The Straw that Breaks the Camel's Back: Do Shocks Moderate the Relationship between
Attitudinal Variables and Turnover?

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This thesis titled
The Straw that Breaks the Camel's Back: Do Shocks Moderate the Relationship between
Attitudinal Variables and Turnover?

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Abstract

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The Straw that Breaks the Camel's Back: Do Shocks Moderate the Relationship between Attitudinal Variables and Turnover?

Director of Thesis: Rodger W. Griffeth

The current study was designed to test the relatively new conceptualization provided by Lee and Mitchell (1994)’s unfolding model of voluntary turnover. The unfolding model introduces a novel construct to the turnover literature known as a “shock to the system”. Shocks are theorized to be distinguishable events that lead individuals to re-evaluate their current condition within their organization. The Turnover Events Shocks Scale (TESS) is a measure of negative workplace events. It was hypothesized that such events will moderate the relationship between satisfaction and turnover as well as commitment and turnover, such that the negative relationships will be stronger when an event(s) is present. Results partially support the hypotheses with shocks serving as a marginally significant moderator to satisfaction-turnover relationship. However, non-significant results were revealed for organizational commitment.
To my parents for instilling the values of drive and dedication

To Brandon for your support, patience, and certainty

You are all my motivation for success.
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Table of Contents

Abstract............................................................................................................................... 3
Dedication .......................................................................................................................... 4
Acknowledgments ........................................................................................................... 5
List of Tables ................................................................................................................... 7
List of Figures .................................................................................................................. 8
Introduction ................................................................................................................... 9
The Unfolding Model of Voluntary Turnover................................................................. 13
  Path 1 .................................................................................................................... 15
  Path 2 .................................................................................................................... 16
  Path 3 .................................................................................................................... 17
  Path 4 .................................................................................................................... 17
  Turnover Events Shocks Scale (TESS) .................................................................. 24
The Relationship between Attitudinal Variables and Turnover ....................................... 28
  Attitudinal Variables and Shocks Interacting to Predict Turnover ....................... 29
The Current Study ........................................................................................................... 30
  Hypotheses .......................................................................................................... 31
Method .......................................................................................................................... 33
  Participants .......................................................................................................... 33
  Measures ............................................................................................................. 33
Results ........................................................................................................................... 36
Discussion ..................................................................................................................... 41
  Limitations .......................................................................................................... 44
  Future Research .................................................................................................. 46
  Practical Implications ............................................................................................ 47
References ..................................................................................................................... 48
Appendix A: TESS Items ............................................................................................... 55
Appendix B: Development of the TESS ......................................................................... 57
List of Tables

Table 1. Unfolding Model Decision Paths (based on Lee & Mitchell, 1994) ................. 14

Table 2. Means, Standard Deviations, Correlations, and Reliabilities of All Variables .. 36

Table 3. Results of logistic regression of job satisfaction on turnover.......................... 39
List of Figures

Figure 1. Events Moderate the Job Satisfaction-Turnover Intention Relationship .......... 38

Figure 2. Events Moderate the Job Satisfaction-Turnover Relationship .......................... 40
**Introduction**

The study of voluntary turnover has been a focal point in Industrial-Organizational (I-O) Psychology since the 1970’s (Price, 1977). There have literally been thousands of studies conducted on the topic since the beginning of the twentieth century (Muchinsky & Morrow, 1980). Although a widely examined phenomenon, researchers are still struggling to successfully predict turnover. Many theories of turnover involve attitudinal variables, such as job satisfaction and organizational commitment, playing a role in the turnover process (e.g., Hom, Caranikis-Walker, Prussia, & Griffeth, 1992; Hom & Griffeth, 1995; Hom, Katerberg, & Hulin, 1979; Hom & Kinicki, 2001; Hulin, Roznowski, & Hachiya, 1985; Lee, 1988; Lee & Mowday, 1987; March & Simon, 1958; Mobley, 1977; Porter, Steers, Mowday & Boulian, 1974; Somers, 1995). It is important to point out that these constructs are referred to as “attitudinal” variables because they represent cognitive, rather than external, constructs that have the ability to influence behavior (Muchinsky, 2006). Research has typically found that if employees have negative evaluations of their job or organization (i.e., dissatisfaction and low commitment), they will be more likely to quit than employees who do not negatively evaluate their job (Hom et al., 1979). However, such attitudinal variables have only weak to moderate correlations with turnover and explain only a small amount of variance in the construct (Abelson, 1987; Hom, Griffeth, & Sellaro, 1984). For example, Griffeth, Hom and Gaertner (2000) only revealed correlations between satisfaction and turnover of -.22 and between commitment and turnover of -.27. Additionally, these attitudinal constructs only account for about 4-5% of the variance in turnover (Griffeth et al., 2000).
In an attempt to ameliorate this problem surrounding weak relationships and little variance explained, Lee and Mitchell (1994) developed the unfolding model of voluntary turnover. The unfolding model is a theoretical departure from many prior turnover theories because it does not predict turnover by focusing primarily on traditional attitudinal variables. Rather, the unfolding model introduced a new concept known as a “shock to the system” in an attempt to better understand the decision making process of an employee who is contemplating turnover. A shock is a distinguishable event that leads one to re-evaluate their current condition within the organization (Lee & Mitchell, 1994). Numerous studies have been conducted examining the unfolding model and one estimate from exit interviews is that shocks are involved in about sixty percent of turnover decisions (Holtom, Mitchell, Lee, & Inderrieden, 2005).

