PREDICTING TERMINATION AND CONTINUATION STATUS IN SHELTER PROGRAMS USING THE TRANSTHEORETICAL MODEL WITH HISPANIC BATTERED WOMEN

Adriana V. Weisz, B.A., M.A.

Dissertation Prepared for the Degree of

DOCTOR OF PHILOSOPHY

UNIVERSITY OF NORTH TEXAS

August 2003

APPROVED:

Edward C. Watkins, Major Professor and Committee Chair
Alina Suris, Committee Co-Chair
Kenneth W. Sewell, Committee Member and Director of Clinical Training
Randall J. Cox, Committee Member and Director of Psychology Clinic
Janice M. Holden, Committee Member, Professor and Coordinator of Counseling Program
Earnest Harrell, Chair of the Department of Psychology
C. Neal Tate, Dean of the Robert B. Toulouse School of Graduate Studies

Weisz, Adriana V., Predicting termination and continuation status in shelter programs using the Transtheoretical Model with Hispanic battered women. Doctor of Philosophy (Clinical Psychology), August 2003, 153 pp., 6 tables, references, 88 titles.

This study tested the applicability of the Transtheoretical Model of Behavior Change in predicting early termination, appropriate termination, and ongoing treatment of Hispanic battered women residing at domestic violence shelters. Self-efficacy, decisional balance, and acculturation were examined in relation to the applicability of this model with the Hispanic women population. One hundred and eight women residing in two shelters for survivors of domestic violence, located in the Dallas/Fort Worth metroplex, were asked to provide information regarding the problems in their relationships, the pull and the strain of their relationship, their level of temptation to stay in the abusive relationship, and how confident they felt that they would not return to their abuser (The Process of Change in Abused Women Scales- PROCAWS). In addition, the women were asked to complete a questionnaire regarding their level of acculturation. This study confirmed the stage of change profiles found in a population of battered women as well as in other clinical populations and the results suggest that this model is applicable to Hispanic populations. The results indicated that the women in this sample could be meaningfully grouped according to their level of involvement in different stages of change. Furthermore, this study provided support for the validity of this theory by finding significant relationships among the profiles of change and the intervening variables that moderate movement across the stages of change. The women in this study differed with regard to their level of temptation to stay in their relationships

and the amount of cons they to making changes. The findings also confirmed that the Transtheoretical Model can be used to predict termination status from domestic violence shelter programs. Although there were no significant differences in termination status among the women with different stage of change profiles, a trend existed that women in earlier stages of change terminated earlier and women in later stages of change terminated appropriately. Overall, the results of this study provide evidence for the applicability of the Transtheoretical Model and the usefulness of the PROCAWS in identifying profiles of change that can potentially guide treatment interventions and predict early termination with the Hispanic population.

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CHAPTER 1

LITERATURE REVIEW

Research conducted over the past 30 years indicates that violence in the family is an enormous problem (Council on Scientific Affairs, American Medical Association, 1992). In the 1960s, the feminist movement played a pivotal role in bringing awareness to the public of the problem of violence against women. Some have credited this movement with the initiation of crisis hotlines for rape and sexual victims and for leading to the opening of the first shelter for battered women in 1970 (Kanuha, 1994). Throughout the 1970s, 80s, and 90s much of the research on domestic violence has focused on documenting the extent of violence against women, on examining the sociodemographic characteristics of battered women and the individuals who abuse them, and on understanding the psychological effects of experiencing abuse in the home (Abbott, Johnson, Koziol-McLain, & Lowenstein, 1995; Bowker, 1983; Gelles & Harrop, 1989; McFarlane, Parker, Soeken, & Bullock, 1992; Rosenbaum & O'Leary, 1981; Straus, Gelles, & Steinmetz, 1980; Walker, 1979). Recently, researchers have begun to focus on the issue of domestic violence among ethnic minorities and on the unique characteristics of these cultures that play a role in the presence of violence within their families (Caetano, Schafer, Clark, Cunradi, & Raspberry, 2000; Hamptom & Gelles, 1994; Kantor, Jasinski, & Aldarondo, 1994; Kanuha, 1994; Krishnan, Hilbert, VanLeeuwen, & Kolia, 1997; Perilla, 1999; Sorenson & Telles, 1991). However, only in the last few years have researchers begun to look at the process of change in which battered women engage as they work towards freeing themselves from the violence in their lives (Brown, 1997;

Heron, Twomey, Jacobs, and Kaslow, 1997).

The Transtheoretical Model of Change has been proposed as a way of conceptualizing the manner in which women make positive changes in their lives. This model can also be used as a guide for developing effective and individualized interventions for these women as they proceed through the change process. The added utility of this model lies in its potential to evaluate shelter programs by providing a way to measure those changes in a systematic and quantifiable way (Brown, 1997).

The purpose of this study is to test the applicability of the Transtheoretical Model with Hispanic battered women. The following review of the literature will provide a rationale for this study by introducing some of the unique issues that Hispanic women face as they attempt to make changes in their lives and by presenting the Transtheoretical Model as an integrative and comprehensive model of change that enables behavior change to be understood as a function of a woman's readiness to take action and the environment in which she lives.

The goal of this review is to familiarize the reader with two broad areas of research that are relevant in working with Hispanic battered women. The first half of the literature review will introduce the topic of domestic violence and describe the cultural factors that place Hispanic families at particular risk for experiencing domestic violence. The second half of the review will focus on the topic of behavior change and on a description of the development and application of the Transtheoretical Model of Change. This literature review will conclude with a section that directly addresses the potential usefulness of this model as a guide for tailoring interventions to decrease the chances that

Hispanic battered women will terminate their treatment early. Throughout this literature review several terms are used interchangeably in reference to domestic violence such as wife abuse, partner abuse, intimate partner violence, spousal abuse, family violence, and wife assault. Similarly, the terms Latino/a and Hispanic are used interchangeably to describe individuals from a culture or country of origin in which Spanish is the predominant language.

Domestic Violence: Prevalence and Demographics

Domestic violence is a social and health problem that affects anywhere from two to over four million women every year in the United States and is being referred to as a "national epidemic" by medical doctors, community leaders, and public health experts (Abbott, Johnson, Koziol-McLain, & Lowenstein, 1995; Straus & Gelles, 1990). The National Network of Women's Funds (NNWF, 1992, as cited in Kanuha, 1994) reported that wife beating results in more injuries that require medical treatment than do rape, auto accidents, and muggings combined and that 30% of female homicide victims are killed by their husbands or boyfriends. The NNWF also reported that in one hospital emergency room, 20% of pregnant women had been battered and that these women had twice as many miscarriages as nonbattered women (Kanuha, 1994). In their seminal works, Walker (1979) and Bowker (1983) reported that violence in an intimate relationship is often ongoing and continuous and can manifest itself in a variety of ways including combinations of sexual and/or physical assaults, emotional/verbal abuse, and threats. Furthermore, domestic violence has been found to begin very early in relationships, it is experienced frequently (daily) and severely, and it usually follows a chronic course

(Bowker, 1983; Krishnan, Hilbert, VanLeeuwen, & Kolia, 1997).

Information obtained from around the world regarding various aspects of domestic violence suggests that issues confronting psychologists and other mental health professionals in the United States are similar to those faced by professionals in other countries. However, few reliable statistics are available on the prevalence of domestic violence due to the fact that it is often underestimated and underreported (Koss, 1994; Walker, 1999). During the 4th United Nations (UN) International Conference on Women, held in China in 1994, no country reported an absence of domestic violence although the participating countries varied greatly in their statistical surveys and intervention plans. It was noted that during the 20 years between the first UN Conference on Women and the last one in 1994, understanding, stopping, and preventing domestic violence and violence against women had risen to a very high priority for countries all over the world. In addition, women's organizations and social service organizations around the world have placed significant pressure on governments to consider domestic violence as a human rights issue rather than just a psychological, legal, or social issue (Perilla, 1999; Walker, 1999). Thus, the issue of domestic violence and its destructive effects on women's health and self-esteem, as well as on society as a whole, is being recognized not only by the United States but also by nations and people from around the world.

Although domestic violence is currently being studied by various cultures and ethnic communities around the world, within the United States, little research has been devoted to studying the incidence and prevalence of domestic violence among minority populations. However, the few estimates available suggest that domestic violence is

equally or more prevalent among minority populations (Sorenson & Telles, 1991). Among African American women ages 15-34, intimate partner abuse has been found to be the leading cause of death (Council on Scientific Affairs, 1992). In addition, some authors have found that African Americans are 1.2 times more likely to experience minor incidents of partner abuse and 2.4 times more likely to experience severe violence within their primary relationship than are their European American counterparts (Hampton & Gelles, 1994). Most of the evidence regarding the prevalence of domestic violence among Native Americans is anecdotal and suggests that tribal councils and official agencies are not documenting the extent of the problem. Through the work of some researchers, however, it has become known that domestic violence is prevalent and increasing both on and off Native American reservations (Krishnan et al., 1997). Although domestic violence also occurs in Asian American families, very few studies to date have used a large enough sample to estimate accurately the prevalence of abuse in these groups (Bauer, Rodriguez, Quiroga & Flores-Ortiz, 2000).

Clearly, more research is needed not only regarding the prevalence of domestic violence within minority populations but also regarding both the unique issues that minorities face which increase their risk of experiencing violence and the barriers that keep these individuals from seeking the necessary help to end the violence. In this review of the literature, we will address the former issue in detail concentrating on the Hispanic population and specifically on Hispanic battered women. After a general discussion of the prevalence of domestic violence in the Hispanic community, socioeconomic and cultural issues will be presented that provide a background for understanding how

Hispanic families may become susceptible to experiencing domestic violence. These subsections will be followed by a discussion of the influence of immigration and acculturation on stress and domestic violence. Briefly, the factors that mediate the impact of stress on Hispanic families, which can lead to domestic violence, will be discussed. Before turning to a description of the Transtheoretical Model and its application with battered women, some of the barriers that Hispanic women face in seeking help will be described.

Domestic Violence in Hispanic Families

Research has shown that Hispanic Americans, as a group, exhibit high rates of domestic violence (Sorenson & Telles, 1991; Straus & Smith, 1990). Surveys conducted in Spanish with a large number of Mexican immigrants have shown that 10.5% to 13% of Mexican American women experience domestic violence (Kantor, Jasinski & Aldarondo, 1994; Sorenson & Telles). Similar percentages were also found for English-speaking and more acculturated Latina women (Straus & Smith). In addition, 14% of Latina patients seeking prenatal care at urban public clinics have reported some form of physical or sexual abuse during their pregnancies (McFarlane, Parker, Soeken, & Bullock, 1992). One study examining the severity of spousal and intimate partner abuse to pregnant Hispanic women found that 30% of the 329 abused Hispanic women studied had been "threatened with death, 18 percent had been threatened with a knife or gun, 80 percent had been shaken or roughly handled, 71 percent pushed or shoved, and 60 percent slapped on the face and head" (Wiist & McFarlane, 1998, p. 248). In understanding these statistics, one must again keep in mind that domestic violence is an underreported

phenomenon, more so in the Hispanic community where a large percentage of illegal immigrants do not report the abuse due to a fear of deportation (Bauer, Rodriguez, Quiroga, & Flores-Ortiz, 2000).

Although some researchers have found no difference in the rates of abuse in Hispanic families when compared to other groups, they also have shown that Hispanic women report longer duration of violence. In other words, Hispanic women tend to stay longer in abusive relationships than do women of other ethnicities (Gondolf, Fisher, & McFerron, 1988). However, evidence indicates that these rates vary by cultural and ethnic group identification within the larger Hispanic community. For example, the results from one study showed that rates of wife abuse in Puerto-Rican American families were more than double those reported by Anglo families. In this same study, the rates of reported domestic violence were found to be similar in Mexican American families as they were in Puerto-Rican American families but were rarely reported by Cuban-American families (Kantor, 1997). This may be due to the considerable heterogeneity among these ethnic groups with regard to socioeconomic status, acceptance of wife abuse as normative, and degree of acculturation (Kantor, Jasinski, & Aldarondo, 1994).

Socioeconomic Status

Researchers have found that violence is often an adaptation to stress caused by structural inequalities. When alternate resources are not available, men often use violence to maintain their dominant status in the family (Straus, Gelles & Steinmetz, 1980). In fact, research has shown that the stress associated with unemployment or income disparity between husband and wife can lead to an increase of violence in the home

(Giachello, 1994; Smith, 1988, as cited in Kantor, 1997). Because low socioeconomic status, including poverty, unemployment, substandard housing, and segregation, has characterized the experience of many Hispanic families in the United States, their susceptibility to violence in and out of the home is quite high (Becerra, 1988; Giachello, 1994; Unites States Bureau of the Census, 1993).

The United States Bureau of the Census (1993) reported that, in the year 1991, over 25% of Hispanic families lived below the poverty line compared to 10.2% of non-Hispanic families. They reported that, in the same year, the median income for Hispanic families was only 65% of that earned by non-Hispanic families and that, in 1992, the unemployment rates for Hispanics was 11.3% compared to 7.5% for non-Hispanic families. Within the Hispanic population, Mexican Americans and Puerto Rican Americans are at particular risk of experiencing domestic violence which is associated with high rates of unemployment and associated difficulties (Becerra, 1988; Garcia & Marotta, 1997). Also, studies have shown that domestic violence is more prevalent in families of blue-collar workers and in households where the husband is unemployed or employed part-time. Once again, because Hispanic families are concentrated in blue-collar occupations that are often low-paying and unstable, domestic violence is more likely to occur in these families (Becerra; Straus & Smith, 1990).

Although domestic violence occurs in families with high socioeconomic status, substandard housing, segregation, and social isolation, as well as a lack of education, affect the experiences of many Hispanic families with low socioeconomic status and increase their susceptibility to violence. The United States Census Bureau (1991)

reported that the Latino-American population increased by 53% to 22.4 million since 1980, constituting 9% of the U.S. population, and that half of this growth was due to foreign immigration. Many of these immigrant families come to the United States without legal documentation which makes it even more difficult for them to obtain employment, much less appropriate housing. The anger and emotional pain that accompany the stress and powerlessness associated with living under poverty conditions can increase the likelihood that families with few resources, such as social support, will turn to violence as a means of coping with these feelings (Kantor, Jasinski, & Aldarondo, 1994). In addition, many Hispanic families, both with and without immigration documentation, are also quite segregated and thus socially isolated. Impaired communication, based on language differences, racial and ethnic discrimination, and differences in cultural values from mainstream society, leave these families without access to social resources that could mitigate the sense of stress and powerlessness that often precedes violent behavior (Bauer et al., 2000).

Researchers have found that rates of attainment of education for Hispanics remain low. In their review of the literature, Garcia and Marotta (1997) found that "only half of Latinos 25 years of age and older have completed high school, compared to 80% for the total population. Only 9% of Latinos have college degrees, compared to 21% for the total population" (p. 10). The American College Testing service reported in 1991 that Hispanics have the lowest education attainment rates compared to other groups in the United States. In addition, according to the United States 1994 Census Report, Hispanic women are less likely to graduate from high school, and they receive lower wages, have a

higher rate of unemployment, and are more likely to be living below poverty levels than are other sectors of the population. These demographics are important to consider when discussing the prevalence of violent behavior among Hispanics because attainment of education is highly correlated with success and power in the United States which, in turn, are related to a sense of well-being, self-efficacy, and mental health (Vasquez, 1994).

Cultural Issues

Social scientists and psychologists in Latin America and in the United Stated have emphasized the importance of studying human beings in their contextual framework, including the political, social, historical, economic, and spiritual aspects of their lives (Dana, 1993; Perilla, 1999). Likewise, it is vital to study the relationship between the individual and one's environment that affects the dynamics of violent behavior (Perilla, 2000). To understand more fully the antecedents, dynamics, and effects of violence in Hispanic populations in the United States it is essential to study the cultural context in which the violence occurs. Once again, it is important to keep in mind that the Hispanic/Latino culture is a heterogeneous population that consists of people with vastly different historical, economic, religious, and social characteristics. In addition, as Hispanic immigrant families acculturate and assimilate to American culture, their values and belief systems may become less rigid, and they may begin to incorporate some aspects of the new culture. However, certain core or common elements continue to characterize the beliefs and value systems of most Hispanic individuals, such as the importance of family, gender roles, and machismo (Coltrane & Valdez, 1997). These common elements interact with individual subgroup characteristics and may influence the

manner in which domestic violence is manifested.

Familism. Many Hispanics exemplify familismo. Familismo refers to a strong belief in the importance, and perhaps necessity, of a highly integrated and supportive extended family system. The members of this system, who include both the immediate family and the extended family of cousins, aunts, uncles, and grandparents, are expected to be loyal, supportive, and protective of one another (Abalos, 1986, Comas-Diaz, 1997). In reviewing the literature, some authors indicate that the cultural emphasis on the family can serve advantageously as a protective mechanism for Hispanics experiencing stress related to migration, acculturation, and socioeconomic difficulties (Balcazar, Peterson, & Krull, 1997; Rodriguez & Kosloski, 1998). However, the disadvantage of familism is that individual members of the family at times are expected to sacrifice their own welfare for "the good of the family" (Abalos, 1986, Vasquez, 1994). This phenomenon may explain the finding cited earlier regarding Hispanic women staying longer in abusive relationships when compared to Anglo or African-American women (Gondolf, Fisher & McFerron, 1988). For example, a woman may decide to stay in an abusive marriage because she believes that it is her duty to suffer and keep the family unit intact both for the sake of her family and to keep from being stigmatized and isolated by her family and the larger community. The value placed on maintaining the family intact also probably keeps women from seeking the medical and psychological help they need to end the violence in their relationships.

Gender Roles. In addition to discussing the importance of the family in Hispanic culture, some authors have also focused on describing and studying the roles of the

individual members of the family (Abalos, 1986; Valentine & Mosley, 2000). In her review of the literature, Vasquez (1994) found that the rigidity of the roles ascribed to each of the members vary from family to family with such factors as geographic location, level of acculturation, social class, age, and education. She reported that in healthy families in which traditional roles exist, members demonstrate a respect and sense of mutuality for the ascribed roles. However, in more dysfunctional families, the roles become rigid and inflexible and are used in a pathological and oppressive manner. Abalos (1986) provided a depiction of traditional and rigid roles in some Hispanic families:

> The father is the source of the mystery…, the eldest son replaces the father in his absence, and the women exist to serve the needs of the men and the household. The father can coerce, cajole, mediate, and bargain, but he will not allow female members of the family to physically isolate themselves or to develop an area of autonomous jurisdiction such as a life style that allows them their own jobs, paychecks, and schedules. (pp. 65-66)

In families such as this, the potential for violence increases when the father, the person who is usually ascribed a role of power and authority, uses his role to control and oppress other members of the family such as his wife and children. It is important to note, however, that this depiction of a rigidly traditional family is no longer the norm for Hispanic families nor is it exclusively characteristic of them (Casas, Wagenheim, Banchero & Mendoza-Romero, 1994). In fact, in a recent study on acculturation and sex-role attitudes, researchers found that, for Mexican Americans, sex-role attitudes tended to

move toward resembling those of the general majority population in the United States (Valentine & Mosley, 2000). As Hispanic families are confronted with new systems of values and beliefs, with socioeconomic challenges associated with their immigration to the United States, and with other stresses unrelated to immigration, it is likely that the roles in the Hispanic family are changing and becoming more flexible and egalitarian (Abalos, 1986; Perilla, 1999).

Machismo. Related to the topic of rigid gender roles is the cultural script of machismo which has been defined as "the broad specific beliefs, attitudes, and behaviors that have been traditionally ascribed to men" (Casas et al., 1994). In discussing the issue of domestic violence in Hispanic families, it is important to look at and understand this cultural characteristic of machismo as it impacts the marital relationship and the family as a whole. Using gender schema theory to understand machismo, Casas et al. explained that, given the strong relationship between self-esteem and gender identity, Hispanic males may be reluctant to let go of their extreme macho-oriented beliefs, attitudes, and behaviors which may impact the development of serious mental and health problems for themselves and their families. Casas et al. went on to describe how a man may turn to violence directed toward the self and/or others as a way of coping with stress and the resulting emotional turmoil. They showed, for example, how a man exhibiting tight emotional control over his wife and family is not a problem as long as the family is not faced with major changes that challenge the way in which the family operates. However, as the family struggles to cope with a new environment, such as the United States, the roles in the family begin to shift as the wife is forced to find a job outside the home and

the children slowly become more fluent in the English language than are their parents. The male now finds himself feeling confused, powerless, and stripped of his identity. Having no acceptable expressive outlets with which to reduce this stress, the potential for violence directed at himself and/or others increases (Casas et al.).

Once again, the purpose of introducing the topic of machismo is to understand the potential impact that this cultural characteristic may have on the presence of domestic violence in Hispanic families. However, much like other rigid gender roles, machismo beliefs, attitudes, and behaviors, are neither the norm for Hispanic families nor exclusively characteristic of them (Perilla, 1999). In a classic article reviewing the literature on machismo, Ramirez and Arce (1981) found that in the average Hispanic family, the role of the father is much more egalitarian and cooperative, especially when it comes to child-rearing. They also noted that some researchers have begun to find support for a broader conceptualization of machismo that may describe Hispanic males more accurately and include such positive attributes as respect, honesty, courage, honor, responsibility, and trustworthiness. Ramirez and Arce went on to state that they hope future studies on machismo will "produce new conceptualizations that are neither pejorative nor pathological in their views of Chicanos" (p. 24).

Alcohol abuse. Alcoholism may interact with Hispanic culture and increase Hispanic families' susceptibility to experiencing violence in their homes. Recently, a wave of research has appeared in which investigators have examined alcoholism in the Hispanic community (Caetano, Schafer, Clark, Cunradi, & Raspberry, 2000; Kail, Zayas, & Malgady, 2000; Lee, Markides, & Ray, 1997; Neff, Prihoda, & Hoppe, 1991; Nielsen,

1998; Treno, Alaniz, & Gruenewald, 1999). The most consistent finding from these studies is that the prevalence of drinking behavior varies by Hispanic subgroup membership. Researchers found that Cuban-American men report the lowest prevalence of drinking behaviors, Mexican-American and Dominican-American men the highest, and Puerto Rican-American, Colombian-American, and other Hispanic-American men somewhere in between (Kail, Zayas & Malgady; Lee, Markides & Ray; Nielsen). Other researchers have found that Hispanic-American men, along with Black men, tend to have more alcohol-related problems than Anglo men and that Mexican American and Puerto Rican-American males had prevalence rates three times higher than those of non-Hispanic-American males (Cunradi, Caetano, Clark & Schafer, 1999; Lee et al.). Yet other researchers have found that the alcohol consumption patterns of Hispanic-American males closely resemble those of the broader U.S. population. However, these authors also state that those at the highest risk of suffering from alcohol-related problems are Hispanic males, ages 31 through 40, with higher incomes, who are separated or divorced (Treno et al.). Some evidence also indicates that level of acculturation is associated with amount of alcohol consumption among Hispanic-American males (Kail et al.; Treno et al.). In one study, researchers found higher rates of alcohol consumption among Hispanics who identify themselves as White. These authors suggest that identifying as White may be an indication of a high level of assimilation or acculturation that, in turn, implies a correlation between acculturation and alcohol consumption (Treno et al.). Other findings suggest that the associations between acculturation and alcohol consumption are inconsistent and vary by Hispanic subgroup (Kail et al.).

