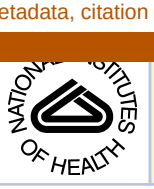



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# Stages of Change as a Correlate of Mental Health Symptoms in Abused, Low-Income African American Women

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## Abstract

The current study aims to further our understanding of the applicability of the transtheoretical model (TM) to intimate partner violence (IPV), with particular focus on mental health symptoms (depression, posttraumatic stress disorder symptomatology, suicidal ideation) in a sample of low-income African American women seeking medical services at an inner city emergency department. Results revealed that of the 121 abused African American women, the majority (95%) were in the precontempla-tion and contemplation stages of the change process. Further, contrary to predictions, bivariate analyses revealed those at further stages of change endorsed more severe mental health symptoms. However, a multivariate analysis of variance examining differences in level of mental health symptoms between women high and low on stages of change was inconclusive due to the small number of women at the higher stages of the TM model. These findings contribute to the growing body of literature supporting the TM as applied to IPV. Results are discussed in terms of applicability to intervention design.

### Keywords

intimate partner violence; African American women; transtheoretical model

The transtheoretical model (TM), also known as the stages of change model, describes an individual's readiness to change behavior. The TM suggests that to make a successful behavior change, individuals must go through a process of evaluating and increasing their readiness to change, ultimately making the change and maintaining the behavior. The TM conceptualizes

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behavior change as occurring in six stages: precontemplation, contemplation, preparation, action, maintenance, and termination (Prochaska, DiClemente, & Norcross, 1992;Prochaska et al., 1994). Each stage depicts a distinct level of attitude and action for behavior change. Classically, each stage also has a timeframe associated with it. During the precontemplation stage, individuals do not identify their behavior as problematic and do not intend to take action at any point in the near future. During the contemplation stage, individuals are aware of the problem and intend to take action within the next 6 months. In the preparation stage, people intend to take action within the next 30 days and have taken some behavioral steps in this direction. During the action stage, individuals currently are actively in the process of taking steps to change overt behavior. During the maintenance stage, individuals have changed the overt behavior for more than 6 months. Although some consider addictive behaviors to be forever in the maintenance phase and in need of ongoing support (e.g., Alcoholics Anonymous groups), others may successfully enter a termination phase. During the termination stage, the behavior will never return and people have complete confidence that they can cope without fear of relapse. This latter stage has been added more recently to the model, and this stage has yet to be fully embraced or consistently used.

In addition to the aforementioned stages of change, the TM also incorporates 10 processes of change to describe how an individual moves from one stage of change to the next (Prochaska et al., 1992). These processes are categorized into two groups, cognitive (consciousness-raising, self-reevaluation, dramatic relief, environmental reevaluation, social liberation) and behavioral (helping relationships, counterconditioning, reinforcement management, self-liberation, stimulus control). People vary in their utilization of these processes to progress through the stages and may employ different processes at various points in time.

The transtheoretical model has been successfully applied to a range of populations and behaviors, including substance abuse, smoking cessation, sexual practices, fruit and vegetable intake, weight-loss, physical activity, and fitness motivation (Abdullah, Mak, Loke, & Lam, 2005;Bourdeaudhuij et al., 2005;Brown, Melchiore, Slaughter, & Huba, 2005;Clarke & Eves, 1997;de Vet, de Nooijer, de Vries, & Brug, 2005;Tassell & Flett, 2005;Wee, Davis, & Phillips, 2005). However, only recently have investigators begun to explore its use with women's experiences of intimate partner violence (IPV; Anderson, 2003;Babcock, Canady, Senior, & Eckhardt, 2005;Burke, Denison, Gielen, McDonnell, & O'Campo, 2004;Burke, Gielen, McDonnell, O'Campo, & Maman, 2001;Frasier, Slatt, Kowlowitz, & Glowa, 2001;Haggerty & Goodman, 2003;Liang, Goodman, Tummala-Narra, & Weintraub, 2005;Mayer & Liebschutz, 1998;Zink, Elder, Jacobson, & Klostermann, 2004). Use of the TM is gaining in popularity as a framework for conceptualizing abused women's attempts to extricate themselves from abusive relationships, as well as a guide for IPV interventions. Nevertheless, the application of the TM to IPV is controversial in some circles, as many advocates believe that it is not the behavior of the victim, but rather the actions of the perpetrator, that need to change. Moreover, many abused women may understand their situation and yet choose to stay in the relationship for complex reasons, not the least of which is an increased risk of becoming a homicide victim within the 6 months following a separation from a violent relationship (Crowell & Burgess, 1996). Behavioral change is not limited to the individual's process, and also should include consideration of other external factors such as attachment to the abuser, the dangers imposed by leaving, the welfare and safety of children, and the woman's ability to be financially independent (Zink et al., 2004). Indeed, the shelter movement was founded on the premise that many abused women will leave when they have the safety and resources to do so (Dobash & Dobash, 1983).

