol and drug use among and from partner, parents, and others. These background items can further help the therapists as well as couples to understand how their current abuse issues can relate to other aspects of the couple relationships.

The ENRICH Couple Inventory provides a couple typology (i.e., vitalized vs. devitalized couples) that can be useful in a clinical setting. As described earlier, most of the research on spouse abuse tended to use the variable-oriented methods. The ENRICH couple typology can help the therapists easily identify couple's overall relational functioning, and describe how they interface with the presence of abuse in their relationship. The ENRICH couple typology can facilitate the therapists' development and implementation of specific interventions for spouse abuse based on the each ENRICH couple type.

Results of the study indicate the importance of relational factors such as effective communication and conflict resolution skills, the continuing network support from family and friends, and personality issues on the spouse abuse dynamics. ENRICH (Version 2000) includes several couple exercises (Olson & Olson, 1999) aimed at targeting these relational issues. The couple should receive a feedback from the couple therapist on their ENRICH results, and they should actively engage in relationship skill buildings using the ENRICH couple exercises through interactive learning methods.

The study also demonstrated the importance of couple closeness (cohesion) and flexibility in discriminating abusing from non-abusing couples. These variables are derived from the Circumplex Model of Marital and Family Systems and are built into the ENRICH Couple Inventory (1997). While past research has demonstrated the importance of communication and conflict resolution (Larson & Holman, 1994), this is one of the first studies that identified the significance of couple closeness, couple flexibility and family closeness. The couple system and the family of origin for each person are, therefore, an important area to focus on during therapy.

The personality cycle identified in ENRICH also were useful in discriminating abusing and non-abusing couples. The negative cycle of partner dominance and avoidance were very common in abusing couples but not in non-abusing couples. Conversely, non-abusing couples were more characterized by the positive cycle of assertiveness and self-confidence. Since these two cycles are negatively correlated, increasing the positive cycle will tend to decrease the negative cycle. So the goal of intervention with abusing couples would be to increase their level of assertiveness and self-confidence, which can help them out of negative cycle of partner dominance and avoidance.

This study of spouse abuse demonstrated the value of an eco-systemic model for identifying significant areas that distinguish abusing and non-abusing couples. All three of the eco-systemic areas were demonstrated to be of importance in understanding spouse abuse and they included the background contextual factors, individual traits and behaviors, and couple interaction processes. Couple therapists should engage in an eco-

systemic assessment and intervention process, in order to help the couple understand the intricacies of their abuse issues, and to better help the couple learn new skills and techniques so that they can relate to each other in non-abusive ways.

In summary, this study demonstrated the value of the ENRICH Couple Inventory in assessing these eco-systemic areas and discriminating between abusing and non-abusing couples. ENRICH can be useful for couple assessment and treatment planning. ENRICH can help a therapist efficiently and effectively identify some of the most salient characteristics of couple abuse including the following: a) specific questions on level of abuse from partner, parents, and others; b) five couple types with more abuse in conflicted and devitalized couples; c) problematic personality styles characterized by high levels of partner dominance and avoidance and low levels of assertiveness and self-confidence; 4) low scores on important aspects of couple interaction including communication, conflict resolution, flexibility and closeness. Couple therapy can directly focus on helping the couple deal with these important issues.

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