Some researchers have looked at the relationship between drinking and domestic violence (Caetano et al., 2000; Cunradi et al., 1999; Kantor, 1997). In a review of the literature, Kantor found that heavy drinking is associated with wife abuse in Hispanic-American and Anglo-American families. However, she also found that cultural variations in drinking patterns are differentially related to wife assaults. According to what Kantor found, binge-drinking patterns occur more often among Hispanics, and this pattern of alcohol consumption is associated with wife assaults among some Hispanic subgroups (Kantor, 1997). Cunradi et al. also found an association between male alcohol-related problems and intimate partner violence across all racial and ethnic groups. However, when controlling for sociodemographic and psychosocial variables, "male alcohol-related problems were associated with a nearly twofold increased risk of male-to-female partner violence among white and Hispanic couples, but the association was no longer statistically significant" (p. 1500). These authors went on to say that the relevant factor to consider in the association between alcohol and partner violence is not the drinking itself but the problems associated with it (Cunradi et al.). Findings from the Caetano et al. study suggest that the relationship between interpersonal violence and drinking behavior "is complex and depends on a number of interrelated factors…[such] as couple members' personalities, socioeconomic status and ethnicity" (p. 42).

Immigration and Acculturation

"The assessment of culturally diverse persons can only be accomplished competently by clearly delineating the contribution of culture to the presenting problems and symptomatology" (Dana, 1993, p. 111). Thus, studying the topic of domestic

violence in the Hispanic community requires an understanding of the impact of immigration and acculturation on these individuals. In the following section, Berry's (1990) definition of acculturation is presented, followed by a review of the literature and a discussion of the findings pertaining to the impact of acculturation on marital disruption and domestic violence.

Definitions. Berry (1990), extracting key elements from other definitions, described the process of acculturation as follows:

> First there needs to be *contact* or interaction between cultures that is continuous and firsthand; this rules out short-term accidental contact, as well as diffusion of single cultural practices over long distances. Second, the result is some *change* in the cultural or psychological phenomena among the people in contact, usually continuing for generations down the line. Third, taking these two aspects together, we can distinguish between a *process* and a *state*: there is activity during and after contact that is dynamic, and there is a result of the process that may be relatively stable; this outcome may include not only changes to existing phenomena, but also some novel effects generated by the process of cultural interaction. (p. 206)

Berry (1990) went on to differentiate between the "dominant group" and the "acculturating group" and emphasized the importance of understanding the reasons why the two groups are coming into contact with one another as a precursor to understanding the process of acculturation for both groups. Berry pointed out that it is necessary to examine the purpose and goals of the dominant culture, such as colonization, evangelization, and/or education; the length of contact with the new culture, that is, how

long this contact has been or will be taking place; the population size, such as whether they constitute a majority; the policies being exercised toward the acculturating group, such as assimilation, extermination, and/or indirect rule; and the cultural qualities, such as whether they possess resources that may benefit the acculturating group. Similar information should also be gathered about the acculturated group, except that, in this case, what is of importance is understanding the group's motive for acculturation including whether it was voluntary or involuntary, whether they remained in their original location or were displaced, and whether certain aspects of the traditional culture might interact in negative ways with the process of acculturation. In addition, Dana (1993) stated that it is necessary to examine the quality of support networks available to individuals and families during this process of acculturation, because these networks can mitigate the stress associated with this process.

In considering the process of acculturation of a culture as a whole, one must also take into account the consequences of the changes that take place as a result of acculturation, such as possible political, economic, demographic, and cultural effects. For example, an acculturating group may have to face a loss of independence, changes in the way the economy is run, a change in the size and composition of the population, and differences in language and forms of social organization. However, it is important to recognize that the effects of acculturation vary from one individual to the next (Berry, 1990).

Another important issue to consider when understanding the process of acculturation is the ways in which an individual in the acculturating group wishes to

relate to the dominant group. An individual's wishes are important to take into account, because resulting choices may impact the individual's mental health and relationships with others. For example, an acculturating individual can retain and maintain one's cultural identity as well as acquire an interest in understanding and then participating in the dominant culture. This process is called integration. A second option, one of assimilation, is to reject one's cultural identity in favor of a new identity as part of the dominant culture. A third choice might be to reject and *separate* from the dominant culture in favor of retaining the original culture. Finally, one could reject one's own cultural identity and also separate from the dominant group thus becoming marginalized from both. How an individual acculturates can determine one's coping style and the availability of resources that will be available when dealing with stressful situations. The more options available, for example, to someone who has achieved integration, the less the likelihood that stress will have a negative impact on that person's mental health (Berry, 1990).

Finally, in summarizing his previous research, Berry (1990) differentiated between two other kinds of consequences to the process of acculturation. One was termed "behavior shifts" and refers to "the relatively conflict-free changes in behavior" (p. 220) that accompany acculturation. Of greater importance to this study is the other consequence of acculturation which Berry called "acculturative stress." In describing this term Berry stated that it "refers to new circumstances that often accompany acculturation, which appear to result from psychological conflict and social disintegration, such as an increase in homicide, spouse abuse, or a decline in mental health status" (p.229). In his

review, Berry cited evidence from his research indicating that stress is associated with the process of acculturation and that this level of stress depends on factors such as mode of acculturation, whereby more stress is associated with marginalized individuals and minimal stress is associated with those who choose integration; phase of acculturation; attitudes and behaviors of the dominant group towards the acculturating group; and the acculturating groups own cultural qualities (Berry,1990).

Understanding the process of acculturation for Hispanic individuals. In the following paragraphs the literature on acculturation, stress, and its impact on Hispanic families will be reviewed. Then, the findings linking these issues with domestic violence will be summarized.

Smart and Smart (1995) described six characteristics that differentiate the Hispanic immigration and acculturation experience and that "…tend to foster and sustain acculturative stress and impede movement through the stages of adjustment." (p. 391). The first characteristic has to do with skin color and discrimination in the United States. The authors stated that, unlike many white European immigrants, Hispanics face immediate discrimination with regard to employment, education, housing, and other services, based on the color of their skin. This kind of treatment by the dominant group can have a seriously negative impact on an acculturating individual's mental health (Flaskerud & Uman, 1996; Gil, 1996; Smart & Smart, 1995).

A second characteristic is related to what we have described as the Hispanic cultural emphasis on familism. The authors noted that separation from families due to migration may be especially hard and stressful for Hispanics. In addition, moving from a

culture in which the cooperation, collectiveness, and family ties are emphasized to one in which independence and competition are emphasized, can leave many Hispanic individuals feeling shameful and guilty as they begin the process of acculturation in the United States (Balcazar, Peterson, & Krull, 1997; Smart & Smart, 1995).

Smart and Smart (1995) described a third characteristic that addresses the high prevalence of illegal, Hispanic immigrants in the United States. The authors described how "illegal or 'undocumented' immigrants do not have full access to jobs, education, and economic benefits, and live in constant fear of deportation." (p. 73). Furthermore, these individuals are vulnerable to being exploited and blackmailed by employers, lawyers, and others, which increases their stress and negatively impacts their psychological health (Smart & Smart). In the case of battered women, the very real risk of exploitation and the fear of deportation keep them from seeking help to end the abuse in their lives and to increase their psychological well-being (Bauer, Rodriguez, Quiroga, & Flores-Ortiz, 2000).

Two other characteristics unique to Hispanic-Americans, particularly Mexican immigrants, are related to the geographic proximity of their countries and the legacy of being a "conquered" minority. Smart and Smart (1995) stated that it easier for Mexican families and individuals, compared to other immigrants, to travel back and forth between Mexico and the United States. In addition, a constant influx of Hispanic immigrants into the United States may lessen the need for immigrants to acculturate into the United States. This, in turn, may affect their willingness to learn the English language and acquire other skills that may improve their standard of living and overall mental health.

Smart and Smart also made readers aware of the fact that many Hispanic immigrants originally became Americans involuntarily as a result of having part or all of their country conquered by the United States. This has implications for the acculturative process, because many Hispanics may feel a sense of anger and distrust of American culture that may also add stress to this process (Smart & Smart).

Finally, Smart and Smart (1995) mentioned that Hispanic immigrants over the years have relied upon physical labor as a means of acquiring jobs in the United States. However, with the advancement of technology the demand for skilled labor is increasing and for unskilled, blue-collar workers is decreasing. This increases the acculturative stress of individuals by decreasing their ability to obtain jobs and support themselves and their families (Smart & Smart).

In the following section, research conducted on acculturation and its relationship to psychological factors relevant to Hispanic individuals will be presented. When reviewing the literature on the impact of acculturation on Hispanic individuals, the experience of acculturation and factors that may interact to increase the stress associated with this process will be highlighted.

Acculturation and psychological factors in Hispanic individuals. Acculturation has been linked in the literature with amount of alcohol consumption among Hispanic males, level of self-esteem among immigrant Latina women, degree of family cohesiveness in Mexican American pregnant women, extent of attitudinal familism in Puerto Ricans, and levels of social support and adjustment among Puerto Rican adolescent mothers (Balcazar, Peterson & Krull, 1997; Contreras, López, Rivera-

Mosquera, Raymond-Smith & Rothstein, 1999; Flaskerud & Uman, 1996; Kail et al., 2000; Rodríguez & Kosloski, 1998; Treno et al., 1999). These studies measured acculturation in similar ways; level of acculturation for research participants was obtained using Likert-type scales that tap into domains such as language use, choice of social relationships, pride in having a Hispanic background, preference and use of media, and country where childhood was spent.

As summarized in the section on alcohol abuse, some evidence links level of acculturation with amount of alcohol consumption among Hispanic-American males. However, these associations appear to be inconsistent and to vary by Hispanic subgroup (Kail et al., 2000; Treno et al.; 1999). Examining the stress-process model, Flaskerud and Uman (1996) tested the hypothesis that the stress associated with immigration and acculturation would lead to decreased self-esteem. They found that the Latina immigrant women who participated in their study experienced an increase in acculturation level and self-esteem over the course of approximately one year. However, the authors found no significant mediators or moderators of acculturation in their sample but did find differences between the Mexican and Central/South American female immigrants on level of education, religious affiliation, and degree of change experienced in their self-esteem. They concluded that when controlling for baseline self-esteem, "ethnicity (Central American) and change in acculturation were significant predictors of follow-up self-esteem." (p. 131).

Balcazar et al. (1997) investigated the implications of acculturation and family cohesiveness on socioeconomic status, acculturative stress, coping strategies, social

support, and pregnancy risk factors in Mexican-American pregnant women. They classified the participants on two factors, acculturation and family cohesiveness, in order to provide further information regarding the hypothesis that adherence to traditional cultural values acts as a protective mechanism against the stress of acculturation. The authors found that women of lower educational status tended to be classified as low in acculturation. Interestingly, they also found that those women who were low in acculturation and high in family cohesiveness used welfare assistance to a lesser extent than those who were high in acculturation and low in family cohesiveness. In addition, Balcazar et al. found that this traditional group of women (low acculturation, high family cohesiveness) experienced a greater amount of stress during immigration as a result of having to leave their families behind in Mexico. Other results included the finding that women who were high in acculturation or high in family cohesiveness were more likely to report the development of more adaptive behavior including a diverse array of coping mechanisms for dealing with the stress associated with acculturation. Finally, the authors found evidence that lower acculturation status may act as a protective mechanism for immigrant women against behavior that increases their risk for health problems during their pregnancy and in subsequent years. Specifically, they found that women who scored low in acculturation tended to smoke less, drink less, and were less likely to smoke marijuana than women who were more acculturated (Balcazar et al.).

Two studies further explored the association between familism as a source of social support and acculturation. Rodríguez and Kosloski (1998) examined the relationship between acculturation and familism in a sample of 182 Hispanic-Americans

of Puerto Rican descent. The authors identified three dimensions of acculturation and familism and explored the impact of acculturation on familism while controlling for demographic variables. They found that acculturation was positively correlated with two dimensions of familism: familial obligations, or an individual's perceived obligation to provide material and emotional support to members of the immediate and extended family, and support from relatives, or the individual's perception that family members will provide help and support in solving problems. However, they did not find an association with the third familism factor, termed "family as referents," which indicates an individual's use of family members as behavioral and attitudinal referents, that is, that one consults relatives for important decisions and looks to them as examples of how one should act and what one should believe in. The results from this study also indicated that none of the demographic variables significantly affected the level of familism (Rodríguez & Kosloski).

Contreras et al. (1999) also found that level of acculturation is related to an individual's reliance on the family as a source of support. The authors examined the moderating effect of acculturation on family support and psychological adjustment among Puerto Rican mothers in their 2nd or 3rd year of parenting. The authors found that the association between these two variables were indeed moderated by the mother's level of acculturation. Specifically, they found that mothers who were relatively unacculturated received greater support from the grandmother as evidenced by the residential, social support, and child care assistance they provided. Furthermore, Contreras et al. found that among these relatively unacculturated mothers, the social support they received was

correlated with lower levels of symptomatology and stress related to parenting. However, for more acculturated mothers, greater involvement from the grandmother was related to increased symptomatology and parenting stress. The authors suggest that Latina women who adhere to traditional values of familism perceive involvement from family members as supportive while Latina women who share American values are more likely to want to feel independent and, thus, perceive involvement from family members as stressful. Contreras et al. concluded that "the associations between grandmother involvement and psychological adjustment and parenting stress are moderated by culturally determined expectations regarding grandmother-adolescent relationships and the levels of grandmother involvement and adolescent independence that are culturally prescribed" (p. 239).

The findings from the above studies indicate that no simple relationships exist among acculturation, stress, ties to traditional values and familism, and mental health consequences. It appears as though, for some individuals, acculturation is associated with such phenomena as increased stress, loss of cultural values and social support, and socioeconomic difficulties. However, for others, increased acculturation appears to be associated with the development of adaptive behaviors and even with a greater sense of familism and decreased symptomatology and stress as a result of family support. Similarly, individuals who are low in acculturation may experience fewer health problems but, at the same time, suffer from the stress associated with leaving families behind and from a low socioeconomic status related to their low level of educational attainment (Balcazar et al., 1997; Contreras et al., 1999; Flaskerud & Uman, 1996;

Rodríguez & Kosloski, 1998). Many variables appear to interact with one another to determine the manner in which acculturation impacts individuals in the Hispanic community such as gender, Hispanic subgroup membership, and adherence to traditional values. What is consistent across the literature is that acculturation has an impact on individuals in ways that affect their level of stress and probably their mental health.

Acculturation and domestic violence. Several researchers recently investigated the connection between acculturation and domestic violence (Caetano, Schafer, Clark, Cunradi & Raspberry, 2000; Jasinski, 1998; Kantor, Jasinski & Aldarondo, 1994; Sorenson & Telles, 1991). The overwhelming consensus from these studies is that a higher rate of domestic violence exists among more acculturated individuals. In the following paragraphs these studies will be examined more closely to understand how such a consistent result was found independent of the use of different measures, populations, and statistical procedures.

In a frequently cited study, Sorenson and Telles (1991) investigated the prevalence rates of spousal violence among 1,243 Mexican Americans and 1,149 non-Hispanic whites as part of a survey of Los Angeles households. The authors assessed for experiences of domestic violence by asking respondents whether they had ever perpetrated violent behavior or had been victimized by it. Acculturation was indirectly assessed by categorizing participants according to whether they were Mexico-born Mexican American, U.S.-born Mexican American, or U.S.-born non-Hispanic white. Sorenson and Telles found that U.S.-born Mexican Americans reported rates of violence that were 2.4 times higher than those of Mexico-born Mexican Americans. The authors

suggested that the findings may be understood by considering that U.S.-born Mexican Americans may be at a high risk of cultural conflict because they are caught between their familial culture of origin and the dominant culture in which they reside (Sorenson & Telles). The conflict and stress that may arise from being "stuck" between the two cultures may leave these individuals lacking the necessary coping mechanisms and social support that can act as protective mechanisms against domestic violence.

A study by Kantor et al. (1994) corroborated Sorenson and Telles' (1991) findings. The goal of their study was to examine the national incidence of marital violence in three Hispanic-American subgroups and in Anglo-American families in order to understand how sociocultural status and attitudes toward violence are related to wife assaults. The authors used the Conflict Tactics Scale (Straus, 1979, 1990a, 1990b, as cited in Kantor et al.) to assess verbal and physical aggression; Respondents were also asked to report on their partner's behavior. To assess acculturation, they used a four-item scale that determined the participants' preference and utilization of the Spanish versus the English language in a variety of situations and asked the participants to indicate their own and their partner's country of birth. Kantor et al. found that being born in the United States is associated with an increased risk of wife assaults by Mexican and Puerto Rican husbands. It should be noted, however, that the authors found no significant effects relating acculturation with wife assaults using the measure of language preference. The authors conclude that the association between the husband's country of birth and wife assaults may be caused by a loss of intact cultural values that act as buffers against stressors that might otherwise lead to violence (Kantor et al.).

Jasinski (1998) also found that using language preference as a measure of acculturation was not useful in predicting wife assault. The purpose of her study was to examine the role of acculturation in both minor and severe wife assault. In addition she examined the impact of using different measures of acculturation in a national sample of 1,970 individuals, which included a varied sample of Hispanic subgroups consisting of 105 Puerto Ricans, 327 Mexicans, 175 Mexican Americans, and 136 Cubans. Like other studies, the author used the Conflict Tactics scale to measure wife assault. Two indexes differentiating between minor and severe violence were derived from the measure and then dichotomized to indicate the presence or absence of violence. Jasinski used several measures in order to assess the different facets of the concept of acculturation. She used the same 4-item scale used by Kantor et al. (1994) that indicated language preference in a variety of settings and situations. In addition to the language preference measure, the Hispanic participants were asked to indicate in which country he or she, his or her partner, and both sets of parents were born. Jasinski used these questions as a measure of generational status and categorized individuals as first-generation (people who were not born in the U.S.), second-generation (U.S.-born offspring of immigrants), and third-generation (people who were born in the U.S. to parents who were also born in the U.S.). Jasinski gathered additional information from the first-generation individuals, including what year they immigrated to the U.S. and the age of the respondent, to calculate length of time in the U.S. A final measure of acculturation was the language used by the participant to complete the interview.

Like the findings from the Kantor et al. study, the results of this study indicated

that all measures of acculturation, except language preference, were associated with minor wife assault. Furthermore, when controlling for socioeconomic factors, only generational status, particularly third-generation individuals, and U.S. arrival age (indicative of length of time in the U.S.) significantly predicted wife assaults. These findings lend further support to the idea that Hispanics who were born in the U.S. or who have spent a longer time in this country are at a higher risk of experiencing domestic violence. One possible interpretation of these findings is that a higher risk of violence is a result of feeling caught between two cultures and not benefiting from the protective mechanisms, against stress and possibly violence, offered by either culture.

Caetano et al. (2000) found further evidence to support the idea that those individuals who are caught between two cultures may be at a higher risk for experiencing violence in their marital relationships than those who are less acculturated or highly acculturated. Caetano et al.'s study reported the rates of intimate partner violence, acculturation, and alcohol consumption among U.S. Hispanic couples. The authors assessed both male-to-female partner violence and female-to-male partner violence in a sample of 527 Hispanic couples in the United States. To assess domestic violence, researchers used an adaptation of the Conflict Tactics Scale to have participants indicate the occurrence of 11 violent behaviors that they perpetrated against their partners or that their partners perpetrated against them during the past year. The dependent variable of violence was dichotomized so that violence was considered to have occurred if at least one partner reported a violent incident within the past year. To measure acculturation the authors used a scale that tapped into many domains of acculturation including use of the

Spanish versus English language, preference for interethnic marriage, use of Hispanic media, preference for Hispanic music, and proportion of social network that is Hispanic. For the analyses the acculturation variable was divided into three categories representing low, medium, and high levels of acculturation. The results of the analyses indicated that Hispanics in the medium acculturation group are at a higher risk for partner abuse than those in other acculturation groups, particularly when both partners are in the medium acculturation group. Furthermore, the authors found that, with regard to female-to-male partner violence, medium to highly acculturated women who also drink alcohol report the highest rates of intimate partner violence. Similar to the conclusions drawn by Sorenson and Telles (1991) and Kantor et al. (1994), Caetano et al. suggested the following interpretation:

> This higher degree of domestic violence among medium acculturated couples may reflect the inherent difficulties of the acculturation process, during which individuals may lack a strong identification with one culture and thus are forced to negotiate between two disparate cultures. This potential lack of ties with the culture of the old country and with that of the adopted country may lead to increased anxiety, stress, conflict, and partner violence. This may be especially true if both partners are undergoing the same process….In this case, neither partner will have a reservoir of resilience to stress and conflict in the relationship may lead more easily to violence. (p. 43).

Thus, the rising evidence from the research is that intermediate stages of acculturation are associated with a negative effect on Hispanic individuals' ability to cope

with stress, which in turn is associated with decreased mental health and increased susceptibility to experiencing violence in their homes. Furthermore, the retention of traditional cultural beliefs and values appears to be associated with greater mental health and lesser susceptibility to violence (Escobar, 1998). The mediating factors that may serve as protective mechanisms for Hispanic families coping with immigration, acculturation, and other stressors will be briefly explored in the following section.

Mediating Factors

Several studies have found that variables such as social support, extended kin networks, and socioeconomic status, in addition to acculturation, mediate the impact of stress on Hispanic families and individuals which can lead to marital disruption and domestic violence (Balcazar, Peterson, & Krull, 1997; Bean, Berg & Van Hook, 1996; Briones, Heller, Chalfant, Roberts, Aguirre-Hauchbaum, & Farr, 1990; Contreras et al., 1999). The findings from these studies suggest that many variables interact with one another to determine the consequences of stress on Hispanics and that the relationships between acculturation, stress, and domestic violence is complex.