It also is worth considering how IPV victims may choose to seek safety within the relationship and take appropriate steps to achieve that outcome. The TM framework may be useful for assessing actual risks, how individuals perceive the violence in their lives (e.g., awareness of

risks), the internal and external factors that may promote or hinder steps toward safety, and how people then choose to take action to end the violence in their lives (Haggerty & Goodman, 2003;Mayer & Liebschutz, 1998). The model also can be used to appropriately counsel victims to move towards safety. These uses of the TM suggest it benefits mental health and medical care providers in ascertaining what educational information may prove most valuable to abused women. Despite the controversy in the use of the TM with IPV victims, it is necessary to further explore this model given that the criminalization of IPV has not reduced the morbidity and mortality associated with this behavior.

Intimate partner violence remains a serious public health problem; 850,000–1.5 million women are raped or physically assaulted by a partner each year (Tjaden & Thoennes, 2000b) and the lifetime prevalence of physical assault by a partner is 22% (Tjaden & Thoennes, 2000a). Although the rate of abused African American women has decreased over the past two decades, these women are still at an increased risk of IPV (Caetano, Nelson, & Cunradi, 2001). African American women are the victims in more than half of the violent deaths occurring in the homes of female victims (Bailey et al., 1997) and homicide by an intimate partner is the leading cause of death among 18-–24-year-old African American women (National Center for Health Statistics, 1997). In addition, IPV takes forms that are more violent in the African American community than in the White community (Hampton, Oliver, & Magarian, 2003;Hampton & Gelles, 1994;Kessler, Molnar, Feurer, & Appelbaum, 2001). Although women from all socioeconomic backgrounds experience IPV, women who are African American, young, poor, and living in urban areas are the most frequent victims (Rennison & Welchans, 2000). As is the case for women of other racial and ethnic backgrounds, IPV in the African American community is associated with numerous medical and psychological problems. They include injury, chronic pain, gastrointestinal and gynecological problems including sexually transmitted diseases, as well as depression, anxiety, posttraumatic stress disorder (PTSD), low self-esteem, sleep and appetite disturbances, suicidal ideation, and somatization (D. Campbell, 1999;Campbell, Sharps, Gary, Campbell, & Lopez, 2002; J.C. Campbell, 2002;Gerlock, 1999;Holmes & Resnick, 1998;Jones, Hughes, & Unterstaller, 2001;Kaslow et al., 2000;Kaslow et al., 1998;Krishnan & Hilbert, 2001).

The theoretical link between stages of change and mental health symptoms has yet to be fully explored. This link may have particular relevance for abused women's capacity to take action. This should not be surprising, as depression is frequently characterized as a condition where individuals feel paralyzed and incapable of action and people with PTSD are classically physically numb, fearful, and avoidant. Both symptom clusters often compromise women's ability to recognize, plan for, or take action. The inability of abused women to take steps to protect themselves also has been referred to as *the battered woman's syndrome* (Walker, 2000). However, although the mental health correlates of IPV, such as depression, PTSD, and suicidal ideation, have been extensively explored, few have directly linked abused women's stages of change to their mental health symptoms.

The TM has been applied to some extent to conceptualizing the mental health correlates of IPV, although research in this regard is relatively scarce. For example, during the precontemplation and contemplation stages, women in violent relationships often become depressed secondary to their forced social isolation, learned helplessness, difficulties navigating complex systems in an attempt to secure safety, and attempts to numb themselves to the experience often to the point of dissociation (Burman, 2003). They often attempt to hide the abuse from other people, becoming more intricately connected to their battering partner. Abused women may believe they deserve or caused the abuse, and as a result, assume blame and responsibility for their batterers' actions. These negative cognitions, in conjunction with unrealized wishes for freedom and safety, often lead to self-hatred, self-deprecatory ideas, and feelings of helplessness to control or change the abuse. The resulting onset of symptoms of

depression and anxiety may provide an overwhelming mental block to motivate progression to the next stage in the process of leading a violence-free life. Women sometimes present to the emergency department (ED) following suicide attempts and these women are more likely to be in precontemplation and contemplation stages in regards to thinking about changing their abusive relationships (Heron, Twomey, Jacobs, & Kaslow, 1997). Suicide attempts for these women often are an unplanned coping mechanism used to garner social support from family, friends, and even the abusive partner. Women may also experience suicidal ideation in these stages as a way to fantasize about ending the relationship or feelings of entrapment (Heron et al., 1997).

During the maintenance and termination stages, women may present with a litany of PTSD sequelae including depression, anxiety, nightmares, flashbacks of the violent attacks, reexperiencing of the painful physical and emotional feelings, inability to focus, intense fear of being located, emotional distress, and obsessive watchfulness (Burman, 2003). However, such symptoms are likely to be less severe than in earlier stages as women's self-esteem is restored and bolstered by newfound freedom. During these stages, women are likely to focus on feeling empowered to ensure their own safety and enhance their own emotional well-being (Heron et al., 1997). They may be less likely to attempt suicide than earlier in the change process (Heron et al., 1997). It also is plausible that women in the latter stages in the change process exhibit fewer symptoms not only because less distress is associated with progress, but also because it may be those individuals with fewer mental health problems in the first place who are more able to leave an abusive relationship.

The overarching aim of the present investigation was to further our understanding of the applicability of the transtheoretical model to IPV, with particular focus on mental health symptoms. There were three goals of the study and the hypotheses were based on the existing, albeit scant empirical and theoretical literature, as well as extensive clinical experience with abused women. The first aim was to ascertain the percentage of abused, low-income, African American women who were primarily in each of the four stages of change (i.e., precontemplation, contemplation, action, and maintenance) assessed by the dominant measure of stages of change, the University of Rhode Island Change Assessment (URICA; McConnaughy, Prochaska, & Velicer, 1983). Preparation and maintenance are not evaluated via the URICA and thus were not examined in this study. Recognition and acknowledgement of abuse is characteristic of people with greater readiness to change, and because our sample was recruited seeking medical care in the ER, it was hypothesized that 75% of the women would be in the precontemplation or contemplation stage and 25% would be in the action or maintenance stage. The second goal was to determine whether there was an association between stages of change on the TM continuum and the level of mental health symptoms in abused, low-income African American women. It was anticipated that the further along women were in the change process, the fewer symptoms of depression, PTSD, and suicidality they would endorse. The third purpose of this study was to examine differences in the level of mental health problems between women in the action and maintenance phases and those in the precontemplation and contemplation phases. It was predicted that women in the action and maintenance phases would evidence lower levels of depressive and PTSD symptoms, and less suicidal ideation than women in the precontemplation and contemplation phases. The findings have the potential to inform clinicians about the ways in which they need to address abused women's mental health symptoms to assist them in moving through the change process and securing violence-free lives.