Socioeconomic status. The following studies examined the relationship between socioeconomic status and acculturation.

Bean et al. (1996) examined how the processes of socioeconomic status and cultural incorporation are related to marital-disruption patterns among individuals of Mexican descent in the U.S. The authors found a negative correlation between level of education, the measure of socioeconomic status, and marital disruption among relatively more acculturated U.S. native Mexican Americans. However, their results also indicated

a positive relationship between educational level and marital disruption among Mexican immigrants. Thus, the authors found that socioeconomic factors and cultural incorporation interact in their effects on marital disruption. The authors speculated that the levels of marital disruption among Mexican Americans will decline in the future to the extent that they acquire higher levels of education (Bean et al.).

Briones et al. (1990) looked at the effects of minority status versus ethnic culture on Mexican-Americans' underutilization of mental health services. They hypothesized that a series of factors, including socioeconomic status, would culminate in a person's decision to utilize mental health facilities. The results from their findings indicated that being Anglo- American was associated with higher socioeconomic status which, in turn, was associated with having a support network that acted as a protective mechanism against depression and resulted in less need for professional mental health care. For Mexican-Americans, socioeconomic status directly predicted utilization readiness. The authors stated that "…high socioeconomic status mitigates many of the effects of minority status by placing persons in a prestigious and affluent network of relationships and memberships" (p. 1338). Thus, it appears that socioeconomic status also interacts with social support to predict decreased symptomatology, stress, and utilization of mental health services.

Social support. Two other studies have explored the role of social support in mediating the effects of stress on Hispanic women (Balcazar et al., 1997; Contreras et al., 1999). Both of these studies found that social support does impact the amount of stress experienced by Hispanic women. To summarize, Balcazar et al. looked at the effects of

family cohesiveness on a number of dependent variables including acculturative stress, coping strategies, and pregnancy risk factors from a sample of Mexican American pregnant women. They found that women who were both low in acculturation and high in family cohesiveness experienced the greater stress as a result of being separated from their families. The authors further speculated that women who are high in acculturation but low in family cohesiveness also suffer increased stress in part because they lack close family relationships that act as buffers and diminish the negative effects of stress (Balcazar et al.)

Contreras et al. (1999) examined the associations between social support and adjustment among Puerto Rican adolescent mothers. They found that greater support from the grandmother was related to less symptomatology and parenting stress with adolescents who were less acculturated. However, among those adolescents who were more acculturated, involvement from the grandmother was associated with increased symptomatology and parenting stress. Social support from partners, however, was related to less symptomatology (but not parenting stress) regardless of the adolescent's level of acculturation. However, an interaction effect revealed that co-residence with their partners was related to increased stress if social support was perceived to be low.

The findings from these studies indicate that socioeconomic status and social support influence the effect of stress, marital disruption, and even utilization of mental health services among Hispanic individuals. However, these relationships are not straightforward, and the impact of these mediating variables also varies according to level of acculturation. Although the studies on social support apply only to women, it is

important to explore the impact of these variables, because they may also be related to these women's ability and willingness to seek help if they do experience domestic violence. This topic will be discussed further in the following section on barriers to seeking mental health services.

Barriers to Seeking Help

In a review of the literature, Kanuha (1994) reported that women of color tend to enter the mental health system through emergency rooms, community health clinics, or other public social services, as opposed to Anglo, middle-class women who seek assistance from private physicians or health insurance programs. Kanuha pointed out that "because public health care is often inadequate and compromised by limited resources and staff, women of color and their families frequently do not receive the quality and level of mental health and social services they require and deserve" (p. 440). Furthermore, Kanuha found that the literature indicates that women of color usually seek mental health services only in times of crisis or as a last measure. Acculturation and assimilation also appear to play a role in whether women of color will initiate contact with mental health services. Thus, second or third generation Hispanic women may be more likely to seek help from mental health services than immigrant women. Kanuha concluded that women of color may be suspicious of mental health practitioners, expect to be treated poorly and inadequately, and underestimate the amount and kind of assistance they may need. Sanders-Phillips (1996) and Bauer et al. (2000) found support for this statement.

The literature lacks consensus regarding whether underutilization of mental health

services is due to ethnicity; to other factors such as minority status, socioeconomic status, and acculturation; or to an interaction among ethnicity and these other factors. Briones et al. (1990), in examining the effects of minority status versus ethnic culture on Mexican-Americans' underutilization of mental health services, found that Hispanic origin alone did not predict utilization readiness. Instead, the authors found that class position directly predicted willingness to use mental health services. They also found that life stress indirectly, through depression, and directly predicted utilization readiness (Briones et al.).

In contrast to the Briones et al. (1990) finding that ethnicity is not directly related to utilization of mental health services, Sanders-Phillips (1996) found that ethnicity was the most significant individual factor related to health-promotion behaviors and that its impact was independent of other variables. However this inconsistency in findings most likely is due to the fact that health-promotion behaviors, as defined in the study, did not include utilization of mental health services, although these two factors may be correlated. The authors also found that a number of individual and community factors, as well as perceptions of the health care system, are related to health promotion in low-income, ethnic minority groups. Thus, it is likely that many factors interact with one another to predict whether a Hispanic individual will seek assistance from mental health services.

Bauer et al. (2000) identified some of the sociopolitical and sociocultural barriers to seeking help from health care organizations faced by abused Latina and Asian immigrant women. The authors collected qualitative data through a series of four semistructured ethnic-specific focus group interviews with 28 abused Latina and Asian

immigrant women recruited through community-based organizations in San Francisco, California. Following is a summary of their findings. For the purposes of this review the focus will be on issues relevant to Latin women.

Sociopolitical barriers. In discussing barriers to seeking help, Latina women talked about their lack of social support and social isolation after they had immigrated to the U.S. They described how difficult it was to seek help outside the home while they were economically and socially dependent on their abusive husbands. In addition, they stated that their social isolation kept them from even being aware of available services, such as women's shelters and other resources for abused women. Furthermore, their knowledge of their legal rights and law enforcement was also lacking, due to their isolation, and affected their decision to seek help (Bauer et al., 2000).

In seeking help, another concern for these women was their inability to effectively communicate with health care practitioners. They stated that this difficulty communicating often added to their sense of isolation, and that although the use of translators could be helpful, it also created a sense of distance that interfered with creating trust and rapport and discouraged their willingness to discuss the abuse in their lives (Bauer et al., 2000). The issue of building trust and rapport is particularly significant for Latina women who prefer personal, informal, and individualized attention in relationships (Dana, 1993). Together, these research findings indicate that demonstrating care and respect and establishing conditions conducive to trust are vital in providing effective mental and medical health care to Latina women (Vasquez, 1994).

Many of the participants who did not have legal status in the U.S. also expressed

that their fear of deportation kept them from seeking the help they needed, especially if they were dependent on their husbands for their legal status. Specifically, these women stated that they were reluctant to call the police or enter the health care system for fear that they would immediately be reported to the federal immigration authorities. Most of the participants did not know that they had any right to legal protection from domestic violence (Bauer et al., 2000).

Some women's beliefs about violence kept them from seeking help from the police or other social service organizations. These women often came from countries where the law did not protect them from domestic violence and where the police and other institutions would not respond to domestic disputes. They were taught to view violence as a private matter, one that was not meant to be discussed with other intimates, much less impersonal authorities such as policemen or medical practitioners. These concerns often impeded the participants from seeking help to end the violence in their lives (Bauer et al., 2000).

A very real fear of racial discrimination and mistreatment was also expressed by the participants in this study as a reason for not seeking help. Bauer et al. (2000) found that "to the extent that these women felt disconnected, disempowered, and mistreated in the medical care setting, they were reluctant to openly discuss their abusive situations" (p. 37). The perception that racial and ethnic prejudice exists in mental health facilities affected whether these women would seek help for domestic violence (Bauer et al.).

Sociocultural issues. The women in this study also talked about how the influence of traditional gender roles influenced their perception of the abuse and their willingness

to seek outside help. Many of these women discussed how maintaining their families intact for the sake of their children took precedence over their own personal problems. Furthermore, their belief in the sacredness of marital bonds and the self-sacrificing nature of marriage, as well as their fear of the stigmatization of divorce, also deterred them from seeking help. As stated earlier in this thesis, Hispanics place a great deal of importance on the value of familismo, which emphasizes family unity and loyalty. Although this value can serve as a protective mechanism against stress and violence, it also can reduce the likelihood that a women will seek extra-familial support if abuse does occur (Bauer et al., 2000). Thus, it is apparent from the women's discussions that their cultural values greatly influence their willingness to seek help from health care institutions.

Structural issues. Although this issue was not addressed in Bauer et al.'s (2000) study, it is important to address the environmental and socioceconomic constraints to seeking help. Heron, Twomey, Jacobs, and Kaslow (1997) discussed these issues as they affect survivors of domestic violence. Although their review of the literature focused on issues encountered by low-income African American women, many of these issues are also relevant for Hispanic women.

As stated earlier, low socioeconomic status, including poverty and unemployment, has characterized the experience of many Hispanic families in the United States (Straus, Gelles & Steinmetz, 1980). These factors influence not only whether a woman is likely to seek help, but whether she is able to so. For example, Heron et al. (1997) point out that low-income women "…often do not have sufficient material resources such as money for basic necessities, housing, transportation, or child-care." (p.

413). For these women, seeking mental health treatment to end the abuse may not be a priority. Furthermore, without transportation, seeking regular assistance in the form of ongoing psychotherapy, for example, is not feasible. Thus, pervasive economic inequities also act as barriers to seeking health care for abused women, especially if they are low-income Hispanic women.

The next section focuses on the development of culturally competent interventions for battered women. In understanding the process of change for battered women, it is important to keep in mind the barriers that Hispanic women face in seeking treatment to end the abuse in their lives. Working to remove these barriers is an essential part of a culturally competent intervention.

Towards Culturally Competent Interventions for Battered Hispanic Women

This portion of the literature review will focus on the issue of understanding and helping survivors of domestic violence. In the following subsections, the Transtheoretical Model of Behavior Change will be described as it can be applied to battered women. First, a brief summary of the internal and external constraints that battered women face as they begin the process of change to end the violence in their lives will be presented. Then, the history and development of the Transtheoretical Model will be described. This section will include a description and definition of the stages and processes of change, the assessment of these stages, and the levels of change. Finally, a brief summary of the literature on the Transtheoretical Model will be presented followed by a discussion of the intervening variables that mediate movement across the stages of change.

Health Behavior Change

An array of health behavior change theories exist including, among others, social cognitive theory, behavior analysis, and the Transtheoretical or Stages of Change model. Most of these theories of change overlap, and all emphasize the existence of internal and external motivators and constraints to changing behavior (Elder, Apodaca, Parra-Medina, & Zuñiga de Nuncio, 1998). In this section, the issue of internal and external constraints applied to women surviving abuse will be addressed. Later, when discussing the variables that mediate movement across different stages of change, the internal and external motivators for change will be addressed.

Internal constraints. Brown (1997) highlighted the reaction that many people have when discussing domestic violence. Often, the question is, "Why doesn't she just leave?" (p. 6). The author points out that this type of question assumes an easy and simple answer to an easy and simple question. In reality, however, the process of change is quite complicated and involves the interaction of many factors that will enable or disable a woman's ability to end the violence in her life.

In reviewing the literature, Brown found that fear of and love for the abuser as well as suffering from post-traumatic stress disorder are common internal constraints to not ending the violence. Walker (1979) discussed how learned helplessness can disable a battered woman from making changes and seeking help for domestic violence. Elder et al. (1998) noted that lacking a belief in positive outcomes and not having the requisite problem-solving skills are among the internal constraints that may keep a woman in an abusive situation. In addition, limited coping resources such as poor health and low

energy, lack of social skills, cultural values, and perceptions of limited alternatives, as well as a commitment to the continuation of the relationship despite the presence of abuse, also influence whether a woman is able to take action to end the abuse (Heron et al., 1997). Lack of knowledge about legal rights and beliefs about violence, for example, that it is a private matter, also keep women from taking action and seeking help from the police or other social service organizations (Bauer et al., 2000). Brown (1997) noted, however, that as opposed to changing behavior that is mostly under individual control, making a change "within the embedded context of a marriage or relationship in which one of the partners is threatening the other with bodily and psychological harm for staying, or leaving; in which children may be shared; and in which the woman loves her partner, the picture of how to deal with the situation is not so clear cut" (p. 8).

External constraints. The external constraints that keep Hispanic women from seeking help to leave abusive situations have already been discussed in previous sections (Bauer et al., 2000; Briones et al., 1990; Kanuha, 1994; Sanders-Phillips, 1996). Here, however, a brief review and an extended list of external constraints that may be relevant to many battered women will be presented.

Bauer et al. (2000) identified lack of social support and isolation as external constraints to seeking help. Insufficient material resources such as lack of income and transportation also limit a woman's ability to end the abuse in her life (Heron et al., 1997). In addition, if the level of threat from the abuse is perceived to be high, this will lessen the likelihood that a woman will take action. Heron et al. stated that, "environmental constraints include limited response by healthcare professionals,

legislators and law enforcement agencies, and pervasive economic and social inequities" (p. 414) which will also determine whether a battered woman will take action. Finally, limited access to healthcare, lack of education about abuse, and/or abuse-related injury also influence a woman's ability and willingness to make changes and seek help for domestic violence (Elder et al., 1998; Heron et al.).

The purpose of this section was to highlight the many internal and external constraints that battered women face as they attempt to end the violence in their lives. The process of change depends upon many variables that are both under and out of a woman's control. Furthermore, as Brown (1997) and Elder et al. (1998) pointed out, we must consider that, especially regarding domestic violence, an individual makes changes within the context of a relationship and a social network. If the individual making changes is Hispanic and adheres to traditional cultural beliefs that place the family and the community above the individual's needs, the process of ending the abuse is further complicated. *Transtheoretical Model of Behavior Change*

History and development. In response to consistent findings from the literature that no one system of therapy is better than another and the subsequent trend toward an eclectic approach to treatment, Prochaska and DiClemente (1982) presented Transtheoretical therapy as an alternative model of treatment that integrates a variety of processes of change derived from different models of therapy. Prochaska (1979) conducted a comparative analysis of 18 leading therapy systems to examine the processes of change that enable clients and therapists to attain their goals. He found that five central processes of change can be applied at either an experiential or an

environmental level to produce change. The various therapy systems use these basic processes of change but differ in terms of which processes are emphasized and whether the processes are applied experientially or environmentally (Prochaska & DiClemente, 1982).

Prochaska and DiClemente (1984) expanded the original analysis to include a total of 29 leading systems of therapy that yielded 10 basic processes of change. Prochaska and DiClemente (1986) described the processes of change in the following manner:

> The processes of change represent a middle level of abstraction between the basic theoretical assumptions of a system of therapy and the techniques proposed by the theory. A process of change represents a type of activity that is initiated or experienced by an individual in modifying affect, behavior, cognitions, or relationships. Whereas there are a large number of coping activities, there are a limited set of processes that represent the basic change principles underlying these activities." (p.7).

Following is a description of the ten processes of change.

Processes of change.

1. *Consciousness raising* is the most frequently used process of change. This process involves providing information to individuals to increase alternatives so that they can make the most effective choices when confronted with particular stressors.

2. *Self-liberation* involves the individual becoming aware of new alternatives and includes the individual consciously creating one's own alternatives for living. This

process involves a feeling of anxiety that goes along with taking the responsibility of choosing an alternative without any guarantee of what the consequences will be.

3. *Social liberation* occurs when changes in the environment increase the number of alternatives available to the individual.

4. *Counter-conditioning* occurs when the individual changes the way one experiences or responds to a particular stimulus.

5. *Stimulus control* involves changing the environment so that a particular stimulus will be less likely to occur, thus reducing the chances that a troublesome response from the individual will occur.

6. *Self-reevaluation* entails changing one's reactions or responses to the consequences without changing the actual contingencies of the situation. This involves a cognitive and affective appraisal of the pros and cons of the consequences that come with changing a particular behavior.

7. *Environmental/social reevaluation* involves reassessing the impact of the problem on other people.

8. *Contingency control* involves changing the contingencies that exist in the environment. This is based on the principle that states that the probability that a behavior will occur is determined by the consequences of the behavior. Thus, changes in the individual are brought about by changing the contingencies that govern the behavior.

9. *Dramatic relief* is related to the belief that when emotions are blocked from being fully and directly expressed the pressure thus created will be released in other, indirect and possibly problematic, ways. It follows that if emotions can be released more

directly in therapy, the pressure is released and the problematic symptoms disappear. Dramatic relief refers specifically to cathartic reactions being evoked through observing emotional scenes in the environment.

10. *Helping relationships* involve characteristics of the relationship that facilitate change such as openness, trust, warmth, and understanding (Prochaska & DiClemente, 1984).

The processes that involve increasing information and alternatives so that the individual can change one's behavior by making an informed and effective choice, that is, consciousness-raising, self- and social-liberation, and those that involve catharsis, that is, dramatic relief, are commonly used in verbal therapies such as psychoanalysis and humanistic or existential therapies. The focus of these systems of therapy is on the subjective aspects of the individual, and the goal is to make inner-directed changes that counteract external pressures. In contrast, those processes that entail dealing with stimuli and contingencies, such as counter-conditioning, stimulus control, reevaluation, and contingency control, have been the focus of more behaviorally-oriented approaches to therapy. In this orientation the focus is on the external environment and the forces that limit inner-directed change (Prochaska & DiClemente, 1982).

The Transtheoretical model integrates the verbal and behavioral approaches to therapy by proposing that change involves moving along "continuous dimensions of inner to outer control, subjective to objective functioning, and self- to environmentally-induced changes" (Prochaska & DiClemente, 1982, p. 281). This integration provides a more complete and realistic picture of the context in which an individual makes changes

(Prochaska & DiClemente, 1982). In addition, with this model, both internal and external constraints to changing behavior are acknowledged and addressed.

Stages of change. Following the idea that individual change begins with an internal, subjective focus and moves toward a more behavioral and objective dimension, Prochaska and DiClemente (1982) observed that individuals go through a series of stages in changing their behavior. The authors identified these stages but noted that progression through these stages was often not linear but dynamic in that individuals progress and regress through the stages at different times in their progression towards change. In addition, an individual may stay in one stage for a long period of time while rapidly progressing through the other stages. Furthermore, it is likely that for some changes in behavior the progression will be more linear while for others the process is more complex and dynamic. Similarly, individuals vary in how they change and the processes they use to make those changes. Thus, Prochaska and DiClemente (1982) identified the following five stages of change that interact with the processes of change described in the above section.

1. *Pre-Contemplation:* Individuals in this stage are not aware of having a particular problem even though others may recognize them as having a problem. These individuals tend to be either naively unaware of the consequences of their behavior or actively engaged in resisting the knowledge of the consequences of their behavior. They may be in this stage because they simply do not want to change or believe that there is nothing they could do to change. The latter position may be common to abused women who are unaware of resources in the community or who may be accepting the abuser's

definition of the situation which is that the abuse is the woman's fault (Brown, 1997). If these individuals were to initiate change, as in coming to therapy, it is likely that they would be doing so at the request of or as the result of pressure from others and not because they feel they want, need, or are able to change.

2. *Contemplation:* In this stage the individual is beginning to recognize that a problem exists or is starting to feel some discomfort about one's situation. One may be struggling to understand the problem and is seeking more information. However, the person at this stage has not yet made a commitment to change. These individuals are ambivalent about the pros and cons of changing and may stay in this stage for a long period of time. For abused women, this may be a time when they are considering how they can go about leaving the abuse and the pros and cons of leaving the batterer (Brown, 1997).

3. *Decision Making/Preparation:* Individuals in this stage are ready and committed to make a change; they are willing to endure the consequences and to take responsibility. However, they have not yet begun to make changes. Brown (1997) described how battered women in this stage may be contacting abuse hotlines, gathering information about shelters, and setting aside money in case of an emergency.

4. *Action:* In this stage the individual has actively started to change one's behavior or the environment. One has not yet attained the desired change and may be seeking help for the problem. Abused women in this case may have left their abuser and are residing in a safe house or a shelter, or they may have taken some action to reduce or end the violence while staying with the batterer (Brown, 1997).

5. *Maintenance*: Individuals in this stage have been successful in making a change. However, they may fear relapse and/or are having a hard time maintaining their recent change on their own. Survivors of domestic violence who have reached this stage may begin therapy because they are beginning to date again and are afraid that similar abusive dynamics will be repeated in these new relationships.

Integration of stages of change and processes of change. In testing their model on smoking cessation, Prochaska and DiClemente (1982) found that certain processes of change are used more often during particular stages of change. The verbal processes of change, such as consciousness raising, are used most often during the first two stages of change. The authors noted, however, that these verbal processes are used in all stages but are emphasized during these first two stages. They also found that cathartic processes, such as dramatic relief, tend to bridge contemplation and preparation because an affective experience was often necessary to motivate these individuals to stop smoking. The behavioral processes of contingency control and conditional stimuli were rarely used in the stages preceding action but were used frequently in the action and maintenance stages. Thus, both verbal and behavioral processes are necessary in bringing about change in individuals. The major difference is that verbal processes appear to be most important in bringing about change while behavioral processes are necessary for committing to take action and maintaining change (Prochaska & DiClemente, 1982).

The findings integrating processes of change with stages of change have important implications for therapy. Underlying these findings is the idea that individuals use certain processes depending upon their readiness for change, or stage in the change

process. Prochaska and DiClemente (1986) suggested the following:

> The integration of stages and processes of change can serve as an important guide for therapists. Once it is clear what stage of change a client is in, the therapist would know which processes to apply in order to help the client progress to the next stage of change. Rather than apply change processes in a haphazard or trial-and-error fashion, therapists could begin to use change processes in a much more systematic style. (pp. 8-9)

The goal for therapists would be to meet clients where they are in terms of their ability and/or willingness to change instead of viewing a client as resistant because they are not using the processes that the therapist deems are appropriate for that person to change. For example, if a battered woman initiates treatment because she is ambivalent about her relationship with her abuser and is simply wanting to process her concerns and acquire more information, a therapist who focuses on behavioral processes to bring about action or a change in behavior is likely to be disappointed when the client is unwilling to make concrete changes. This client is not ready to make changes and, in addition, will likely feel misunderstood by the therapist who, in the client's view, is pushing her to make changes she is not ready to make. Thus, before initiating treatment and formulating goals, it is important to first assess what stage the client is in regarding one's readiness to initiate change and then tailor treatment to include processes that are most relevant for that particular client.