# Method

## Sample

The sample consisted of 121 self-identified abused, African American women who sought medical services at a large, inner-city emergency department (ED) at the only public and university affiliated hospital and level-one trauma center in this Southeastern city. These 121 women represent 9.4% of the women who consented to participate in the baseline assessment (T1), as well as the 35.2% of the women who screened positive for IPV at the baseline assessment and who also returned for follow-up (T2). The majority of the patients served by the hospital are minority and from low-income households. To meet inclusion criterion for this investigation, the women needed to be between the ages of 18–55; able to speak and read English at a fifth-grade level; not be intoxicated, acutely psychotic, acutely medically ill, or severely injured; and able to stand for 20 minutes to complete the study. In addition, the women needed to screen positive for IPV on the George Washington Universal Violence Prevention Screening protocol (UVPSPS; Dutton, Mitchell, & Haywood, 1996) on a computer kiosk administered screening questionnaire. Further, the women had to return to the hospital ED for a one-week follow-up research assessment visit.

## Procedure

For the T1 assessment, research assistants approached all eligible women in the ED waiting room during designated times after being identified via an ED patient registration log. After being approached, the women were invited to meet with the research assistants in a semiprivate booth to learn about the project and provide written informed consent. Once informed consent was obtained, the women responded to a series of questions on a touch-screen computer kiosk in a private booth in the ED. Computer screening for IPV has been found to be safe, effective, and associated with increased IPV disclosure (Rhodes et al., 2001,2006). In addition to demographic questions, psychometrically sound measures of IPV, depressive symptoms, PTSD symptoms, and suicidality were administered. Participants terminated the research protocol for one of the following reasons: It was their turn to see the physician, they became too physically ill, or they decided they no longer wanted to participate. Of the 343 abused African American women who started the protocol, 39 terminated for one of the aforementioned reasons. Following completion of the computerized questionnaire process, all participants were provided with a list of resources for each type of mental health symptom they disclosed. Any woman who endorsed active suicidal ideation was immediately evaluated. The women who finished the survey also received a healthy snack. All women who were classified as abused based on their UVPSP responses were invited to return for a second visit one week later. They were given an appointment prior to leaving the ED and up to three reminder telephone calls. The T2 assessments occurred in a family room in the ED and consisted of the administration of a series of questionnaires, including a measure of stages of change. Research assistants administered these measures, and the participants had an option to have the questions read aloud to them or to complete the questionnaires by themselves. This assessment interview lasted approximately 45 minutes. Upon completion of this interview, the women were paid $20 and were provided with public transportation tokens to cover the cost of their transportation to and from the interview. The institutional review board of our university and the hospital's research oversight committee approved this study.

## Measures

**Demographic Data Questionnaire—**Standard sociodemographic information was queried about, such as relationship status, education, and income.

**George Washington Universal Violence Prevention Screening Protocol—** Intimate partner violence was assessed via the UVPSP (Dutton et al., 1996). Specifically, this five-item screening tool includes questions that tap physical violence, threat of violence, sexual violence, and emotional violence (two items) among women who reported being in a relationship in the prior year. A positive response to any question yielded a positive screen for IPV. A prior study (Heron et al., 2003) conducted in this hospital demonstrated a sensitivity of 78–95% for the physical and emotional abuse screening questions and a positive predictive value of 75–95% compared to the Index of Spouse Abuse (Hudson & McIntosh, 1981).

**Beck Depression Inventory-II—**The presence and severity of depressive symptoms were measured via a commonly used self-report measure, the Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996). This 21-item questionnaire includes items associated with the somatic-affective and cognitive symptoms of depression. Each of the questions includes four response choices, with each choice indicating greater severity of the symptom being assessed. Total scores on the measure can range from 0– 63 (Beck et al., 1996). According to the scale's authors, scores $\geq 20$ indicate moderate or severe levels of depressive symptoms. For the purposes of this study, individuals who obtained scores $\geq 20$ were classified as depressed. Validity tests of the BDI-II in other samples using the same cut-point resulted in an overall classification rate of 88% (sensitivity 71%; specificity 88%; Dozois, 1998). The scale also has been shown to have good test–retest reliability, as well as convergent and construct validity. Further, in the present sample, the internal consistency reliability of the BDI-II was very high (Cronbach's $\alpha = 0.94$).

**Posttraumatic Stress Diagnostic Scale—**Part 3 of the Posttraumatic Stress Diagnostic Scale (PDS; Foa, 1993) was used to ascertain the presence and severity of PTSD symptoms. This section of the PDS (symptom severity scale) asks 17 questions that address the three categories of symptoms associated with a diagnosis of PTSD: reexperience (5 questions), avoidance (7 questions), and hyperarousal (5 questions). Patients who had scores of 21 or higher were coded as having PTSD symptoms, as these scores have been found to reflect moderate or severe levels of PTSD symptoms (Foa, 1993). Validity tests resulted in an overall classification rate of 74% (sensitivity 89%; specificity 65%; Foa, 1993). In our sample, Cronbach's alpha was 0.94.

**Beck Scale for Suicidal Ideation—**Suicidal intent was measured via the Beck Scale for Suicidal Ideation (BSS; Beck, Kovacs, & Weissman, 1979), which consists of 5 screening items and 21 test items. The five screening items eliminate the need for nonsuicidal persons to complete the 21 test items. Response categories for the first 19 questions consist of a 3-point intensity scale ranging from 0 to 2. When summed, total BSS scores range from 0 to 38 (Beck et al., 1979). The measure has high internal consistency (Chron-bach's $\alpha = .89$) and interrater (.83) reliability (Beck et al., 1979). Patients who scored equal to or greater than 11 on the scale were considered to be positive for suicidal ideations, consistent with the literature (Beck, Brown, & Steer, 1997). In our sample, Cron-bach's alpha was.843.

**University of Rhode Island Change Assessment—**Readiness for change was assessed by the University of Rhode Island Change Assessment (URICA; McConnaughy et al., 1983). The URICA is a 32-item scale designed to assess four theoretical stages through which individuals progress in changing their behavior: precontemplation, contemplation, action, and maintenance. Each item consists of a statement regarding a problem along with a 5-point Likert scale on which participants are asked to rate the extent to which they agree or disagree with the statement. Higher scores indicate greater endorsement of particular attitudes or behaviors, with total subscale scores ranging from 8 to 40. The URICA has demonstrated solid

psychometric properties for theoretical consistency and scale composition, ranging between. 88 and.89 (McConnaughy, DiClemente, Prochaska, & Velicer, 1989;McConnaughy et al., 1983). Internal consistency in the current sample for the subscales ranged from.64 to.87.

## Results

The mean age for the sample of 121 women is 33.54 (*SD* =11.34). Concerning relationship status, 73.9% (*n* =88) were single, 16.8% (*n* =20) were separated or divorced and 8.4% (*n* = 10) were currently married at the time of initial screening. In terms of education, 5% had less than a ninth-grade education, 53.8% had some high school education or had completed high school, and 41.2% had some college education or had completed college. Income distributions for the sample indicated that 29.9% reported having enough money to meet their needs and 32.5% reported having a job outside of the home. In terms of mental health symptoms, 50.4% had moderate to severe depressive symptoms, 32.2% had symptoms of PTSD, and 14% were positive for suicidal ideation.

To address the first study aim, the percentage of women in each of the four stages of change assessed by the URICA were calculated. Results revealed that 69.4% (*n* = 84) scored in the precontemplation category on the URICA, 25.6% (*n* = 31) were in the contemplation category, 5% (*n* =6) scored in the action category, and none (0%) were in the maintenance stage. Statistically, there were significantly more women in the precon-templation and contemplation stages as compared to the action and maintenance stages (Fisher's Exact Test, *n* =121, *df* =1, *p* <.001). Whereas it was predicted that 75% of the women would be in the earlier stages of the change process, the findings indicated that 95% of the women were in these early stages of change.