Assessing stages of change. McConnaughy, Prochaska, and Velicer (1983) reported on the development of a test designed to measure the five stages of change: 1)

Precontemplation, 2) Contemplation, 3) Decision Making, 4) Action, and 5) Maintenance. The authors stated that although, theoretically, these stages are not discrete and movement along the stages is not necessarily unidirectional and linear, for the purposes of developing the measure, the stages would be seen as distinct and consecutive.

The data for this study was collected from 155 adult outpatients (99 females, 55 males) from a community facility, private therapist, military counseling center, and a university counseling center. The authors devised a rational scale by first generating items based on the theory of the stages of change. Interrater reliability was calculated, and only those items were retained on which all judges agreed 100% regarding the matching of items to the theoretical changes. The initial analysis involved a reduction of the questionnaire to a 75-item version and then to a 32-item version with 8 items on each of the stages. During this analysis, the Decision Making stage was eliminated because 9 of its 10 items loaded on two other components (Contemplation and Action), indicating that it was not a separate, distinct stage. The authors then conducted a principal components analysis on the 32-item questionnaire, obtained correlations between each item and the total score for all items measuring a particular stage, and calculated the coefficient alphas for the items in each stage. Finally, a hierarchical cluster analysis was conducted to determine whether the initial group of participants could be classified into a smaller number of cohesive subgroups.

The results of this study indicated that the Stages of Change questionnaire provides a highly reliable and brief instrument for measuring the stages of change. The data yielded 4 clearly-defined stages: 1) Precontemplation, 2) Contemplation, 3) Action,

and 4) Maintenance. These stages formed a pattern in which the adjacent stages were more correlated to one another than to any other stage. The cluster analysis yielded 9 distinct profiles that represented 90% of the total sample. These profiles suggest that instead of an individual being in one stage or another, a more complete and accurate picture is that individuals show patterns of different involvement in each of the stages at any given point in time. The cluster analytic techniques have consistently yielded similar profiles across clinical and nonclinical populations (McConnaughy, DiClemente, Prochaska, & Velicer, 1989; McConnaughy, Prochaska, & Velicer, 1983). Following is a list and a description of the major and minor clusters/profiles found primarily with clinical population as they are more relevant to the present study.

Major clusters found with a clinical population (participants from a state psychiatric facility; McConnaughy et al., 1989):

1) *Participation Cluster:* This cluster is characterized by below average scores in pre-contemplation and above average scores in contemplation, action, and maintenance. Individuals with this profile are acknowledging that there is a problem, are engaged in thinking about the problem, are taking action to change it, and are working to maintain the changes they have already made.
2) *Precontemplation Cluster:* In this cluster, individuals score above average on Precontemplation and below average on Contemplation, Action, and Maintenance. Individuals with this profile are indicating a reluctance to change.
3) *Uninvolved Cluster:* This cluster has scores that are average on all the stages.

This is indicative of a person who is neither thinking about nor ignoring the problem; they report minimal involvement in all stages.

4) *Discouraged Cluster:* This cluster is similar to the uninvolved cluster except that the Maintenance scale is significantly lower in this profile. These individuals are not thinking about making changes nor are the working to maintain changes that they have already made.
5) *Decision-making Cluster:* This cluster is characterized by below average scores on Precontemplation and Maintenance, and above-average scores on Contemplation and Action. This profile suggests that the individual is involved in thinking about the problem and is taking action to change their situation.
6) *Maintenance Cluster:* In this cluster, scores are above-average in all stages but particularly high in the Maintenance stage. These individuals are maintaining previous changes but are not involved in rethinking or taking new action in the problem area.
7) *Immotive Cluster:* This cluster is characterized by above average scores on Precontemplation, below average scores on Contemplation and Action, and close to average scores on Maintenance. Individuals with this profile are not contemplating change and are not making changes; they are simply maintaining the status quo.
8) *Contemplation Cluster:* This cluster is characterized by above average scores on Contemplation, below average on Precontemplation, well below average

on Action, and about average on Maintenance. These subjects are thinking about changes but have not yet began to take action to bring about those changes.

Additional clusters that were not replicated with the clinical population but found with higher functioning individuals from community mental health centers McConnaughy, Prochaska, & Velicer, 1983):

9) *Pre-participation Cluster:* This cluster is a less pronounced version of the Participation cluster. It is characterized by slightly above average scores on Contemplation, Action, and Maintenance. Individuals with this profile are not ignoring the problem; they are somewhat involved in thinking about it, making changes, and maintaining those changes.
10) *Non-contemplative Action Cluster:* Individuals with this profile score about average on Precontemplation and Action and below average on Contemplation and Maintenance. These individuals are neither thinking about changing nor maintaining any changes they may have made previously.
11) *Reluctance Cluster:* This minor cluster (only 5 subjects had this profile) is characterized by average scores on Precontemplation and Contemplation, below average scores on Maintenance, and extremely below average scores on Action. These subjects seem to be reluctant to take action on a problem although they may be thinking about it. In addition, they are not committed to making any changes.
12) *Non-reflective Action cluster:* This is also a minor cluster (found in only 6

subjects) characterized by average scores on Maintenance, below average scores on Contemplation, above average scores on Action, and well above average scores on Precontemplation. Individuals with this profile are taking action but are not acknowledging that a problem exists.

The stages of change measure has been modified for use with battered women (Brown, 1998). The Process of Change in Abused Women Scales (PROCAWS) includes a stages of change scale, a decisional balance scale, and a self-efficacy scale. The latter two scales will be discussed in the section on variables that mediate movement across stages. Preliminary cluster analyses of the data collected using this modified measure yielded similar profile patterns as those listed above (Brown, 1998).

Levels of change. Researchers of the Transtheoretical Model began by looking at how people change with regard to addictive problems, such as smoking (DiClemente & Prochaska, 1982). Soon, however, the developers of this model began to realize that, to apply this model to other, less well-defined problem areas, another dimension would have to be included when examining change processes. In addition, they noted that, even with well-defined problems, such as addictive behaviors, it is necessary to understand the context in which the problems occur in order to be able to address the problems and the changes that can be made in treatment. Prochaska and DiClemente (1986) described the levels-of-change dimension as, "a hierarchical organization of five distinct but interrelated levels of psychological problems which are addressed in treatment" (p. 17). These levels are:

1) *Symptom/situational*

2) *Maladaptive cognitions*

3) *Current interpersonal conflicts*

4) *Family/systems conflicts*

5) *Intrapersonal conflicts*

In the transtheoretical approach, intervention should initially begin at the symptom/situational level, because change tends to occur more rapidly at this, more conscious level of problems. In addition, clients tend to enter therapy at this level of problems and are motivated to change what they perceive is their problem at that point in time. The further down the hierarchy, the less likely that clients will be aware of the determinants of the problem and the less likely they will be, at least initially, to address them. Prochaska and DiClemente (1986) stated that "as we progress down the levels, the further back in history are the determinants of the problem and the more interrelated the problem is with the sense of self" (p. 18). Thus, according to the model, one would predict that the deeper the level of problem, the more chronic and complex the therapy will be and the more resistant the client will be. Furthermore, these levels are interrelated, and change in one level is likely to produce change at other levels. A therapist should be prepared to intervene at any of the five levels of change, though the preference is to begin at the symptom/situational level.

In the case of intervening with a battered woman using the Transtheoretical Model's hierarchical level approach, initial sessions may focus on the client's feelings of depression related to the abuse she is experiencing at home. During these sessions, the therapist would address the depression by providing emotional support and education

about depression, referring the client to obtain an evaluation for medication, and using cognitive techniques to aid the client in developing skills to alleviate the depressive symptoms. As therapy with this client progresses, maladaptive cognitions such as, "He hits me because I did something wrong" would be explored with the goal of determining the source of these cognitions. Later sessions may focus on the client's relationships with others, specifically whether the pattern of abuse and control exists in other, current and past significant relationships. The goal during this phase of treatment may be to work towards gaining insight on how this pattern of relationships may have developed, of the consequences of this manner of relating, and how to break the cycle of abuse. In the deeper levels of treatment, the focus will be more on the client's development of a sense of self, one's identity and self-esteem, and the coping styles that complicate the conditions that led to the abuse.

The Transtheoretical Model thus provides a comprehensive view of treatment by addressing five different dimensions of problems and the processes of change. Integrating the different dimensions consisting of levels, processes, and stages of change, provides a guide for intervening hierarchically and systematically across a broad range of therapeutic content (Prochaska & DiClemente, 1986). In the following section, an issue that has not yet been addressed, but that is a vital part of this model of change, will be described. This issue relates to the factors that motivate individuals to progress from one stage of change to the next.

Intervening variables that mediate movement across stages. Two important change variables have been integrated with the Transtheoretical Model: self-efficacy and

decisional balance. These variables can affect whether individuals take action on their problem, achieve their goal, and are able to maintain the changes they have made (Prochaska, DiClemente, Velicer, Ginpil, & Norcross, 1985).

Bandura (1982) wrote that knowledge, transformational operations, and skills are necessary but insufficient in producing behavior change. He stated that "self-referent thought also mediates the relationship between knowledge and action" (p. 122). In other words, how people view their own capabilities affects their motivation and behavior. Thus, perceived self-efficacy, according to Bandura, involves judgements of how well one thinks they can execute taking action to deal with problem situations. Indeed, in his work, Bandura found that the higher the level of induced self-efficacy in phobic participants, the higher the performance accomplishments and the lower the emotional arousal. In his review of the literature, Bandura also found that the self-efficacy mechanism can account for changes in coping behavior and level of physiological stress reaction, achievement strivings, and resignation to failure experiences, among other diverse phenomena (Bandura, 1982).

Self-efficacy, within the context of the Transtheoretical Model, has been used to predict movement along the stages of changes and successful behavior change (DiClemente, Prochaska, Fairhurst, Velicer, Velasquez, & Rossi, 1991; Prochaska et al., 1985). In working with smoking cessation, Prochaska et al. (1985) defined self-efficacy as "the subjects' level of confidence that they can resist smoking across a number of tempting situations" (p. 397). Specifically, the authors in this study were interested in examining the utility of self-efficacy in predicting which participants would progress

along the stages of change, which would regress, and which would remain in the same stage in their efforts to quit smoking. The sample of participants was divided into five groups based on current smoking behavior and discriminant function analyses were used to predict movement along the stages. The authors constructed a measure of self-efficacy for this study which consisted of 31 situations that served as strong cues to smoke. Participants were asked to rate their confidence in being able to avoid smoking in that situation and the degree of temptation to smoke in that particular situation. The discriminant functions yielded significant results, and self-efficacy was found to be an important variable in understanding and predicting changes in smoking cessation. Self-efficacy was found to contribute strongly both for change from Contemplation to Action and from Action to Maintenance. The authors highlighted the important practical implications of these results by stating that self-efficacy is related positively to change with or without professional intervention, as opposed to being a static variable such as age or gender that can not be changed (Prochaska et al., 1985).

DiClemente et al. (1991) tested the Transtheoretical Model of Change with a large sample of smokers volunteering to participate in an intervention smoking research program. Participants were classified as being either in the Precontemplation or Contemplation stages of change with the Contemplation phase further subdivided to create a Preparation stage as was proposed in early research with this model. The authors were interested in analyzing comparisons among the smokers in these three categories for process and outcome differences on smoking history dimensions and prospective cessation activities. They hypothesized that there would be clear movement across the

stages toward smoking cessation and that differences in movement would be due, in part, by the mediating variable of self-efficacy, among others. The predictions from this study were confirmed and the data overwhelmingly supported the stages categories, the interactions of stage and processes of change, and the interactions between stages of change and self-efficacy. The authors found that individuals in the Preparation stage had significantly higher levels of confidence in their ability to stop smoking and efficacy to abstain from smoking across a variety of cues to smoke and individuals in the Precontemplation stage were the most tempted to smoke in different situations (DiClemente et al., 1991). These findings support the idea that self-efficacy can be used predict successful behavior change and is a variable that can be impacted through one's own motivation or through a professional intervention. In this way, self-efficacy is an intervening variable that may mediate movement across the stages of change. In working with battered women, these findings suggest that interventions could focus on increasing the client's sense that she can change and that she can successfully end the abuse in her life by providing her with tools and skills that will increase her self-efficacy. However, more research is needed to confirm that self-efficacy can mediate movement across stages of change.

Decisional balance is another variable that has been found to mediate movement though the stages of change. This variable was adapted from work by Janis and Mann (1977) on the Decision-Making Model. Janis and Mann suggested that decision-making involves an assessment of the pros and cons (gains and losses) of the consequences of each alternative. They also described how anticipated benefits and costs could be

categorized into four types of consequences: utilitarian gains versus losses for self, utilitarian gains versus losses for others, approval or disapproval from others, and self-approval or self-disapproval (Janis and Mann). The fact that both individuals and significant others are included in this conceptualization indicates that the decisional balance is especially relevant when working with battered women. When these women begin the process of changing their situation, it is likely that the pros and cons of their behavior will include an assessment of the utilitarian and approval-related consequences to themselves as well as to others in their lives including the consequences to their abuser and their children.

The two studies presented above with regard to self-efficacy also tested the utility of the Decisional Balance in predicting movement along the stages of change and successful behavior change (DiClemente et al., 1991; Prochaska et al., 1985). In the study by Prochaska et al. (1985), a decisional balance measure was created based on the model proposed by Janis and Mann (1977). The researchers conducted principal component analyses of a 32-item questionnaire that yielded two distinct and reliable components. These components were labeled the Pros of Smoking and the Cons of Smoking. The participants could score high on one scale and not on the other, high on both scales, or low on both scales. The authors found that decisional balance, or the extent to which one endorses pros and cons to changing, was a predictor of change in the Precontemplation and Contemplation stages, prior to the individuals taking action on decisions that were already made. Thus, the results from this study suggest that the decisional balance is also an efficacious predictor of movement along the stages.

The findings from the Prochaska et al. (1985) study were replicated in a study by DiClemente et al. (1991). The results from this later study yielded significant differences among the three stages of change "Precontemplation, Contemplation, and Preparation" with regard to the decisional balance. The number of pros, or positive aspects of smoking, decreased significantly across the three groups with Precontemplation individuals holding smoking pros most important and participants in the Preparation stage holding pros least important. The reverse pattern was found for the importance of the negative aspects of smoking. The difference between the pros and cons across the groups demonstrated an increasing trend in the number of cons of smoking among Preparation participants versus Precontemplation individuals (DiClemente et al., 1991). These findings support the previous findings that the decisional balance can be used to predict successful behavior change and mediates movement across stages of change, especially those prior to taking action.

Other important mediating variables have not yet been studied as part of the Transtheoretical Model but are relevant to this discussion, especially when understanding the process of change for Hispanic individuals. Elder et al. (1998), in their critique of the current health behavior change theories, noted the limited availability of empirical research demonstrating the applicability of these theories with people from non-Anglo cultures. The authors reviewed three factors: positive intention, minimal barriers, and skills, which are considered necessary and sufficient for changing one's behavior. The issue of barriers to change was reviewed earlier. A summary of Elder et al.'s discussion of intentions and skills follows.

The authors defined intention as "the strength of a person's commitment to perform or try to perform a behavior" (Elder et al., 1998, p. 579). They found five supporting factors with respect to intention "self-image, normative support, positive outcome expectations, positive affect, and self-efficacy" that indirectly affect the strength and direction of intention. The first sub-factor is self-image. Elder et al. noted that considering a particular behavior consistent or inconsistent with one's self-image will influence whether an individual will be motivated to perform that particular behavior. Thus, a Hispanic woman who sees that it is her role to endure abuse from her husband for the sake of family unity will not seek help because she may fear that this will lead to divorce, which is against her self-image. If, however, an intervention occurs in which the Hispanic woman's self-image is protected while she is seeking help for the abuse, it is likely that she will become motivated to change her situation.

Another factor related to intention is normative support. This is related to the value of familism that was discussed in a previous section on Hispanic culture. Elder et al. (1998) suggested that it is important to include the whole family in any intervention with Hispanic individuals. In their review of the literature, they found that family support increases the likelihood that an individual will participate in a health promotion program (Elder et al.). Thus, a woman who is considering leaving an abusive husband is more likely to do so if she perceives that she has support from family and friends. A helpful intervention with Hispanic battered women considering change might be to form a support group comprised of other Hispanic women.

Positive outcome expectations have to do with the belief that the benefits of

engaging in or changing a particular behavior will outweigh the costs. This factor is similar to the decisional balance factor of the Transtheoretical Model and might, for example, mediate movement from Contemplation to Action. Elder et al. (1998) suggested that, "when poverty is the norm, limited resources are directed to meeting the basics of life, such as shelter and food" (p. 581). In this case, the benefits of making changes in one's behavior are outweighed by the financial costs associated with seeking help. However, if, for example, Hispanic women receive information regarding free services such as shelters and outreach programs, they may have higher positive expectations that will lead to them taking action to change their abusive situations, because the benefits of receiving help may outweigh the cost of enduring further abuse.

Elder et al. (1998) also mentioned the importance of having positive affect as a motivator to making changes. If the environment in which an individual is seeking help is perceived to be favorable and safe, it is more likely that one will have a positive emotional reaction that will motivate her to make changes. The authors also note that self-efficacy is an important factor that motivates change. They presented several sources of self-efficacy that have practical significance for mental health professionals who are interested in tailoring their treatments and intervention for working with Hispanic individuals.

The first source of self-efficacy is personally experiencing a situation or a feared task with a consequent sense of mastery. Vicarious experience, such as a battered women learning that other women like herself have ended the abuse in their lives, can also motivate change (Elder et al., 1998). Another source of self-efficacy is verbal persuasion.

The authors found that receiving confidence-building messages from people that they trust and admire, and that are similar to them (also Hispanic), can also increase their self-efficacy. Finally, cues from one's physiological state can influence self-efficacy. For example, feeling highly anxious when considering change may inhibit one's willingness to deal with the problem. However, feeling relaxed and at ease can help to increase self-efficacy and increase one's motivation to change (Elder et al.).

A final factor associated with the motivation and willingness to engage in the change process has to do with perceiving that one has the necessary skills to change successfully. Elder et al. (1998) explored 2 dimensions of skills: knowledge of the actions and abilities needed to perform a specific behavior, and intra- and interpersonal resources. The authors stressed that it is important for mental health professionals to provide skill-training classes that are linguistically and culturally appropriate, taking into account the literacy level of the individual, when working with Hispanic populations (Elder et al.).

Review of the literature on the Transtheoretical Model. Most of the work with the Transtheoretical Model has focused on the area of smoking cessation (DiClemente, Prochaska, Fairhurst, Velicer, Velasquez, & Rossi, 1991; Prochaska & DiClemente, 1983; Prochaska, DiClemente, Velicer, Ginpil, & Norcross; 1985; Prochaska, Velicer, DiClemente, & Fava, 1988; Velicer, Norman, Fava, & Prochaska, 1999; Wilcox, Prochaska, Velicer, & DiClemente, 1985). However, within the past 10 years, this model has also been applied to areas such as alcohol addiction, therapy with survivors of child sexual abuse, condom use, obesity, cocaine addiction, adolescent delinquent behavior,

and sunscreen use (DiClemente & Hughes, 1990; Koraleski & Larson, 1997; Lauby, Semaan, Cohen, Leviton, Gielen, Pulley, Walls, & O'Campo, 1998; Prochaska, Velicer, Rossi, Goldstein, Marcus, Rakowski, Fiore, Harlow, Redding, Rosenbloom, & Rossi, 1994; Suris, Trapp, DiClemente, & Cousins, 1998). Also, the relevance of the Transtheoretical Model across different problem areas has been tested with Hispanic populations (Gottlieb, Galavotti, McCuan, and McAlister, 1990; Suris et al.). Most recently, researchers have begun to examine the possibility of applying this model to survivors of domestic violence, although, to date, no empirical studies with this population have been published (Brown, 1997; Heron, Twomey, Jacobs, & Kaslow, 1997).

The research on smoking cessation has helped to refine the Transtheoretical Model. Early work with smokers supported the notion that people go through stages when making changes in their lives. Futhermore, regardless of whether or not they were receiving formal treatment, as these individuals progressed through the stages, the processes of change were emphasized differentially during particular stages of change (Prochaska & DiClemente, 1983). Later research focused on the variables and subject characteristics that predict change in smokers. The findings from this work revealed that self-reevaluation, helping relationships, self-efficacy, and decisions weighing the advantages and disadvantages of smoking were the most efficacious predictors of movement across stages of change (Prochaska et al., 1985; Prochaska, 1994). Subject characteristics that were found to predict movement across the stages included health problems, problem duration, number of cigarettes consumed daily, and previous attempts

to quit. The researchers also found that the stronger the smoking habit the less likely that a smoker will be able to quit and maintain their nonsmoking status. In addition, smokers with higher incomes and levels of education were found to be more successful in changing their behavior (Wilcox et al., 1985).

Following this early work, research on smoking cessation included developing a process measure, further testing the value of the Transtheoretical Model with smokers, and testing predictions based on this model (DiClemente et al., 1991; Prochaska et al., 1988; Velicer et al., 1999). The findings from this body of work resulted in a measure of 10 processes of change and the discovery of 2 secondary factors, Experiential and Behavioral, which were composed of 5 processes each and revealed that individuals in particular stages tend to use more than one process at a time. The Experiential factor involved cognitive and/or affective activities, whereas the Behavioral factor involved processes used mostly be individuals in the Action stage. However, the authors found that the two factors were highly correlated, which indicates that most processes reflect both experiential and behavioral activities (Prochaska et al., 1988).

Findings from other studies on smokers confirmed and expanded previous research on the Transtheoretical Model. The results from one study indicated that predictions based on the stages of change could be made with regard to 1- and 6-month smoking cessation activity (DiClemente et al., 1991). Subsequent research on smoking cessation focused on further testing the predictions from the Transtheoretical Model. Findings from research on this model demonstrate the ability to predict movement from one of three initial stages to stage membership 12 months later (Velicer et al., 1999).

Research applying the Transtheoretical Model to different areas and populations has yielded a number of interesting findings that further support the validity, reliability, and general usefulness of this model. Studies on alcoholism have provided support for the validity of cluster profiles, have confirmed the interpretation of profile groups, and have investigated how motivation and commitment to change interact with these profiles and provide a guide for matching individuals to appropriate interventions (DiClemente & Hughes, 1990; Willoughby & Edens, 1996). One study conducted a partial test of the Transtheoretical Model in therapy with adult survivors of childhood sexual abuse and found support for the applicability of this model to sexually abused clients. The researchers also found, as predicted by the model, that behavioral processes of change were used most often by individuals in the Action stage and that experiential processes were used earlier in the stages of change (Koraleski & Larson, 1997). Research involving women at risk for HIV infection examined self-efficacy, decisional balance, and stages of change for condom use and found that most of the questionnaires used to measure these variables were moderately to highly reliable when applied to this population (Lauby et al., 1998).

Prochaska et al. (1994) investigated the generalization of the Transtheoretical Model across 12 problem behaviors including, among others, smoking, cocaine use, obesity, high-fat diet, adolescent delinquent behavior, condom under use, and sunscreen under use. The authors were interested in determining the validity of a 2-factor model of decisional balance and relating the pros and cons of the decisional balance with the stages of change. The findings from this study supported the validity of the 2-factor model, and

the relationship between the decisional balance and the stages of change was as predicted. Prochaska et al. concluded that the findings provide strong support for the generalizability of the basic constructs of the Transtheoretical Model.

Very few researchers have examined the applicability of the Transtheoretical Model to other cultures. A review of the literature yielded only two published empirical articles that applied this model to work with Hispanics (Gottlieb et al., 1990; Suris et al., 1998). Gottlieb et al. examined the self-change processes of smoking cessation, including intentions to quit and self-change perceptions, in a sample of Mexican Americans. The researchers focused on the Precontemplation and Contemplation stages, because they were only interested in studying intentions to quit. It is unclear as to what instrument the researchers used to assess stages of change and classify the participants into their Precontemplation and Contemplation categories. They measured self-change perceptions by creating a measure that combined 11 items adapted from the Processes of Change Questionnaire and 5 items from the Decisional Balance Scale. To assess the construct validity of the processes of change and the pros and cons of smoking, the relationship of these two variables to intention to quit was examined with Precontemplators scoring below Contemplators on all processes except for the pros of smoking. The authors concluded that the underlying structure of the stages-of-change model of smoking cessation was generalizable to small-town Mexican Americans with limited education (Gottlieb et al.).

Suris et al. (1998) also found support for the generalizability of the Transtheoretical Model to Mexican Americans. The authors' purpose in conducting this

research was to apply the Transtheoretical Model to an obesity-intervention program for Mexican American women. They focused on the aspects of the model that could be applied to understanding obesity treatment with this population. The researchers used data gathered from 81 families who where recruited from a larger study investigating the effectiveness of promoting weight loss in young Mexican American families. A shortened version of the University of Rhode Island Change Assessment Scale (URICA) was used to measure participant involvement in the tasks of the different stages of change: Precontemplation, Contemplation, Action, and Maintenance. In addition, a weight-loss-specific, shortened version of the Processes of Change Scale was used to measure the 10 cognitive and behavioral coping processes associated with weight-loss behavior. Both measures were translated into Spanish. Cluster analyses were conducted to determine the stage of change profiles. These analyses yielded five distinct profiles that were consistent with those reported in previous research on smoking, psychotherapy, alcoholism, and overeating. The relationships between the stages, processes, and profiles of change were also found to be consistent with previous research. The authors concluded that this study supports the use of the Transtheoretical Model with Mexican American women who were enrolled in a behaviorally oriented weight-loss treatment program (Suris et al.).

An interesting component to the study by Suris et al. (1998) is that they also looked at the relationship of acculturation and readiness for change. The authors found that individuals with Contemplation (below-average scores on all but the Contemplation scale) and Participation (above-average scores on contemplation, action, and

maintenance) profiles were the most acculturated when compared to individuals in other stage of change clusters. Thus, it appears that their instrument assessing stages of change also taps into an acculturation component, a mediating variable whereby more acculturated individuals are more ready to engage in the change process. Based on these findings, the authors hypothesized that "these are the Mexican American women who are more likely to have incorporated the Anglo American ideals of thinness and health and therefore may be more motivated to do something about their weight" (Suris et al., p. 666). These findings suggest that acculturation may also mediate behavior change for Hispanic battered women.

To date, no empirical studies have involved application of the Transtheoretical Model to battered women. However, two pivotal articles, published within months of each other, explored the potential of applying this model to abused women (Brown, 1997; Heron et al., 1997). Brown integrated the current research on battered women with research on the Transtheoretical Model. The goal of her article was to "explore how this model of change can improve our understanding of how battered women make changes in their lives, with an ultimate goal of measuring changes in a systematic and quantifiable way" (p. 5). After thoroughly reviewing the literature on battered women and the Transtheoretical Model of change, Brown concluded that this model can be useful not only in understanding how women overcome the violence in their lives but also in evaluating programs set up to help them and design more effective interventions. Brown highlighted the usefulness of this model in helping mental health professionals tailor their interventions to the stage that the individuals are in. Brown also recommended that future

research should focus on the development and testing of an instrument using the concepts of the Transtheoretical Model to understand the process of change that battered women go through as they end the violence in their lives (Brown, 1997). In a paper presented at the Program Evaluation and Family Violence Research International Conference, Brown (1998) discussed her development of the Process of Change in Abused Women Scales (PROCAWS) that incorporate stages of change, pros and cons, and self-efficacy as measurable outcomes.

Heron et al. (1997) explored the potential of using the Transtheoretical Model to guide an intervention for low-income, African-American women who are survivors of domestic abuse and who have made one or more suicide attempts. The authors reviewed the literature on domestic abuse and suicidal behavior in African-American women and discussed the relationship between abuse and suicide in this population. They then proposed using the Transtheoretical Model as part of a culturally-sensitive, integrative model using stress and coping, as well as stages of change, to understand suicidal behavior as a coping mechanism for African-American women experiencing stress associated with domestic violence. A group treatment approach combined with the assignment of advocates was recommended for these women. The authors suggested that the proposed intervention would focus on a variety of issues including safety-planning, increasing coping skills and resource mobilization, and promoting supportive relationships. Finally, they highlighted the importance of taking into consideration context factors, such as the cultural and socioeconomic status of these women, when creating interventions to help these women to free themselves from abusive situations.

Implications for Treatment of Hispanic Battered Women

The literature review indicates that the Transtheoretical Model has value in its potential to aid mental health workers and other professionals in planning effective interventions for Hispanic battered women. Planning effective interventions, however, involves an understanding of the factors that allow an individual to stay in treatment long enough to benefit from the intervention. In the following section, the utility of the Transtheoretical Model as a guide to tailoring interventions to prevent early attrition from treatment will be discussed.

Termination

Early termination is a common problem encountered in clinical practice (Garfield, 1994). Individuals who drop out of treatment early constitute a large percentage of those who begin therapy, and it is generally assumed that this premature termination will signify a poorer therapeutic outcome than that which can be achieved by continuing treatment (Frayn, 1992; Garfield 1994). In addition, early termination can be quite costly in terms of time, effort, expense, and disruption to both the clients and their therapists. However, because an individual terminates prematurely it should not be assumed that treatment has not been beneficial or represents an unsuccessful outcome (Frayn, 1992). In the case of battered women for example, Brown (1997) stated the following:

> Administrators of programs for battered women know well that battered women usually return to the batterer a number of times before ending the abusive relationship. In addition, a woman may have made critically important changes without having left the abuser. Staying in the relationship does not mean that the

battered woman is inactive or that an intervention has had no effect on her. (p. 5)

Thus, even though a woman may drop out early from a shelter program, only to return to her abuser, this does not mean that the treatment she did receive did not aid in her ability to eventually free herself from the abuse in her life. However, early termination can decrease the likelihood that a battered woman will receive important information or learn the necessary skills that may aid her in protecting herself from further harm.

Premature termination is also common among ethnic minorities, in fact, ethnic minority status has been found to be a consistent predictor of premature termination in outpatient community-based treatment centers (Wierzbicki & Pekarik, 1993). In reviewing the literature, Garfield (1994) discussed two studies that investigated premature termination among Caucasians, Mexican-Americans and other minorities. The findings from one study indicated that some common reasons exist for terminating therapy early regardless of race. These include having negative attitudes toward the therapist, beliefs that they would not benefit from therapy, environmental constraints, and self-perceived improvement (Acosta, 1980). The findings from the second study suggested that ethnic match between therapist and client was related to positive treatment outcomes for Mexican Americans. In addition, for those individuals who do not speak English as a primary language, therapist-client match with regard to ethnicity and language are significant predictors of the length and outcome of treatment (Sue, Fujino, Hu, Takeuchi, and Zane, 1991). Although the latter findings point toward a relationship between ethnicity and termination, Garfield (1994) cautioned that social class may interact with ethnicity and other variables in influencing treatment outcome. In a study on

smoking cessation using Hispanic participants, income level was found to be the only sociodemographic or ethnicity factor that predicted attrition from treatment. Participants who did not complete treatment reported lower annual incomes than those who did complete it (Nevid, Javier, & Moulton, 1996).

The Transtheoretical Model has been used to predict termination in psychotherapy (Brogan, Prochaska, and Prochaska, 1999; Smith, Subich, & Kalodner, 1995). Smith et al. explored the issue of premature termination by using client readiness for change variables reflected in the stages of change and processes of change of the Transtheoretical Model. The participants in their study consisted of 74, mostly Caucasian, clients from a counseling center at a large midwestern state university. Of the 74 clients, 55 (74%) remained in counseling or mutually agreed upon termination, while 19 (26%) prematurely terminated their counseling. The researchers used the Stage of Change Scale (SCS) and the Process of Change Questionnaire (PCQ) to assess the different stages and processes used by the participants, and clients were categorized into each of the 5 stages of change based on their highest SCS subscale score. Clients in the Preparation stage were identified by Contemplation and Action subscale scores that were tied as highest scores. Due to the small number of clients in the Maintenance stage, only individuals in the first four stages of change were examined. The results of the analyses indicated that premature terminators and nonpremature terminators were distinguishable by the stage of change in which they were classified at the beginning of therapy: Premature terminators scored highest on the first two SCS subscales (Precontemplation and Contemplation) and nonpremature terminators scored highest on the second and third subscales (indicative of

the Preparation stage). Furthermore, the processes of change were useful in distinguishing between premature and nonpremature terminators at the outset of counseling. Other findings, however, were not predicted by the Transtheoretical Model. The authors summarized the findings as follows:

> In summary, the model of change that emerged from the present study's findings includes a distinct precontemplation stage in which clients typically terminate prematurely, a contemplation stage that is less clearly related to termination status, preparation and action stages in which clients generally do not drop out of therapy early, and a maintenance stage, with few such clients seeking counseling (and thus limited interpretive possibilities regarding premature termination). (p. 38)

They also concluded that the potential to identify clients at risk for premature termination suggest that this model may provide a guide for developing interventions to better prepare clients for counseling (Smith et al.).

Brogan, Prochaska, and Prochaska (1999) also found that the Transtheoretical Model can be used to predict premature termination. The authors compared measures from the Transtheoretical Model of Change to client characteristic variables as predictors of termination and continuation status of clients entering psychotherapy. The participants in this study were 60 client-therapist pairs sampled from university counseling centers, a community mental health center, and a doctoral training clinic. The researchers gathered demographics and general information from both the clients and the therapists and used a brief symptom inventory to assess client problems and their degree of distress associated

with each problem during the previous week. They also used the Stages of Change, Processes of Change, and a Decisional Balance scale developed to ascertain the individuals' opinions of the pros and cons of entering into psychotherapy, to assess the different factors relevant to behavior change specified by the Transtheoretical Model. A measure assessing levels of attribution regarding change was also used. A final measure was used in which the therapists indicated the client's progress status as follows: premature termination, that is, discontinuing treatment prior to completing 10 sessions, appropriate termination, that is, appropriately completing treatment prior to 10 sessions but with therapist and client mutually agreeing upon termination, or therapy continuation, that is, continuing treatment after the 10^{th} session. The researchers found that their analyses correctly classified approximately 92% of client participants when discriminating premature terminators from appropriate terminators and therapy continuers. Brogan et al. highlight that the importance of these findings is that the variables that effectively predicted premature termination were not static variables that are not amenable to change, such as age and gender, but by dynamic variables, such as stages of change, processes of change, and decisional balance, that are open to professional interventions which, in turn, can affect the course of psychotherapeutic treatment. The authors also note that the three groups of clients did not differ in type or intensity of symptomatology which suggests that premature terminators did not have fewer problems when they initiated treatment (Brogan et al., 1999).

Brogan et al.'s (1999) study yielded a number of interesting findings. They found that premature terminators, appropriate terminators, and therapy continuers differ in the

processes that they use throughout their time in treatment. For example, when compared to other clients, premature terminators were found to be more oriented toward changing their environment than themselves as seen by their use of stimulus control and environmental reevaluation processes. The authors suggest that these individuals may be focused on changing their environment in order to confirm that they do not have a problem. Appropriate terminators, on the other hand, tended to highly endorse the action stage of change and placed a high value on the personal benefits that they might gain from therapy. Therapy continuers differed in that they were more likely to endorse the contemplation stage of change and, thus, were more aware that they had problems but were struggling to understand them. In summary, it appears as though clients who drop out prematurely from therapy tend to begin therapy in the precontemplation stage, clients who continue in therapy begin in the contemplation stage, and those who terminate therapy quickly but appropriately tend to be in the action stage when therapy begins.

The authors concluded that the findings from their study emphasize the importance of tailoring treatments to meet the needs of the clients and that this can be crucial in preventing early termination from treatment. They stated the following:

> If we can continue to predict the vast majority of premature terminations, we will then have the potential to control costly dropouts. The findings of this study suggest a number of interventions that could be used to reduce dropouts. As advocated by the transtheoretical model, therapists should match their interventions to the client's stage of change…Treating contemplators as if they are ready to take action or to contemplate in-depth the causes of their disorders

> may lead to premature termination…We cannot treat clients in the precontemplation stage as if they are in the same place as those in the action stage and expect them to complete therapy. We can drive them away and then blame them for being resistant, not motivated, or not ready for therapy. Historically it has been us who are not ready for them. (Brogan et al., 1999, p. 111)

These conclusions are what underlie the purpose of this thesis. The idea that assessing readiness for change can serve as a model for tailoring treatments and addressing intervening variables in order to prevent early termination has important implications for working with battered women.

Summary and Rationale

The goal of this literature review was to summarize broad areas of research that can be applied in work with Hispanic battered women. The first half of this review focused on introducing the topic of domestic violence and describing the cultural factors that place Hispanic families at particular risk for experiencing violence in their homes. The purpose of this section was to provide a rationale for the importance of conducting research in this area.

The impact of domestic violence in the United States and around the world was discussed. Within this discussion, startling statistics regarding the prevalence of domestic violence in the United States were presented. The research literature clearly shows that domestic violence affects a large percentage of the population and knows no boundaries with regard to socioeconomic status, level of education, geographic location, age, gender, ethnicity, or race. Also, although the research has yielded mixed findings, individuals

who appear to have the highest risk of experiencing domestic violence often have low-incomes and belong to ethnic minority groups. Hispanic families, many of which are classified as living below the poverty line, are at particular risk for experiencing domestic violence. In addition, the unique values and beliefs that are part of the Hispanic culture may contribute to this risk. Immigration and acculturation were also presented as added risk factors because they are high level stressors that affect many, if not all, Hispanics and appear to have an impact on the prevalence of domestic violence among more acculturated individuals.

The conclusion from this first half of the literature review was that Hispanic families face a myriad of factors that may interact with one another and leave those families vulnerable to experiencing violence in their homes and may also impede their willingness or ability to seek help. However, many of the research findings from these sections were inconclusive because domestic violence is an underreported crime, particularly within minority groups, and because there is much heterogeneity among the Hispanic community with regard to country of origin, level of acculturation, social class and education, and adherence to traditional cultural values.

The second half of this review focused on the topic of behavior change. The purpose of this part of the review was to introduce a model of behavior change that researchers have recently begun to explore conceptually for its potential usefulness in work with battered women. The complexities of behavior change, especially for battered women who face many internal and external constraints to ending the abuse in their lives, were addressed. The Transtheoretical Model was then presented as a comprehensive

model that addresses these constraints by enabling behavior change to be understood as a function of how ready an individual is to take action to change her situation.

The majority of this portion of the literature review consisted of describing, in detail, the development of the different facets of the Transtheoretical Model. The cognitive and affective processes associated with behavior change and the stages that individuals pass through when they are attempting to change their behavior were presented not only as a way of conceptualizing how individuals change but also as a guide to clinicians for developing interventions that are tailored to an individual's particular needs and expectations. A discussion of the factors that mediate movement across these stages of change such as self-efficacy and a shift in the pros and cons associated with making a certain change was also presented. These mediating factors are important as they are amenable to interventions by mental health professionals.

A summary of the current research regarding applications of the Transtheoretical Model of Change was also included in this portion of the literature review. The findings from the research indicate that this model of behavior change is reliable and valid for working with a range of problems and is especially useful for working with individuals struggling to overcome addictive behaviors such as smoking and alcoholism. In addition, the validity of this model is generalizable to a variety of populations including clinical and nonpatient populations. However, very little research has been conducted using this model with minority populations. The studies that have looked at applying this model to minorities have yielded promising results that provide further evidence for this model's reliability and validity. In the last several years, researchers have become interested in

applying this model to battered women, but, to date, no empirically-based articles applying this model to battered women have been published.

The concluding section of this literature review explored the usefulness of predicting premature termination using the Transtheoretical Model. It is clear that Hispanic women, particularly battered women, face many barriers when seeking help to free themselves from the abuse in their lives. In addition, these barriers may influence their ability or willingness to stay in treatment once they have started. The Transtheoretical Model, used as a guide to develop individually tailored treatments that respectfully depend upon the woman's readiness to change, can help prevent early termination among Hispanic battered women receiving help from shelters or outpatient clinics. The research reviewed suggests that the Transtheoretical Model is useful in predicting premature termination from psychotherapy.

The purpose of the present study is to test the applicability of the Transtheoretical Model with the Hispanic battered women population. As part of testing the generalizability of this model, the relevance of the intervening variables, namely self-efficacy and the decisional balance, in mediating behavior change for these women will be explored. The utility of this model, the intervening variables, and acculturation in predicting early termination, appropriate termination, and ongoing treatment of Hispanic battered women residing at domestic violence shelters will also be examined.

Research Hypotheses

1. Distinct stage of change profiles will be found among the women upon entrance into the domestic violence shelter program. These profiles will represent

individuals in different stages of change.

2. Individuals with different stages of change profiles will differ on self-efficacy (temptations and confidence), decisional balance (pros and cons), and acculturation.
    a. Individuals with Precontemplation profiles will score significantly higher on the Temptations scale than on the Confidence scale and significantly higher on the Cons scale than the Pros scale.
    b. Individuals with Contemplation profiles will not have significantly different scores on the Temptations scale versus the Confidence scale, and likewise, will not have significantly different scores on the Pros scale versus the Cons scale.
    c. Individuals with Action profiles will score significantly higher on the Confidence scale than on the Temptations scale and significantly higher on the Pros than on the Cons scale.
    d. Individuals with Precontemplation profiles will score significantly higher than individuals with Action profiles on the Temptations scale and the Cons scale.
    e. Individuals with Precontemplation profiles will score significantly lower than individuals with Action profiles on the Confidence scale, the Pros scale, and the Acculturation scale.
3. There will be significant differences across the profiles of change among women who terminate early, terminate appropriately, or continue treatment.
    a. Individuals with Precontemplation profiles will terminate early, that is,

without completing their goals or without finishing the shelter program, more frequently than individuals with Contemplation or Action profiles.

b. Individuals with Contemplation and Action profiles will continue treatment more frequently than individuals with Precontemplation profiles.

c. Individuals with Action profiles will terminate appropriately more often that individuals with Precontemplation or Contemplation profiles.

CHAPTER 2

METHODS

Participants

The participants consisted of voluntary, clinical sample of adult females who, at the time of data collection, were residing in a shelter for survivors of domestic violence. The participants were selected from one of two shelters located in the Dallas/Fort Worth, Texas metroplex: Genesis Women's Shelter, Friends of the Family. The sample was composed of 108 females. Minors, or individuals under the age of 18, were excluded from this study, because they would need parental consent to participate in the research.

Overall, the participants in this sample were young with a mean age of 31.06 years (*SD* = 9.4), with the Hispanic portion of the sample having a mean age of 27.94 (*SD* = 6.31) and the Anglo participants a mean age of 36.03 (*SD* = 11.91). In the following paragraphs, descriptive frequencies are presented along with valid percentages, that is, percentages that have been adjusted due to missing data.

Regarding ethnicity, of the 108 participants, 66 individuals (67.3%) were Hispanic, 32 (32.3%) were Anglo, and 1 individual (.9 %) indicated that she did not belong in any of the categories listed in the questionnaire. Of the 66 Hispanic women, 60 (89.6%) completed the questionnaires in Spanish and 6 women (9.1%) preferred to complete them in English. Generational level for the Hispanic women in this sample was also assessed with 50 women (84.7%) reporting that they were 1st generation immigrants, meaning that they were born in Mexico or another country other than the United States; 4 women (6.7%), reported that they were 2nd generation; 3 women (5.0%) said they were

3rd generation; 1 woman (1.7%) indicated that she was a 4th generation American; and 1 woman (1.7%) indicated that she was a 5th generation American, meaning that she was born in the United States, her parents were born in the United States and all of her grandparents were born in the United States. Of the 66 Hispanic participants, 18 (90.5%) stated their country of origin was Mexico and 2 individuals (9.5%) said that they were originally from another Hispanic/Latin country. An analysis of the acculturation levels among the Hispanic women in this sample indicated that 11 individuals (50.0%) were "Very Mexican Oriented," 3 (13.6%) were "Mexican oriented to approximately balanced bicultural," 6 women (27.3%) were "Slightly Anglo oriented bicultural," 1 woman (4.5%) was "Strongly Anglo oriented," and 1 woman (4.5%) was "Very Assimilated: Anglicized."

In this sample, 39 participants (42.9%) reported that they were married, 27 participants (29.7%) indicated they were single, 22 (24.2%) said they were separated, and 3 individuals (3.3%) were divorced. Of the 108 participants, 41 (47.1%) identified themselves as Catholic, 21 (24.1%) stated they were Christian, 8 (9.2%) indicated being Baptist, 4 (4.6%) were Pentecostal, and 13 women (14.9%) indicated that they did not belong in any of the categories listed in the questionnaire. Regarding education levels, 50 individuals (46.7%) reported achieving a high school diploma as their highest degree of academic achievement, 19 (17.8%) completed one to two years of college, 15 (14.0%) indicated that they had completed seven to eight years of schooling, 14 (13.1%) had reached an elementary to sixth grade education, and 3 (2.8%) had attained three to four years of college or higher. For a breakdown of these figures by ethnicity see Table 2.1.