To investigate the second study objective related to the expected associations between readiness to change and depressive symptomatology, PTSD symptomatology, and suicidal ideation, a series of Pearson correlation coefficients were calculated. These analyses identified significant positive correlations between readiness to change and depressive symptoms, *r*(119) =.121, *p* = <.05), PTSD symptomatology *r*(119) =.182, *p* <.05, and suicidal ideation, *r*(119) =.031, *p* <.05). Of note, these correlations were opposite to predictions. Specifically, women at further stages of readiness to change endorsed more symptoms of depression and PTSD, as well as more suicidal ideation.

A MANOVA was calculated to address the third study aim, with stage of change (precontemplation and contemplation versus action and maintenance) serving as the independent variables and scores on the BDI-II, PDS, and BSS serving as the dependent variables. Although no significant effect was found, potentially indicating no difference in mental health symptoms between women high and low on stages of change, it is unlikely that there was adequate power to detect between-group differences given that only 5% of the sample was in the action or maintenance stages of change.

## Discussion

This study provides a preliminary examination of the stages in the change process endorsed by low-income African American women seeking medical services at an inner-city ED, as well as the association between stage in the change process and mental health symptoms. As predicted, the majority of women were in the precontemplation and contemplation stages. In fact, more women acknowledged being in these earlier phases of the change process than anticipated. Specifically, whereas it was predicted that 75% of the women would be in the earlier stages of the change process, the findings indicated that 95% of the women were in

these stages. In light of previous theorizing, it was hypothesized that more advanced levels in the change process would be associated with fewer mental health symptoms and that women in the action and maintenance stages of change would endorse lower levels of depression, fewer PTSD symptoms, and lower levels of suicidal ideation than women in the precontemplation and contemplation stages of change. The results were either contradictory to or failed to support these hypotheses. Specifically, correlational analyses revealed that higher levels in the change process were associated with more symptoms and suicidal ideation and a multivariate analysis of variance was inconclusive due to a lack of statistical power.

There are a number of possible explanations for why most of the women in this investigation were categorized as being in the precontemplation and contemplation stages in the change process. First, these women were seeking medical care at the hospital, rather than traditional services related to addressing or extricating themselves from the abusive situation. In addition, they were not necessarily seeking ED services for injury-related care. However, a visit to the hospital ED may represent an indirect effort of seeking help or support related to IPV. There are data to suggest that abused women have higher health and mental health care service utilization than nonabused women (Paran-jape, Heron, & Kaslow, in press; Ulrich et al., 2003). Second, it is not uncommon for abused women to have difficulty acknowledging and believing that they are in an unsafe and problematic relationship and such admission may be more characteristic of people with greater readiness to change (Burke et al., 2001). Third, abused women often make five to seven attempts to leave abusive partners before they are successful (Ferraro, 1997). Thus, many abused women may vacillate between the action phase and earlier phases in the change process, as well as between the cognitive processes associated with the earlier stages and the behavioral processes linked to the later stages (Burke et al., 2004;Prochaska et al., 1992;Prochaska et al., 1994).

The correlational analysis between mental health symptoms (depression, PTSD, suicidal ideation) and stages of change unveiled some interesting results. The significant positive relationship between readiness to change, depressive and PTSD symptomatology, and suicidal ideation may be indicative of the fact that as women traverse through the change process and increasingly acknowledge the abusive nature of their relationships, they may feel more vulnerable as well as self-aware, and as result may experience more psychological distress. The findings also may reflect the fact that as many women contemplate, prepare to, and finally take action to leave an abusive partner, they become “acutely aware of the cons” of such behavior (Prochaska & Velicer, 1997). For example, women attempting to leave abusive relationships may become more fearful of being harmed or killed by their partner. Research indicates that the risk of violence from a partner increases after women attempt to leave (Burman, 2003). In addition, results from the current study might reveal that women have fears about sustaining themselves economically, emotionally (fear of loneliness, isolation, and missing their partners), and feel sadness about their families not remaining intact (Burke et al., 2004;Ferraro, 1997;Miller & Rollnick, 2002). These fears are likely evidenced and experienced through increased feelings of depression, PTSD symptomatology (increased anxiety), and suicidal ideation. It also is possible that their mental health scores reflect a cumulative effect of the steps they must take to end abusive relationships. While noted earlier that their awareness or risks may be higher, they actually may endure an emotional impact from their safety seeking. Some of the participants had engaged outside services (e.g., contacting law enforcement), which itself can cause anxiety and fear. Whether talking with IPV service providers and court personnel, relaying earlier incidents, or actually progressing to leave the abusive relationship, these behaviors may contribute to mental health symptoms and merits further exploration. Additional cultural and ethnic barriers of trusting helping professionals, including mental health professionals, needs to be explored in the context of African American victims help-seeking behaviors (West, Kantor, & Jasinski, 1998).