Of the 66 Hispanic participants, 14 individuals (21.9%) reported that they were educated in the United States, 45 (69.2%) received their education in Mexico, and 5 women (7.7%) indicated that they were educated in another Hispanic/Latin country other than Mexico.

Table 2.1

Descriptive Statistics for Hispanic and Anglo Sub-Samples

Descriptives	Hispanic		Anglo	
	Frequency	Valid Percent	Frequency	Valid Percent
Marital Status				
Married	23	45%	10	35%
Divorced	0	0%	2	7%
Separated	9	18%	9	31%
Single	19	37%	8	28%
Religion				
Christian	10	19%	9	28%
Baptist	3	6%	5	20%
Catholic	37	70%	3	12%
Pentecostal	1	2%	2	8%
Other	2	4%	6	24%
Education				
Elementary to 6	13	19%	0	0%
7-8	15	22%	0	0%
9-12	29	44%	18	58%

1-2 years of college	6	9%	9	29%
3-4 years of college	2	3%	1	3%
College graduate or higher	1	2%	3	10%

N = 108

Independent samples t-tests were conducted to determine whether the Hispanic sample and the Anglo sample differed on demographic variables. Significant differences were found in age and education. The Hispanic women in this sample were significantly younger and less educated than the Anglo women.

Instruments

The Process of Change in Abused Women Scales (PROCAWS). (See Appendix A). The PROCAWS consists of a measure of the stages of change, a decisional balance questionnaire, and a self-efficacy measure developed specifically for assessing battered women. Brown (1999) modified the original stages of change, decisional balance, and self-efficacy scales developed by McConnaughy, Prochaska, and Velicer (1983), Velicer, DiClemente, Prochaska, and Brandenburg (1985), and DiClemente, Prochaska, and Gilbertini (1985), respectively, and subsumed them under one measure, PROCAWS, composed of these three scales. Based on the Transtheoretical Model, these measures assess the stage of change a woman is in when she enters the shelter, the extent to which she feels that there are more pros than cons to making changes in her life, and the extent to which she feels confident that she can make these changes successfully.

For the purpose of this study, these measures were translated into Spanish using the back-translation method first identified by Brislin (1970). This method requires that

one person (or team of translators) translate the instrument from English to Spanish, and a different person (or team of translators) translates from the Spanish version back into English. This produces two versions of the instrument in English, which can then be judged for equivalence.

Following is a description of each measure within the PROCAWS:

The Problems in Relationships Scale is a 25 item questionnaire that measures involvement in the stages of change: Precontemplation, Contemplation, Letting Go of the Hope That He'll Change, Action, and Autonomy/Separate Self. These last two stages are not Transtheoretical Model traditional stages, but they appear to play a major role in the staging construct for abused women (Brown, 1999). Autonomy/separate self is functionally equivalent to "maintenance," and, in preliminary work with this questionnaire, Letting Go of the Hope That He'll Change has been found to account for the most variance (24%) and appears to be a pivotal factor that has been placed between Contemplation and Action (Brown, 1999). Five items comprise each of the stage scales. Brown (1999) calculated internal consistency and reliability coefficients for each of the five 5-item scales. Coefficient alphas found for each scale were: Precontemplation, .74; Contemplation, .70; Action, .77; Letting Go of the Hope That He'll Change, .86; Autonomy/Separate Self, .86. Responses to this questionnaire are given on a 5-point Likert format (strong disagreement = 1 to strong agreement = 5). To score this scale, mean scores are obtained for each subscale (Precontemplation, Contemplation, etc.) and are then converted into standardized scores (T scores). Thus, each participant obtains scores on each of the five stages of change (Brown, 1999). Cluster analyses were

conducted to group participants who scored similarly on the five staging subscales.

The Decisional Balance Scale (Pros and Cons) is a 12 item questionnaire that measures the pros (the pull of the relationship) and cons (the strain of the abuse) of the change process for battered women. Six items comprise each subscale. Brown (1999) calculated the internal consistency and reliability coefficients for each of these two subscales. Coefficient alphas for each scale were: pros, .82; cons, .85. Responses are given on a 5-point Likert format (not important = 1 to extremely important = 5). The mean is calculated for each subscale and is then converted into a standardized T score so that each participant obtains a separate score for each of the two subscales (Brown, 1999).

The Temptations and Confidence Scale is a self-efficacy measure that assesses participants' degree of temptation, on several different situations, to remain with or return to their partners even though the abuse is still occurring. It also assesses how confident they are that, under the same certain situations, they would be able not to remain with or return to their abuser. Both subscales are composed of the same 5 Likert-type items (not at all tempted/not at all confident = 1 to extremely tempted/extremely confident = 5). Brown (1999) calculated the internal consistency and reliability coefficients for each of these two subscales. Coefficient alphas for each scale were: temptations, .92; confidence, .93. The mean is calculated for each subscale and is then converted into a standardized T score so that each participant obtains a separate score for each of the two subscales (Brown, 1999).

The Acculturation Rating Scale for Mexican Americans-II (ARSMA-II). (See Appendix B). The ARSMA-II is composed of two scales that can be used together or independently to explore multidimensional aspects of acculturation. In this study, only Scale 1 of the ARSMA-II was used due to a lack of adequate validation of Scale 2 (Cuellar, Arnold, & Maldonado, 1995). Scale 1 of the ARSMA-II is a 30-item self-rating scale composed of an Anglo Orientation Subscale (AOS) of 13 items and a Mexican Orientation Subscale (MOS) composed of 17 items. Responses are given on a 5-point Likert format (not at all = 1 to extremely often or almost always = 5). These scales assess the extent to which an individual feels acculturated to either or both cultures. Language use and preference, ethnic identity and classification, cultural heritage and ethnic behaviors, and ethnic interaction are used to measure an individual's level of acculturation (Cuellar, Arnold, & Maldonado, 1995).

The ARSMA-II has a bilingual format with both language versions appearing on the same page. To score Scale 1 of the ARSMA-II it is first necessary to obtain the mean scores for the AOS and for the MOS. Then, the MOS mean is subtracted from the AOS mean to obtain a linear acculturation score that represents an individual's score along the continuum from very Mexican oriented to very Anglo oriented. Cuellar, Arnold, and Maldonado (1995) recommended cutting scores for determining acculturation level using ARSMA-II (See Table 2.2) based on the raw score means and the formula: Acculturation Score = AOS (Mean) – MOS (Mean).

Table 2.2

Cutting Scores for the ARSMA-II

Acculturation Levels	Description	Acculturation Score
Level I	Very Mexican oriented	< -1.33
Level II	Mexican oriented to approximately Balanced bicultural	>/= -1.33 and </= -.07
Level III	Slightly Anglo oriented bicultural	> -.07 and < 1.19
Level IV	Strongly Anglo oriented	>/= 1.19 and < 2.45
Level V	Very Assimilated; Anglicized	> 2.45

Cuellar, Arnold, and Maldonado (1995) calculated the internal consistency and reliability coefficients for each of the two subscales that compose Scale 1. Coefficient alphas for each scale were: AOS, .83; MOS, .88. Test-retest reliabilities (1-week interval) for each scale were: AOS, .94; MOS, .96. Split-half reliabilities were: AOS, .77; MOS, .84. The authors also calculated the concurrent validity of the ARSMA-II with the original ARSMA, and the Pearson product moment correlation coefficient of .89 was obtained between the linearly derived ARSMA score and the linearly derived ARSMA-II score (Cuellar, Arnold, & Maldonado).

Procedure

Participants entering one of the two shelters followed the usual intake procedures already in place at each shelter. The intake procedures usually involved the women completing a set of forms and questionnaires that ask them to provide basic demographic

information including their age and ethnicity. The shelter administrators were contacted on a regular basis to determine whether a self-identified Hispanic/Latin woman had entered the shelter. Within a week of their admittance into the shelter program, these women were approached and asked if they would be interested in participating in a study on Hispanic survivors of domestic violence. If they agreed to participate in this study, they were given an informed consent form to read and sign and asked to complete the PROCAWS and the ARSMA-II measures independently. At the end of their stay at the shelter, the shelter administrators, as part of their exit procedures, documented the length of their stay in the shelter, whether the women had met their major treatment goals as determined by their casework managers, and whether the women planned on continuing to receive treatment elsewhere. This information determined whether the women completed the 6-week shelter program and/or met their major treatment goals (appropriate termination), whether they left before completing the 6-week program and/or meeting their major treatment goals (early termination), or whether they planned to continue receiving treatment via a stay in a transitional home or outpatient counseling.

A decision to include Anglo women in the sample was made after approximately 9 months of data collection due to the difficulty in recruiting Hispanic women for this study. According to shelter administrators, for unknown reasons, the percentage of Hispanic women staying at the shelters was lower than in previous years, making recruitment difficult. Thus, in order to bring data collection about in a timely manner, a decision was made to collect questionnaires from Anglo women as well. Another rationale for this modification was to be able to compare the results obtained between the

two ethnic groups thus making the results more valid and generalizable.

Statistical Power

For the final sample of 108, assuming a moderate effect size based on previous research (Brown, 1999; Cuellar, Arnold, & Maldonado, 1995; Cohen, 1988), and adopting an alpha level of .05, a power analysis revealed that change profiles would be reliably differentiated in approximately 73% of samples (i.e. power = .73).

CHAPTER 3

RESULTS

Descriptive Analyses

To determine whether the sample was typical or atypical, the means and standard deviations of each measure used in this study were compared to those previously reported by studies using the same measures with similar populations (Brown,1998; Cuellar, Arnold, & Maldonado, 1995). The expected and observed means and standard deviations for each measure used in this study are shown in Table 3.1. A one-sample t-test using Brown (1998) and Cuellar, Arnold, and Maldonado's (1995) values as expected was conducted to determine the representativeness of this sample. Overall, the results of these comparisons suggest that this sample is typical in that, by and large, the mean scores yielded by this sample were not significantly different from the mean scores yielded by similar samples tested in other studies. However, in the few instances where there was a statistically significant difference between the expected and observed scores (ie., Letting Go of the Hope That He Will Change, Autonomy/Separate Self, Cons, and Temptations) the effect size was small. In other word, the sample was large enough that a statistical difference was detected but this difference is not interpretable.

Table 3.1

Expected and Observed Means and Standard Deviations of Shelter Residents

Measure/Scale	Expected Mean	Expected St. Dev.	Observed Mean	Observed St. Dev.	Sig. Diff.
Problems in Relationship (n = 108)					
Precontemplation	1.7	.78	1.8	.87	.10
Contemplation	4.2	.71	4.2	.65	.93
Action	4.3	.62	4.4	.60	.06
Letting Go…	4.0	1.0	3.6	.63	.00
Autonomy/Separate…	4.1	.74	4.4	.53	.00
Decisional Balance (n = 108)					
Pros	4.1	.93	4.0	.89	.28
Cons	2.4	1.10	2.1	1.1	.01
Self-Efficacy (n = 108)					
Temptations	2.76	1.24	2.37	1.24	.00
Confidence	3.31	1.22	3.13	1.35	.19
ARSMA-II (n = 32)					
Anglo Orientation	3.82	.57	2.75	1.07	.00
Mexican Orientation	3.28	.84	3.99	.73	.98

Note. Sources of expected means and standard deviations were reported by Brown (1998) for the PROCAWS, and Cuellar, Arnold, & Maldonado (1995) for the ARSMA-II.

Frequency distributions were examined and the Kolmogorov-Smirnov statistic was calculated to determine whether the distribution of scores for each measure

represented a normal or non-normal distribution. The findings from these analyses indicated that distributions emerging from this sample of participants were often non-normal. Attempts to perform data transformations (i.e. log and natural log) to achieve normal distributions were unsuccessful. However, methods based on the General Linear Model (i.e., MANOVA and cluster analyses) are, in general, robust to modest departures from normality with sample size similar to the size of the current sample (Tabachnick & Fidell, 2001). Nevertheless, the fact that the measures violated the normality assumption will be noted as a limitation of the current study.

Reliability of the measures was then assessed. Cronbach's Alpha was used to determine the internal consistency reliability for each of the measures (see Table 3.2).

Table 3.2

Internal Consistency Reliability: Cronbach's Alpha

Measure/Scale	Cronbach's Alpha
Problems in Relationship (n = 108)	
Precontemplation	.68
Contemplation	.61
Action	.62
Letting Go…	.64
Autonomy/Separate…	.68
Decisional Balance (n = 108)	
Pros	.90
Cons	.74
Self-Efficacy (n = 108)	
Temptations	.93
Confidence	.95
ARSMA-II (n = 32)	
Anglo Orientation	.93
Mexican Orientation	.88

In order to examine whether confounding associations existed among the measures, a matrix of intercorrelations was examined for any unexpected correlations (See Table 3.3). The correlations were generally as theoretically expected based on the

stages of change theory (DiClemente et al., 1991; McConnaughy, Prochaska, and Velicer, 1983; Prochaska & DiClemente,1982; Prochaska, DiClemente, Velicer, Ginpil, & Norcross, 1985).

Table 3.3

Pearson Product Moment Correlations Among Study Measures

Measure/ Scale	Pre-cont.	Cont.	Letting Go...	Action	Auto-nomy	Tempt.	Conf.	Cons	Pros
Precont. (n = 108)									
Cont. (n = 108)	.281**								

Letting Go…	-.416**	-.073							
(n =108)									
Action	-.355**	-.067	.401**						
(n = 108)									
Autonomy	-.179	.112	.106	.390**					
(n = 108)									
Tempt.	.477**	.257**	-.398**	-.373**	-.362**				
(n = 108)									
Conf.	-.056	.105	.104	.187	.017	.081			
(n = 108)									
Cons	.442**	.251**	-.390**	-.419**	-.311**	.759**	.106		
(n = 108)									
Pros	-.214*	-.094	.326**	.254**	-.049	-.077	.148	-.079	
(n = 108)									
ARSMA	-.147	-.097	.007	.051	.176	.038	.406	-.066	.458*
(n = 22)									

* $\underline{p} < .05$

** $\underline{p} < .01$

Hypothesis-testing Analyses

Hypothesis 1. It was hypothesized that distinct stage of change profiles would be found among the women upon entrance into the domestic violence shelter program. These profiles would represent individuals in different stages of change.

To determine the presence of distinct stage of change profiles, a cluster analysis was conducted, with the Anglo and Hispanic samples together, using a hierarchical agglomerative clustering procedure that calculated the Euclidean distance between each

cluster and combined clusters that have the smallest distance at each stage. The hierarchical tree and the clustering coefficients were used to determine the most accurate and appropriate number of clusters. Five clusters adequately differentiated the groups of participants (see Figures 3.1-3.5).

Figure 3.1

Reluctance Cluster (n=7)

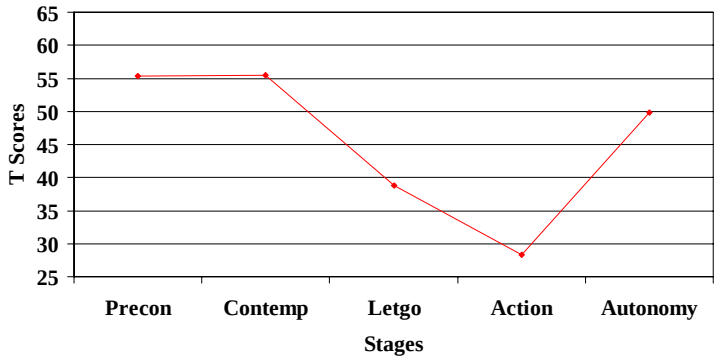


Figure 3.2

Uninvolved Cluster (n=20)

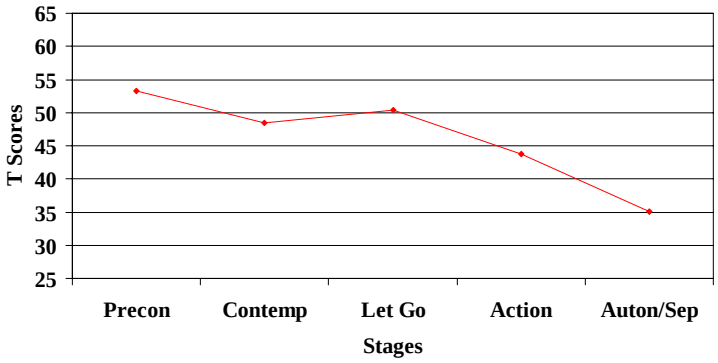


Figure 3.3

Hoping He Will Change Cluster (n=19)

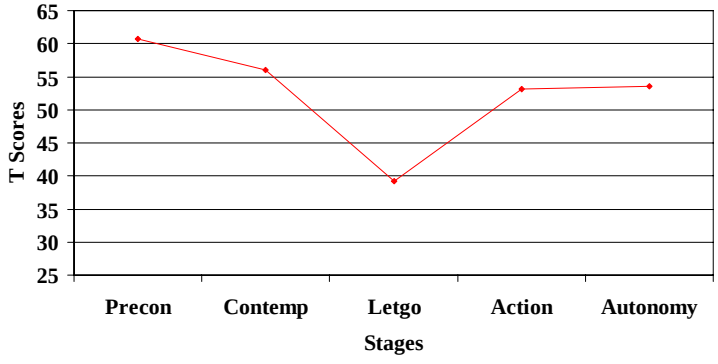


Figure 3.4

Action Cluster (n=26)

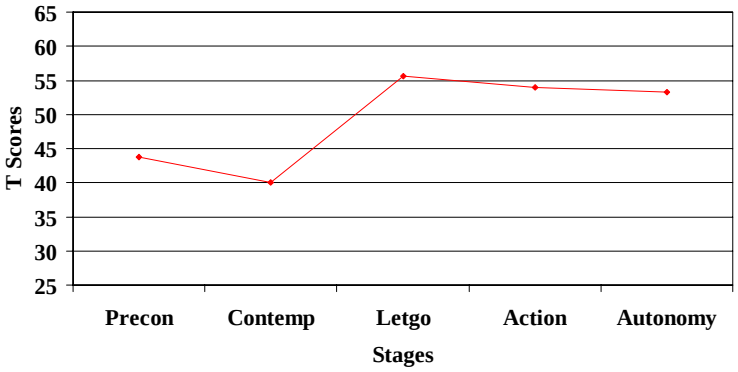
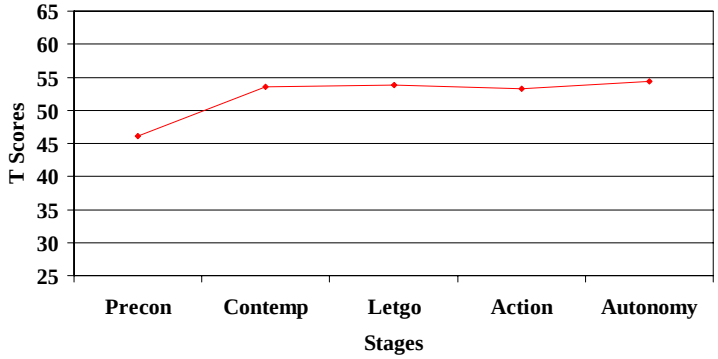


Figure 3.5

Engagement Cluster (n=37)



These clusters are labeled and described as follows:

1. Reluctance Cluster: The 7 participants in this cluster (Figure 3.1) were characterized by slightly above average scores on Precontemplation (M = 55.4, SD = 8.6)

and Contemplation (*M* = 55.5, *SD* = 6.7), below average scores on Letting Go of the Hope That He Will Change (*M* = 38.8, *SD* = 5.5), particularly low scores on Action (*M* = 28.3, *SD* = 3.8), and average scores on Autonomy (*M* = 49.8, *SD* = 4.7). These participants appeared to be resistant to take action to end the abuse in their lives, may have been ambivalent and somewhat in denial about engaging in the process of change, and were unwilling and/or not committed to taking action.

2. Uninvolved Cluster: The 20 participants in this cluster (Figure 3.2) were characterized by about average scores on Precontemplation (*M* = 53.3, *SD* = 8.0), Contemplation (*M* = 48.5, *SD* = 8.7), and Letting Go of the Hope That He Will Change (*M* = 50.4, *SD* = 5.1) and below average scores on Action (*M* = 43.7, *SD* = 7.9) and Autonomy (*M* = 35.1, *SD* = 7.0). Although these participants were not ignoring their problems, they did not appear to be actively thinking about their problems and were defined by their lack of action.

3. Hoping He Will Change Cluster: The 19 women in this cluster (Figure 3.3) were characterized by above average scores on Precontemplation (*M* = 60.7, *SD* = 10.7) and Contemplation (*M* = 56.0, *SD* = 5.9), slightly above average scores on Action (*M* = 53.2, *SD* = 5.4) and Autonomy (*M* = 53.5, *SD* = 7.3), and below average scores on Letting Go of the Hope That He Will Change (*M* = 39.2, *SD* = 9.1). These women were focusing on the idea that the abuser would change and that their problems would be solved when this occurred. They may not have seen changing their own behavior as necessary or as a worthwhile endeavor.

4. Action Cluster: The 26 women in this cluster (Figure 3.4) were characterized by below average scores on Precontemplation (M = 43.7, SD = 4.6) and Contemplation (M = 40.0, SD = 7.9) and above average scores on Letting Go of the Hope That He Will Change (M = 55.6, SD = 8.4), Action (M = 53.9, SD = 8.5), and Autonomy (M = 53.3, SD = 4.7). These participants were distinguished by contemplation being low, suggesting that they had stopped considering the pros and cons of changing and were just focusing on acting.

5. Engagement Cluster: The 37 women in this cluster (Figure 3.5) were characterized by below average scores on Precontemplation (M = 46.1, SD = 5.6) and above average scores on Contemplation (M = 53.5, SD = 6.4), Letting Go of the Hope That He Will Change (M = 53.8, SD = 6.8), Action (M = 53.3, SD = 5.2), and Autonomy (M = 54.4, SD = 4.7). They were acknowledging the problem, were thinking about it, were taking action to change the problem, and were maintaining the changes they had already made.

Additional analyses were conducted to determine if there were differences among the clusters on demographic variables such as age and level of education. Regarding ethnicity, analyses were restricted to Hispanic and Anglo ethnicities, because only one participant identified her ethnicity as other than Hispanic or Anglo. A Chi Square analysis comparing frequencies of each ethnicity within each cluster was statistically significant ($\chi 2$ (4, N = 98) = 10.86, p = .03). However, these results violated the core assumption of the Chi Square analysis that expected frequencies for each cell would be equal to or greater than 5. Thus, based on recommendations by Howell (1997), the five

clusters were regrouped into early stages of change (i.e. Reluctance, Uninvolved, and Hoping He Will Change) and late stages of change (i.e. Action and Engagement) that yielded a non-significant result ($\chi 2$ (1, N = 98) = 3.23, p = .07). The expected frequency was again violated when a Chi Square analysis of cluster by level of education was analyzed. Thus, the clusters were again re-grouped into earlier and later stages and level of education was recoded into 4 categories consisting of whether an individual reached an elementary to sixth grade education, a seventh to eighth grade education, a ninth to twelfth grade education, or college and one to two years of college and beyond. This analysis was also non-significant ($\chi 2$ (3, N = 97) = 4.38, p = .22).

Chi Square analyses were also conducted to determine whether there were any significant differences among the clusters with regard to the shelter from which the data was collected and the language used to complete the questionnaires. Again, the clusters were re-grouped into earlier and later stages due to violating the assumption. The results of both Chi Square analyses were non-significant (shelter: $\chi 2$ (1, N = 98) = .17, p = .68; language: $\chi 2$ (1, N = 98) = 2.91, p = .09). Marital status was also re-grouped into married versus "other" in addition to re-grouping the clusters into earlier and later stages in order not to violate any Chi Square assumptions. The results of the Chi Square indicated that none of the clusters differed significantly with regard to marital status ($\chi 2$ (1, N = 80) = .38, p = .54). A one-way analysis of variance (ANOVA) was then performed to determine if clusters differed in age. The results of this analysis were non-significant (F (4, N = 96) = 2.16, p = .08).

Hypothesis 1 was accepted. The results indicated that the women in this sample could be meaningfully grouped according to their level of involvement in different stages of change. Further calculations showed that the differences among the groups of women were not due to ethnicity, level of education, shelter from which the data was collected, language preference, marital status, or age.

Hypothesis 2. It was predicted that individuals with different stages of change profiles would differ on self-efficacy (temptations and confidence), decisional balance (pros and cons), and acculturation. Initially, specific predictions were made based on the assumption that the cluster analyses would yield the following four profiles: Precontemplation, Contemplation, Action, and Maintenance. However, as mentioned above, the cluster analyses performed on this data set resulted in a different group of profiles. Thus, a general prediction was made that during earlier stages of change, temptations would be higher, confidence lower, cons higher, pros lower, and acculturation lower. For later stages, the reverse would occur. In this sample, the earlier stages appeared to be different manifestations of the traditional Precontemplation profile. Reluctance, Uninvolved, and Hoping He Will Change all appeared to represent different aspects of women who were not yet willing to take action to change. However, a woman with a Hoping He Will Change profile may have been thinking or contemplating change more than a woman with a Reluctant profile. The Action profile was as expected in this sample, and the traditional Maintenance stage was represented by the Engagement profile.

This hypothesis was tested by first running a multivariate analysis of variance (MANOVA) to determine whether overall significant differences existed among the different profiles of change with regard to self-efficacy, decisional balance, and acculturation. Then, post hoc analyses, using the Tukey's HSD test, were conducted to test any significant univariate effects. The MANOVA was significant overall (Wilks' Lambda = .51, $F(20, 213) = 2.39$, $p < .01$), indicating that individuals with different stages of change profiles did indeed differ from each other with regard to the major dependent variables.

Tabachnick and Fidell (2001) recommended the use of Wilks' Lambda in most cases for the interpretation of the MANOVA. Univariate tests revealed that the multivariate effect was specific to the dependent variables Temptation ($F(4, 68) = 5.14$, $p = .001$) and Cons ($F(4, 68) = 4.44$, $p = .003$). These analyses were repeated using only the Hispanic sample and Acculturation as the dependent variable. The results indicated that Acculturation did not differ across the five change profiles ($F(4, 22) = .712$, $p = .595$). Due to the fact that only one Hispanic participant was in the Reluctance profile, these analyses were again repeated with the stages of change variable recoded into "early" versus "late" stages of change. Again, the results we non-significant ($F(1, 22) = 2.51$, $p = .129$). As predicted, Action ($M = 45.1$, $SD = 6.6$) was found to be significantly lower in Temptation than Reluctance ($M = 58.4$, $SD = 10.9$), Uninvolved ($M = 55.6$, $SD = 9.1$), and Hoping He Will Change ($M = 56.3$, $SD = 9.7$). Action ($M = 45.3$, $SD = 7.1$) was also significantly lower in Cons than Hoping He Will Change ($M = 55.7$, $SD = 12.4$), and

Reluctance (M = 58.8, SD = 12.1) was significantly higher in Cons than Action (M = 45.3, SD = 7.1). For more information see Table 3.4.

Table 3.4

Descriptive Statistics for Univariate Tests

	Stages	Mean	Standard Deviation	N
Temptation	Reluctance	58.4	10.9	6
	Uninvolved	55.6	9.1	15
	Hoping He…	56.3	9.7	14
	Action	45.1	6.6	21
	Engagement	50.8	10.8	17
Confidence	Reluctance	43.7	6.5	6
	Uninvolved	50.0	7.7	15
	Hoping He…	51.9	8.8	14
	Action	50.0	11.3	21
	Engagement	51.6	10.5	17
Cons	Reluctance	58.8	12.1	6
	Uninvolved	53.7	8.2	15
	Hoping He…	55.7	12.4	14
	Action	45.3	7.1	21
	Engagement	48.5	9.3	17
Pros	Reluctance	43.0	7.6	6
	Uninvolved	50.9	8.9	15
	Hoping He…	48.8	11.1	14
	Action	51.7	10.8	21
	Engagement	50.0	9.4	17
Acculturation	Reluctance	-.60	.	1
	Uninvolved	-1.80	1.60	4

	Hoping He…	-1.39	1.91	7
	Action	-.56	1.42	6
	Engagement	-.01	2.11	4

Hypothesis 2 was accepted. Women with different stage of change profiles differed on intervening variables. However, further calculations showed that the women differed only with regard to their level of temptation to stay in their relationships and the amount of cons they to making changes.

Hypotheses 3. It was hypothesized that there would be significant differences across the profiles of change among women who terminate early, terminate appropriately, or continue treatment. Due to the differences in this sample in terms of the profiles that emerged, the original specific predictions regarding each of the stages of change was changed to a general expectation that those women with earlier stage of change profiles would terminate earlier more frequently than those in later stages. Conversely, women in later stages of change would be more likely to terminate appropriately or continue treatment.

Based on the significant demographic differences between the Hispanic and Anglo samples with regard to age and education, individual samples t-tests and a Chi Square test were conducted to determine whether age, level of education, and/or ethnicity predicted termination status. To avoid violating the Chi Square assumption of an expected cell count of less than five, the termination variable was recoded into early termination and appropriate termination. The stages of change variable was also recoded into earlier and later stages of change. The results of the t-tests indicated that age did

significantly predict termination in that the younger the individual, the more likely she was to terminate early ($t(97) = -3.01$, $p = .003$). Level of education, however, did not significantly predict termination status ($t(97) = -1.78$, $p = .079$). The results of the Chi Square test, conducted to determine whether ethnicity significantly predicted termination status, were significant, indicating that Hispanic women were more likely to terminate early than Anglo women ($\chi 2$ (1, $N = 93$) = 8.60, $p = .003$).

Independent samples t-test and Chi Square tests were also conducted to determine whether demographic differences were moderated by stages of change to predict termination status. The results of the independent samples t-test indicated that in early stages of change, those individuals who are younger were more likely to terminate early ($t(41) = -3.38$, $p = .002$). In later stages, however, age did not significantly predict termination status ($t(53) = -1.38$, $p = .173$). Similarly, in early stages of change, Hispanic women were more likely to terminate early ($\chi 2$ (1, $N = 38$) = 4.51, $p = .034$), but in later stages of change, ethnicity did not significantly predict termination status ($\chi 2$ (1, $N = 55$) = 3.19, $p = .074$).

This hypothesis was also tested by conducting a Chi Square test, not adjusted to control for ethnicity, age, or education, in order to determine whether overall differences existed among the stages of change with regard to termination status. The sub-hypotheses were tested through a series of cell comparisons. The results of the Chi Square were not significant ($\chi 2$ (1, $N = 99$) = 1.16, $p = .28$), indicating that no significant differences existed among the different profiles with regard to termination status when ethnicity, age,

and education were not controlled. However, the results did show a weak trend in the predicted direction.

Hypothesis 3 was rejected. There were no differences in termination status among the women with different stage of change profiles.

Exploratory Analyses

Further analyses were performed that involved using acculturation as a moderator variable to predict termination status. The results of the Chi Square for the "Very Mexican Oriented" group was significant ($\chi 2$ (1, n=10) = 6.43, p = .011). This finding indicates that participants who had a Mexican orientation and were in the early stages of change were more likely to terminate early, and participants who had a Mexican orientation but were in the later stages of change, were more likely to terminate appropriately. Results were not significant when looking only at the bicultural group ($\chi 2$ (1, n=9) = 1.10, p = .294). Similarly, the Chi Square yielded non-significant results when examining the "Strongly Anglo Oriented and Very Assimilated or Anglicized" group ($\chi 2$ (1, n=2) = 2.00, p = .157). However, the results of this last analysis show a trend that suggests that Anglo participants were more likely to terminate appropriately regardless of whether they were in an early or late stage of change.

CHAPTER 4

DISCUSSION

The primary purpose of this study was to test the applicability of the Transtheoretical Model with a Hispanic battered women sample using a measure developed by Brown (1998) that assesses an individual's level of involvement in the different stages of change, one's estimation of the pros and cons of changing, and one's sense of self-efficacy in making and sustaining changes in behavior. The role of acculturation in determining the usefulness of this model was also explored along with this model's ability to predict early termination, appropriate termination, and ongoing treatment of Hispanic battered women residing at domestic violence shelters.

The purpose of the original study was revised to include Anglo women in the sample due to the difficulty in recruiting Hispanic women for this study. The rationale for this modification was to be able to compare the results obtained between the two ethnic groups to enhance the validity and generalizability of the Transtheoretical Model. However, recruitment was also slow for the Anglo sample, and the N for this portion of the sample was too small to conduct separate cluster analyses by each ethnicity. On the other hand, the overall N that was achieved by including the Anglo women yielded enough statistical power to reliably differentiate the stage of change profiles. Thus, all cluster analyses and subsequent tests used to detect differences among the profiles were conducted using the complete sample of participants that included both Hispanic and Anglo women.

The results of this study are consistent with the theory and research literature

related to behavior change and provide evidence of the utility and generalizability of the Transtheoretical Model and the PROCAWS measure (Brown, 1998) in work with Hispanic battered women. In the following paragraphs the purpose of this study is addressed by considering each hypothesis in detail and then discussing limitations and implications for research and clinical practice.

To test the validity of PROCAWS it was first expected that adjacent scales (i.e., stages closer to one another) would be positively correlated and nonadjacent scales would be negatively correlated. Similarly, it was expected that the temptation to stay in the relationship would be positively correlated to earlier stages of change, that is Precontemplation and Contemplation, but negatively correlated with later stages of changes, that is Letting Go of the Hope That He Will Change, Action, and Autonomy. Likewise, the Cons scale was expected to be positively correlated with earlier stages of change and with the temptation to stay in the relationship, and negatively correlated with later stages of change with the Pros scale yielding opposite correlations. All of these expectations were confirmed by the data analysis and support the stages of change theory as well as the use of the PROCAWS measure with the Hispanic population and for women attempting to make changes in their lives to end the abuse in their relationships (Brown, 1998; DiClemente et al., 1991; McConnaughy, DiClemente, Prochaska, & Velicer, 1989; McConnaughy, Prochaska, & Velicer, 1983; Prochaska & DiClemente, 1982; Prochaska, DiClemente, Velicer, Ginpil, & Norcross, 1985).

Interestingly, the Confidence scale, that measured a woman's degree of confidence that she would not remain with or return to her abuser, did not yield

significant correlations with any of the other measures scales. After examining the raw data, it is suspected that many women did not read or understand the instructions on how to complete this measure. These women scored the Confidence scale in the same manner in which they scored the Temptation scale. They apparently answered in terms of their confidence that would stay with or return to their spouse rather than, as the instrument indicated, that they would not stay. This mistake was probably made because both scales are identical, differing only in the instructions at the top of the page.

It was then hypothesized that distinct stage of change profiles would be found among the women upon entrance into the domestic violence shelter program. These profiles would represent individuals in different stages of change. Five clusters were found to adequately differentiate the groups of participants. The within cluster patterns were consistent with the clusters that were found in a study of abused women by Brown (1998) as well as in previous research on stages of change in psychotherapy (McConnaughy et al., 1989; McConnaughy et al., 1983).

These results also indicated that the PROCAWS and the Spanish translated version of the PROCAWS can be reliably used to classify women entering a shelter program into five distinct stage related profiles: Reluctance, Uninvolved, Hoping He Will Change, Action, and Engagement. These profiles were remarkably similar to those found with women in other shelter programs (Brown, 1998), individuals receiving outpatient psychotherapy (McConnaughy et al., 1989; McConnaughy et al., 1983), and participants entering treatment for alcohol addiction in predominantly Anglo populations (DiClemente & Hughes, 1990). The profiles found in this study were also similar to those

found with a sample of Mexican American women participating in a weight loss treatment program (Suris, Trapp, DiClemente, & Cousins, 1998).

The first three profiles that emerged from this sample appear to represent three different types of Precontemplation as defined by previous researchers (Brown, 1998; DiClemente et al., 1991; McConnaughy et al.,1989, McConnaughy et al., 1983; Prochaska & DiClemente, 1982; Prochaska et al., 1985). These profiles are all characterized by women who are not engaging in the process of change. The Reluctance profile represents a group of women who appear not only to be unwilling to commit to making changes but also to be focusing their energy on resisting change. Similarly, women with Uninvolved profiles appeared not to be engaged in the change process but appeared to lack the resistance that characterized women in the Reluctance profile. The Hoping He Will Change profile appeared to be unique to this sample of women and involved a hope that the abuser would change and that the problems in the relationship would be solved when this occurred. However, like the previous two profiles, the unwillingness to change remained for the women with this profile.

The Action profile was remarkably similar to the Action profile found by Brown (1998) with a similar sample of shelter residents. This profile, however, has not been found consistently in the research literature and may also represent a phenomenon unique to this sample, although, theoretically, it is a vital stage in the process of change. McConnaughy et al.. (1989) speculated that this profile was not found in a sample of psychotherapy participants because individuals entering psychotherapy are most likely taking action while they are also contemplating change. However, in this sample, some

women focused mostly on acting and spent less energy considering the pros and cons of changing. This profile seems to fit women who entered the shelter in desperation and as a result of a threat or actual physical assaults on themselves or their children.

In contrast, the Engagement profile has been consistently found in the research literature albeit in different variations (Brown, 1998; McConnaughy et al., 1989; McConnaughy et al., 1983; Suris et al., 1998). McConnaughy et al. (1983) found two profiles, Participation and Pre-participation, with their sample of psychotherapy outpatients, which highly resemble the Engagement profiles found in this and Brown's (1998) study with shelter residents. The Engagement profile differs from the Participation profile in that it is a less pronounced version of the latter and is more like a Pre-participation profile. The only difference among these profiles appears to be in terms of degree of involvement in the change process. Unlike individuals entering psychotherapy or weight-loss programs in which the majority of the focus and impact of change is on one's self, it may be that women entering a shelter program may still have doubts, fears, and/or concerns about their ability to sustain changes and cope with the separation from the abuser as well as the new responsibilities and change of lifestyle that are involved in making those changes that impact not only themselves but also their families.

No significant differences were found among the clusters on several variables including age, ethnicity, education, shelter from which data was collected, language in which questionnaires were completed, and marital status. The fact that no differences were detected may have been due to the necessity of collapsing categories to conduct the data analysis on a small sample size. In addition, the significant differences in age and

education between the Hispanic and Anglo portions of the sample may have clouded any true differences among the different profiles. Language preference was also probably confounded with ethnicity and acculturation. When cluster analyses were conducted separately for each ethnic group to address these issues, the results did not add any new information, because the analyses conducted on the Hispanic sample alone yielded similar findings to the cluster analyses conducted on the overall sample, and the small sample size of the Anglo sample did not yield enough power to detect and interpret the cluster analyses.

According to the Transtheoretical Model, intervening variables mediate movement across the stages of change. Self-efficacy and the decisional balance were identified as two variables that affect whether individuals take action on their problem, achieve their goal, and are able to maintain the changes they have made (Prochaska et al., 1985). For Hispanic women, acculturation may also have an impact on one's decision or willingness to move from one stage of change to another. Based on this aspect of the theory, in the second hypothesis it was predicted that individuals with different stages of change profiles would differ on self-efficacy (temptations and confidence), decisional balance (pros and cons), and acculturation. A specific prediction was made that during earlier stages of change, temptations would be higher, confidence lower, cons higher, pros lower, and acculturation lower, whereas for later stages, the reverse would occur.

As predicted, the profiles were found to differ significantly overall from one another with regard to the intervening variables. The Action profile was most distinct from the Reluctance, Uninvolved, and Hoping He'll Change profiles in that women with

this profile were significantly less tempted to stay in an abusive relationship. Also, women with Action profiles saw less cons to making changes than women with a Hoping He'll Change profile. Conversely, women with Reluctance profiles saw significantly more cons to changing than women with Action profiles. The Hispanic women in this sample did not, however, differ across profiles with regard to acculturation. A definite trend was observed; during earlier stages of change women feel more tempted to stay in their abusive relationships and see more cons to making changes to end their relationships, whereas women in later stages feel less tempted and see less cons. However, the relationship between acculturation and the stage of change profiles is more complex.

Regarding acculturation, it appears as though the Hispanic women who were most oriented toward the Mexican culture had Uninvolved or Hoping He'll Change profiles, although there were no statistically significant patterns. In contrast, the Hispanic women who were most acculturated toward the Anglo culture tended to have Engagement profiles. This pattern supports the literature that suggests that women who subscribe to traditional Mexican values, such as familismo, are more likely to remain in abusive situations for the sake of keeping the family together, whereas women who are more oriented to the Anglo culture and exposed to the Anglo ideal of independence and self-sustenance are more likely to make and sustain changes that lead to a life without abuse (Bauer, Rodriguez, Quiroga, & Flores-Ortiz, 2000; Suris et al., 1998).

Interestingly, Hispanic women with Reluctance and Action profiles were somewhere in the middle with bicultural orientations leaning towards a more traditional

Mexican orientation. This finding points toward a complex relationship between acculturation and behavior change. Previous research has also found complex relationships among acculturation and other factors such as stress and other mental health consequences suggesting that variables, such as adherence to traditional values, interact with one another to determine the manner in which acculturation impacts individuals in the Hispanic community (Balcazar, Peterson, & Krull, 1997; Contreras, Lopez, Rivera-Mosquera, Raymond-Smith, & Rothstein, 1999; Flaskerud & Uman, 1996; Rodríguez & Kosloski, 1998). In this case, it may be that women who are reluctant to engage in the change process are adhering to traditional Mexican values that impede them from leaving an abusive relationship, whereas women with Action profiles are adhering to some of the traditional Mexican values that encourage their attempts to make changes in their lives such as relying on a supportive and tight-knit extended family.

A more clear and significant pattern of differences among the profiles, with regard to the intervening variables, might have occurred with a larger sample size. The confusion that may have emerged from the instructions on how to complete the Confidence scale and the large amount of missing data on the ARSMA-II may also have contributed to a difficulty in detecting true differences among the profiles. It is likely that with more statistical power arising from a larger sample size, a statistical difference would have emerged based on the predicted trends that were observed among the intervening variables.

Finally, it was hypothesized that significant differences would be found across the profiles of change among women who terminated early versus those who terminated

appropriately and/or continued treatment. Specifically, it was predicted that women with earlier stage of change profiles would terminate earlier more frequently than those in later stages. Conversely, women in later stages of change would be more likely to terminate appropriately and/or continue treatment.

Research has shown that ethnic minority status is a consistent predictor of premature termination in outpatient community-based treatment centers (Wierzbicki & Pekarik, 1993). Thus, before determining whether the profiles of change could predict termination status, the relationship between ethnicity and termination was examined. The initial results confirmed the expectation based on the literature that, overall, Hispanic women were more likely to terminate earlier than Anglo women. However, when ethnicity was moderated by stages of change to predict termination status the findings indicated that, in early stages of change, Hispanic women were more likely to terminate early, but in later stages of change, ethnicity did not significantly predict termination status.

This finding also supports the research literature which has noted that the relationship between ethnicity and other variables, such as stress, violence, and the utilization of mental health services, is often complex, because ethnicity itself is interrelated with other factors such as socioeconomic status, level of education, social support, and acculturation (Balcazar et al., 1997; Bean, Berg, & Van Hook, 1996; Briones et al., 1990; Contreras et al., 1999). For example, in a study on smoking cessation using Hispanic participants, income level was found to be the only sociodemographic or ethnicity factor that predicted attrition from treatment. Participants

who did not complete treatment reported lower annual incomes than those who did complete it (Nevid, Javier, & Moulton, 1996). In this study, however, level of education, which is related to socioeconomic status, did not significantly predict termination status. It is probable that women who find themselves in the position of having to go to a shelter to escape an abusive relationship, do not have the economic resources or social support that would allow them to obtain other living arrangements. In this study, the majority of the sample had achieved a high school education or less and was probably of lower income status, thus clouding any effect that may have existed but could not be detected in this sample which was relatively homogeneous in terms of education and socioeconomic status.

The relationship between age and termination was also examined, in light of the fact that the Hispanic women in the sample were significantly younger than the Anglo women. The results of these analyses indicated that younger women tended to terminate earlier. This finding contradicts Brogan, Prochaska, and Prochaska's (1999) conclusion, based on their analyses of the Transtheoretical Model and it's utility in predicting premature termination, that the variables that effectively predict premature termination are not static variables, such as age and gender, but dynamic variables, such as stages of change, processes of change, and decisional balance. However, intuitively, this finding makes sense, because younger women may have had less of an opportunity to receive education about abuse and the cycle of violence and may have a naïve expectation that their partners will change or that the problems in their relationship will be solved in some other way.