Several limitations are worth noting with regard to this study. First, it was initially hoped that we would be able to compare groups (precontemplation, contemplation, action, and maintenance); however, because so few women were found to be in the higher stages of change, we were unable to do this. This discrepancy between the number of women found in the higher and lower stages likely influenced the lack of significant findings found between the mental health symptoms of the women. However, this difficulty speaks to the need for interventions to be created targeting these women, to help move them through the readiness for change model (i.e., action and maintenance). Second, the URICA does not include items associated with all six stages in the TM model, and thus provides a somewhat limited perspective on the model. Third, an obvious challenge is that the nature of the data collection methodology, the self-report and possible retrospective nature of the women's responses, may impact the validity of the results. Fourth, we are unable to control for severity of violence, given the measures of IPV used. It is possible the women experiencing the most severe violence had the highest mental health scores and thus may be the most likely to leave. Last, the results cannot be generalized to all settings and experiences of IPV, as the women in the current study were recruited from a hospital emergency department. The results may not reflect other women's experiences and expectations in other settings, including shelters, primary care centers, and legal and mental health institutions. In addition, given the sample was African American and low-income, the findings may not generalize to women from other racial/ethnic backgrounds or social class groups.

The results of this study support the need for future research. First, more empirical attention needs to be paid to the validity and utility of the TM for abused women, given that earlier TM research has been devoted to addictive behaviors. Given the far-reaching medical, psychological, and social sequelae of IPV, many people question why abused women remain in abusive relationships. This may reflect a failure to recognize that termination of an abusive relationship can be a very trying, difficult, and frightening time for female victims, likely fraught with increased symptoms of depression, PTSD, and suicidal ideation. In addition, ending an abusive relationship can be a very time-consuming process, often involving inconsistent behavioral patterns and coping strategies on the women's part (Anderson & Gillig, 2003), including vacillation between the various stages of readiness to change and the associated cognitive and behavioral phases. Further, many women want the violence to stop, but do not see leaving the relationship as the solution. Recognition of the complex issues related to extrication from a violent relationship and the possible mental health outcomes is important, as it is helpful in aiding women in making changes and decisions that they are comfortable and able to make (Anderson & Gillig, 2003). These findings reflect the importance of addressing the difficulties faced in these women's lives, such as fear, depression, and suicidality, in the design of intervention programs. In this regard, further examination of the TM to women's experiences of ending IPV and the mental health symptoms associated with making such changes is both appropriate and necessary.

Finally, it is imperative that interventions be patient-centered, matched to the women's stage in the change process, and tailored to fit the women's unique experiences (Anderson, 2003;Frasier et al., 2001;Zink et al., 2004). For example, those in precontemplation may benefit most from education, whereas those in the action phase may respond most favorably to guidance and support for their efforts. When TM-oriented interventions are conducted in a group format, they must take into account the fact that women in the groups are likely to be in different stages of the change process, and thus may need differential forms of assistance from each other and the group leaders. In addition, the interventions must take into account the fact that change generally proceeds in a nonlinear fashion and as such, therapists should be realistic in their expectations for the abused women with whom they are working (Anderson, 2003). Interventions conducted in accord with the TM model must be constructed and implemented

in a manner that facilitates progress through the change process and increases the likelihood that women will secure and maintain a violence-free life.

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