Interestingly, like ethnicity, when age was examined separately for each stage of change profile to predict termination status, the findings indicated that, in early stages of change, younger women were more likely to terminate early, but in later stages of change, age did not significantly predict termination status. These findings together suggest that once a woman has made a decision to change and is actively making and sustaining changes, ethnicity and age play a less important role than other factors not explored in this study such as perceived support and effectiveness of the shelter programs.

To further investigate the relationship between ethnicity and termination status, exploratory analyses were performed that involved using acculturation as a moderator variable to predict terminations status. The finding from these analyses indicated that women who have a Mexican orientation and are in the early stages of change are more likely to terminate early, whereas women who have a Mexican orientation but are in the later stages of change are more likely to terminate appropriately. This finding sheds some light on the earlier discussion of acculturation levels among women with different stage of change profiles. As mentioned earlier, a complex relationship was found in that women with Reluctance and Action profiles had a more bicultural orientation but were still leaning towards having traditional Mexican ideals. This relationship made sense for the Reluctance profile but not for the Action profile where it would be expected that the Hispanic women would be more Anglo acculturated. The conclusion based on the literature was that no simple relationships exist among acculturation and behavior change, because for some individuals, acculturation is associated with such phenomena

as increased stress, loss of cultural values and social support, and socioeconomic difficulties, but for others, increased acculturation appears to be associated with the development of adaptive behaviors and even with a greater sense of familism and decreased symptomatology and stress as a result of family support (Balcazar et al., 1997; Contreras et al., 1999; Flaskerud & Uman, 1996; Rodríguez & Kosloski, 1998). Similarly, it may be that women in earlier stages of change who are Mexican oriented and feeling more acculturation stress and less able to make changes, subsequently terminate early from the shelter program. On the other hand, Hispanic women with traditional Mexican values who are in later stages of change may be experiencing the positive effects of their culture, such as receiving increased social support, that aid in their process of change and their willingness to complete the shelter program.

No significant findings emerged regarding the bicultural or Anglo oriented groups with regard to termination status. However, the Anglo oriented group did show a trend that suggests that Anglo women are more likely to terminate appropriately regardless of whether they are in an early or late stage of change. This trend was expected, because Anglo women have more access to environmental resources, due to their legal status in the United States, their knowledge of the language and culture, and values such as independence that enable them to make and sustain changes that lead them away from abusive relationships.

Overall, no significant differences were found among the different profiles with regard to termination status when ethnicity, age, education, and acculturation were not controlled. However, the results did show a weak trend in the predicted direction,

indicating that with a larger and more heterogeneous sample, statistical analyses would probably reveal a relationship between stages of change and termination status in which women who begin treatment in earlier stages of change terminate earlier than women who begin treatment in later stages of change.

Summary of Findings

The results of this study provide evidence for the applicability of the Transtheoretical Model and the usefulness of the PROCAWS in identifying profiles of change that can potentially guide treatment interventions and predict early termination with the Hispanic population. This study confirmed the profiles found by Brown (1998) in a similar population of battered women and others who found similar profiles with different populations. Also, the results suggest that this model is applicable to Hispanic populations as profiles consistent with those found in the literature were found with this sample. Furthermore, this study provided further support for the validity of this theory by examining and finding significant relationships among the profiles of change and the intervening variables that moderate movement across the stages of change. The findings also confirmed that the Transtheoretical Model can be used to predict termination status from domestic violence shelter programs.

Limitations of the Current Study

The initial difficulty with this study occurred in the manner in which the data was collected. Unfortunately, this investigator was not able to be present when the data was collected. Thus, the data collection was done by caseworkers at the shelter. Although this form of "piggy backing" on already established procedures may have placed less stress

and confusion on the shelter staff and the participants, this investigator was unable to personally monitor data collection to assure that the questionnaires were being filled out correctly and completely. These conditions account for much of the missing data and the confusion regarding the completion of the Confidence questionnaire. These issues impacted the data analyses and may account for insignificant findings as well as the interpretability of the findings.

Another related limitation was the small subject sample. Although power analyses indicated that the sample was large enough to detect the stage of change profiles, some analyses had less power to detect differences because of the large amount of missing data. A relatively small N is also problematic for cluster analyses, because the sample has to be divided into even smaller subgroups. Cluster analyses are typically performed on much larger Ns, making relatively equitable subject distribution among the clusters more likely. In the current study, some differences in size existed among the five stage of change cluster profiles, which could have accounted for lack of significant differences. In addition, the data analyses that examined the difference in demographic variables and self-efficacy, decisional balance, and acculturation among the profiles of change as well as the model's ability to predict termination status, were limited by the fact that, due to large amount of missing data, many categories had to be recoded into a smaller number of categories in order to meet the assumptions of the statistical analyses. By collapsing the categories, valuable information may have been lost, and type II errors may have occurred. Another consequence of the missing data and the resulting small N is that most of the measures in this study were found not to be normally distributed.

However, this may be due to the nature of the population of battered women temporarily residing in shelter who had a tendency to endorse more extreme items on the questionnaires. Nevertheless, replication with a larger sample with more complete data quite probably will not only increase the chances of significant results but also strengthen the conclusions of the study.

A further limitation of the current study was the reliance on self-report data. As in all studies that rely on self-report data, accuracy may be in question, especially when the investigator is not personally available to answer questions. Also, participants understanding of questions on measures may also be problematic, especially because they are probably foreign concepts to the less acculturated participants. As mentioned above, this probably occurred with the women who incorrectly completed the Confidence measure. Finally, women who could not read had to be excluded from the study. Although this situation occurred only once in this study, in future research, attempts should be made to provide for an alternative way of administering the questionnaires so that these women will not be excluded, because they represent a portion of the population with a unique set of difficulties that may affect their ability to engage in the change process.

The measures used in this study appeared to be generally internally and externally valid and reliable. However, as mentioned before, the measures were not normally distributed in this sample. Thus, the measures may only have tapped into certain aspects of the sample while missing information about other groups of participants. Also, although the reliability coefficients were all above 60%, Brown's (1998) study using the

PROCAWS yielded higher coefficients. However, her sample was significantly larger with an N of approximately 300.

A final limitation of this study was that the sample size was not large enough to allow the comparison of the Hispanic portion of the sample with the Anglo portion. Initially, with the addition of the Anglo participants in the sample it was hoped that comparisons could be done, especially regarding the stage of change profiles, between the two subgroups. However, the two year delay in collecting the data did not allow for obtaining a larger Anglo sample. Also, because the majority of the sample was Hispanic, the findings from this study are somewhat limited to this ethnic group. Additionally, because the majority of the sample was Mexican or Mexican-American, the results from this study may not be generalizable to other Hispanic subgroups.

Implications for Research and Clinical Practice

Despite the limitations discussed above, the results of this study are informative and clinically useful. To date, no published studies have empirically tested the applicability of the Transtheoretical Model with battered women. In addition, research on this topic with minority populations is scarce. Thus, this study represents one of the earliest attempts to study the validity and generalizability of this model with a sample of Hispanic battered women. Furthermore, PROCAWS, a relatively new measure, has been tested and found to be useful in assessing profiles of change as predicted by the larger Transtheoretical Model.

This study provides support for the theory that assessing readiness for change can serve as a model for tailoring treatments and addressing intervening variables in order to

prevent early termination. These findings hold important implications for working with battered women. Although more research is needed with respect to assessing profiles of change in battered women and minority populations, clinical practitioners can begin to use this model of behavior change to design individualized treatment interventions that address the issues that are most relevant to women with particular stage of change profiles. Future research should also focus on developing and testing interventions and treatment programs designed to facilitate battered women's attempts to make the necessary changes to leave and remain out of an abusive relationship.

Further research is also needed to identify which processes of change and mediating variables are most relevant to a minority population and to a battered women population. More intricate statistical analyses will be needed to assess the interactive and cumulative effects of these variables and the demographic characteristics that affect a woman's movement across the different stages of change and predict termination status.

Although potentially expensive and time consuming, it may be important that future research focus on interviewing women, instead of or in addition to using self-report measures, to provide more accurate and complete assessments of the women's stage of change profiles. In addition, efforts should be made to minimize missing data and to gather a larger sample that will make the analyses more meaningful and useful for descriptive and predictive purposes. Also, when studying minorities, such as Hispanics, attempts should be made to gather data from all possible subgroups of Hispanic culture so that future findings can generalize to a larger and more representative population.

Finally, as Brown (1997) pointed out, behavior change for battered women is

complex, because it involves making changes in a system that requires the cooperation of others as well as the ability to cope with the resistance of others who are invested in having conditions remain as they are even if these conditions are painful and dysfunctional. Thus, future studies assessing the utility of the Transtheoretical Model of Change with battered women, and future interventions designed after this model, should focus on developing measures and interventions that address these issues and involve significant others, including children, parents, siblings, and extended family, in the treatment process.

APPENDIX A

The Process of Change in Abused Women Scales

(PROCAWS)

Used with permission

PROBLEMS IN RELATIONSHIPS

Please answer the following questions based on experiences with your partner. Circle the number that indicates how much you agree or disagree with each of the following statements according to the following 5 point scale with 5 = Strongly Agree and 1 = Strongly Disagree. In each case, make your choice in terms of HOW YOU FEEL RIGHT NOW, not what you have felt in the past, or what you would like to feel.

Please circle the number that best describes how much you agree or disagree with each statement right now.

	Strongly Agree 5	Agree 4	Undecided/Neutral 3	Disagree 2	Strongly Disagree 1
1. If I give my partner a chance, I know things will change for the better.	5	4	3	2	1
2. I am actively taking steps to keep myself safe from abuse.	5	4	3	2	1
3. I have less and less hope that my partner will ever change.	5	4	3	2	1
4. Anyone can talk about ending abuse in their life; I'm actually dong something about it.	5	4	3	2	1
5. I will not return to an abusive relationship.	5	4	3	2	1
6. My partner is the boss and that's how it should be.	5	4	3	2	1
7. I have learned the pleasure of making choices for myself.	5	4	3	2	1
8. I am doing things to live my life the way I want to.	5	4	3	2	1
9. I'm continuing to learn what it takes to stay out of an abusive relationship.	5	4	3	2	1
10. I now believe my partner will never change.	5	4	3	2	1
11. I think I might be ready for some changes in how I deal with my partner.	5	4	3	2	1
12. I'm taking time out to do the things I want to do.	5	4	3	2	1
13. I would like to figure out some ways to end the abuse, but I need help.	5	4	3	2	1
14. I need a boost right now to help me maintain the changes I've already made toward a life free of abuse.	5	4	3	2	1
15. I'm beginning to pay close attention when I hear others talking about domestic violence and abuse.	5	4	3	2	1
16. I might like to talk to someone who could tell me how to deal with an abusive partner.	5	4	3	2	1
17. If I do what my partner wants, the abuse will stop.	5	4	3	2	1

PROBLEMS IN RELATIONSHIPS

Please answer the following questions based on experiences with your partner. Circle the number that indicates how much you agree or disagree with each of the following statements according to the following 5 point scale with 5 = Strongly Agree and 1 = Strongly Disagree. In each case, make your choice in terms of HOW YOU FEEL RIGHT NOW, not what you have felt in the past, or what you would like to feel.

Please circle the number that best describes how much you agree or disagree with each statement right now.

	Strongly Agree 5	Agree 4	Undecided/Neutral 3	Disagree 2	Strongly Disagree 1
18. I am doing well making my own decisions.	5	4	3	2	1
19. Being really jealous means my partner loves me.	5	4	3	2	1
20. My partner doesn't respect me and I deserve better.	5	4	3	2	1
21. Anything is better than being alone.	5	4	3	2	1
22. I am being more assertive about my own needs.	5	4	3	2	1
23. I've thought out very carefully what I can do to end the abuse in my life.	5	4	3	2	1
24. If my partner would just stop drinking/doing drugs, everything would be ok.	5	4	3	2	1
25. I'm beginning to realize that my partner doesn't want to change.	5	4	3	2	1

PROS AND CONS

The following statements represent different opinions about relationships. Please rate HOW IMPORTANT each statement is to your decision to remain in the relationship according to the following 5 point scale with 5 = Extremely Important and 1 = Not Important.

How important are the following statements in your decision to stay with, or leave, your partner?

	Not Important 1	Slightly Important 2	Moderately Important 3	Very Important 4	Extremely Important 5
1. I would be lonely without my partner.	1	2	3	4	5
2. I'm tired of walking on eggshells around my partner.	1	2	3	4	5
3. I think I can make this relationship work.	1	2	3	4	5
4. The abuse is getting worse and worse.	1	2	3	4	5
5. I don't feel good about myself in this relationship.	1	2	3	4	5
6. The relationship has its good times; I don't want to lose those.	1	2	3	4	5
7. I love my partner.	1	2	3	4	5
8. I feel like I'm going crazy in this relationship.	1	2	3	4	5
9. My partner needs me.	1	2	3	4	5
10. I feel calmer when my partner is not around.	1	2	3	4	5
11. I would feel like a failure if my relationship ended.	1	2	3	4	5
12. Remaining in this relationship is harmful to me.	1	2	3	4	5

TEMPTING SITUATIONS

Listed below are situations that lead some people to remain with, or return to, their partners, even though abuse may be occurring. We would like to know HOW TEMPTED you may be to remain, or return, in each situation. Please answer the following questions by using a 5 point scale with 5 = Extremely Tempted and 1 = Not at all Tempted.

How tempted would you be to remain with, or return to, your partner in each situation?

	Not at all Tempted 1	2	Not Very Tempted 2	3	Moderately Tempted 3	4	Very Tempted 4	5	Extremely Tempted 5
1. When I feel like I'm the only one who can help my partner.	1	2		3		4		5	
2. When my partner is going through a hard time.	1	2		3		4		5	
3. When I remember the part of my partner that I fell in love with.	1	2		3		4		5	
4. When my partner promises to change.	1	2		3		4		5	
5. When my partner turns on the charm.	1	2		3		4		5	
6. When my partner needs me.	1	2		3		4		5	
7. When my partner enters a treatment program.	1	2		3		4		5	

CONFIDENCE IN TEMPTING SITUATIONS

Listed below are situations that lead some people to remain with, or return to, their partners, even though abuse may be occurring. We would like to know HOW CONFIDENT you are that you would not remain with, or return to, your partner in each situation. Please answer the following questions by using a 5 point scale with 5 = Extremely Confident and 1 = Not at all Confident.

How confident are you that you would <u>not</u> remain with, or return to, your partner in each situation?

	Not at all Confident 1	2	3	4	Extremely Confident 5
1. When I feel like I'm the only one who can help my partner.	1	2	3	4	5
2. When my partner is going through a hard time.	1	2	3	4	5
3. When I remember the part of my partner that I fell in love with.	1	2	3	4	5
4. When my partner promises to change.	1	2	3	4	5
5. When my partner turns on the charm.	1	2	3	4	5
6. When my partner needs me.	1	2	3	4	5
7. When my partner enters a treatment program.	1	2	3	4	5

Appendix B

The Acculturation Rating Scale for Mexican Americans-II

(ARSMA-II)

Used with permission

ACCULTURATION RATING SCALE-II (ARSMA-II)

English Version

Name: _____

Male: _____ Female: _____

Age: _____ Date of Birth: _____/_____/_____

Marital Status: _____

What is your religious preference? _____

(a) Last grade you completed in school: *(Circle your choice)*

1. **Elementary-6**
2. **7-8**
3. **9-12**
4. **1-2 years of college**
5. **3-4 years of college**
6. **College graduate and higher**

(b) In what country? _____

[Circle the generation that best applies to <u>you</u>. Circle only one.]

1. **1st generation = You were born in Mexico or other country.**

2. **2nd generation = You were born in USA; either parent born in Mexico or other country.**

3. **3rd generation = You were born in USA, both parents born in USA and all grandparents born in Mexico or other country.**

4. **4th generation = You and your parents born in USA and at least one grandparent born in Mexico or other country with remainder born in the USA.**

5. **5th generation = You and your parents born in the USA and all grandparents born in the USA.**

Circle a number between 1-5 next to each item that best applies. If you are not of Mexican origin please respond to the following questions according to your own country of origin which is : _____.

		1	2	3	4	5
		Not at all	Very little or not very often	Mo-der-ate-ly	Much or Very often	Ex-tre-mely often or al-most Al-ways
1.	I speak Spanish	1	2	3	4	5
2.	I speak English	1	2	3	4	5
3.	I enjoy speaking Spanish	1	2	3	4	5
4.	I associate with Anglos	1	2	3	4	5
5.	I associate with Mexicans and/or Mexican Americans	1	2	3	4	5
6.	I enjoy listening to Spanish language music	1	2	3	4	5
7.	I enjoy listening to English language music	1	2	3	4	5
8.	I enjoy Spanish language TV	1	2	3	4	5
9.	I enjoy English language TV	1	2	3	4	5
10.	I enjoy English language movies	1	2	3	4	5
11.	I enjoy Spanish language movies	1	2	3	4	5
12.	I enjoy reading (e.g., books in Spanish)	1	2	3	4	5
13.	I enjoy reading (e.g., books in English)	1	2	3	4	5
14.	I write (e.g., letters in Spanish)	1	2	3	4	5
15.	I write (e.g., letters in English)	1	2	3	4	5
16.	My thinking is done in the English language	1	2	3	4	5
17.	My thinking is done in the Spanish language	1	2	3	4	5
18.	My contact with Mexico has been	1	2	3	4	5
19.	My contact with the USA has been	1	2	3	4	5
20.	My father identifies or identified himself as “Mexicano”	1	2	3	4	5
21.	My mother identifies or identified herself as “Mexicana”	1	2	3	4	5
22.	My friends, while I was growing up, were of Mexican origin.	1	2	3	4	5
23.	My friends, while I was growing up, were of Anglo origin	1	2	3	4	5
24.	My family cooks Mexican foods	1	2	3	4	5
25.	My friends now are of Anglo origin	1	2	3	4	5
26.	My friends now are of Mexican origin	1	2	3	4	5
27.	I like to identify myself as an Anglo American	1	2	3	4	5
28.	I like to identify myself as a Mexican American	1	2	3	4	5
29.	I like to identify myself as a Mexican	1	2	3	4	5
30.	I like to identify myself as an American	1	2	3	4	5

ACCULTURATION RATING SCALE-II (ARSMA-II)

Versión en Español

Nombre: _____

Masculino: _____ **Femenino:** _____

Edad: _____ **Día de Nacimiento:** _____

Estado Civil: _____

Cual es su religión predilecta? _____

(a) ¿Hasta que grado fué a la escuela? ***(Indique con un círculo la respuesta)***

1. **Primaria-6**
2. **Secundaria 7-8**
3. **Preparatoria 9-12**
4. **Universidad o Colegio 1-2 años**
5. **Universidad o Colegio 3-4 años**
6. **Graduado, o grado mas alto de Colegio o Universidad**

(b) ¿En que país? _____

[Indique con un círculo el numero de la generación que considere adecuada para usted. Dé solamente una respuesta.]

1. **1a. generación = Usted nació en México u otro país [no en los Estados Unidos (USA)].**

2. **2a. generación = Usted nació en los Estados Unidos Americanos (USA), sus padres nacieron en México o en otro país.**

3. **3a. generación = Usted nació en los Estados Unidos Americanos (USA), sus padres tambien nacieron en los Estados Unidos (USA) y sus abuelos nacieron en México o en otro país.**

4. **4a. generación = Usted nació en los Estados Unidos Americanos (USA), sus padres nacieron en los Estados Unidos Americanos (USA) y por lo menos uno de sus abuelos nació en México o algun otro país.**

5. **5a. generación = Usted y sus padres y todos sus abuelos nacieron en los Estados Unidos (USA).**

Marque con un círculo el numero entre 1 y 5 a la respuesta que sea más adecuada para usted. Si Ud. no es de origen Mexicano por favor conteste a las siguientes preguntas de acuerdo a su propia cultura o su país de origen que es:

_____.

		1	2	3	4	5
		Nada	Un Po-qui-to o A-ve-ces	Mo-der-ado	Mu-cho o muy fre-cue-nte	Muchi-simo o Casi todo el tiempo
1.	Yo hablo Español	1	2	3	4	5
2.	Yo hablo Inglés	1	2	3	4	5
3.	Me gusta hablar en Español	1	2	3	4	5
4.	Me asocio con Anglos	1	2	3	4	5
5.	Yo me asocio con Mexicanos o con Norte Americanos	1	2	3	4	5
6.	Me gusta la musica Mexicana (musica en idioma Español)	1	2	3	4	5
7.	Me gusta la musica de idioma Inglés	1	2	3	4	5
8.	Me gusta ver programas en la televisión que sean en Español	1	2	3	4	5
9.	Me gusta ver programas en la televisión que sean en Inglés	1	2	3	4	5
10.	Me gusta ver películas en Inglés	1	2	3	4	5
11.	Me gusta ver películas en Español	1	2	3	4	5
12.	Me gusta leer (e.g., libros en Español)	1	2	3	4	5
13.	Me gusta leer (e.g., libros en Inglés)	1	2	3	4	5
14.	Escribo (e.g., cartas en Español)	1	2	3	4	5
15.	Escribo (e.g., cartas en Inglés)	1	2	3	4	5
16.	Mis pensamientos ocurren en el idioma Inglés	1	2	3	4	5
17.	Mis pensamientos ocurren en el idioma Español	1	2	3	4	5
18.	Mi contacto con México ha sido	1	2	3	4	5
19.	Mi contacto con los Estados Unidos Americanos ha sido	1	2	3	4	5
20.	Mi padre se identifica (o se identificaba) como Mexicano	1	2	3	4	5
21.	Mi madre se identifica (o se identificaba) como Mexicana	1	2	3	4	5
22.	Mis amigos(as) de mi niñez eran de origen Mexicano	1	2	3	4	5
23.	Mis amigos(as) de mi niñez eran de origen Anglo Americano	1	2	3	4	5
24.	Mi familia cocina comidas mexicanas	1	2	3	4	5
25.	Mis amigos recientes son Anglo Americanos	1	2	3	4	5
26.	Mis amigos recientes son Mexicanos	1	2	3	4	5
27.	Me gusta identificarme como Anglo Americano	1	2	3	4	5
28.	Me gusta identificarme como Norte Americano* (México-Americano)	1	2	3	4	5
29.	Me gusta identificarme como Mexicano	1	2	3	4	5
30.	Me gusta identificarme como un(a) Americano(a)	1	2	3	4	5

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