Rather than a one path fits all approach to turnover, the unfolding model consists of four decision paths that individuals may take when deciding to leave their organization, three of which postulate a shock as a distal cause of turnover (Lee & Mitchell, 1994). Multiple studies have had success classifying leavers into these four distinct decision paths (Lee, Mitchell, Wise & Fireman, 1996; Lee, Mitchell, Holtom, McDaniel, & Hill, 1999; Donelly & Quirin, 2006; Holt, Rehg, Lin, & Miller, 2007; Holtom et al., 2005; Niederman, Sumner, & Maertz, 2007). However, the majority of this research was done retrospectively by relying on exit interviews and surveys completed only by leavers. Using retrospective data to examine the impact that shocks have in the employee turnover process is problematic for many reasons including; post decisional rationalization (Fischhoff, 1982; Lee et al., 1996; Westaby, 2005), oversimplification (Huber & Power, 1985), image enhancement (Golden, 1992; Huber & Power, 1985), and
forgetting (Golden, 1992; Huber & Power, 1985; Lee et al., 1996) which can all lead to inaccurate recall of the event (Golden, 1992; Huber & Power, 1985; Lee et al., 1996; Westaby, 2005). Therefore, prospective research needs to be conducted to examine if shocks can predict later turnover, which is one goal of the current study.

A second goal of the current study is to provide a predictive test of the unfolding model by examining the interaction between the attitudinal variables of job satisfaction and organizational commitment with the shocks construct to predict subsequent turnover. It is hypothesized that if an individual is experiencing a negative condition within their organization (i.e., low satisfaction and commitment) they will be more likely to quit after experiencing a shock than someone who does not experience such an event. The rationale here is that because a shock is an event that leads one to think about quitting (Lee & Mitchell, 1994), if someone is also experiencing a negative condition, such as job dissatisfaction, they will be more likely to quit than someone who is dissatisfied but has not experienced a shock. Therefore, shocks may serve as a moderator between the attitudinal variables of satisfaction and commitment with turnover.

The current study contributes to the turnover literature in a number of ways. First, it is providing a predictive test of the unfolding model. Second, it is introducing a new role for the shocks construct in that shocks have not previously been examined as moderators. This could suggest a new path for shocks as an interactional, in addition to its direct, antecedent role to turnover. Third, it utilizes the predictive measurement of shocks and/or events. Only one other study to date has used such a measurement approach (Kammeyer-Muller, Wanberg, Glomb, & Ahlburg, 2005). Third, the measure used assesses events (not only shocks). This has practical benefits because events lead to
shocks and subsequently shocks lead to turnover and turnover intention. Additionally, because the measure used assesses only events under the control of the organization, organizations may be able to intervene to prevent turnover. Finally, it introduces the notion of a “tipping point” that has not previously been discussed in the turnover literature. Specifically, the experience of shocks serves as the “final straws” for unsatisfied and uncommitted employees to exit the organization.

Before elaborating on the current study, this paper will provide a discussion and literature review of the unfolding model.
The Unfolding Model of Voluntary Turnover

The unfolding model of voluntary turnover (Lee & Mitchell, 1994) is a more recent model of turnover that consists of four different decision paths that one may take when deciding whether to leave their current job. A summary of the decision paths can be found in Table 1. Three of the paths involve a psychological process as well as an external event, which is referred to as a shock to the system. Shocks are the critical, unique feature of the unfolding model and are a relatively new contribution to the turnover literature. Shocks are theorized to be “a very distinguishable event that jars employees toward deliberate judgments about their jobs and, perhaps, to voluntarily quit their job” (Lee & Mitchell, 1994, p.60, italics in original). Although, there are other components of the unfolding model including; scripts, image violations, job satisfaction and job search, shocks have generated the most research interest (e.g., Kammeyer-Muller et al., 2005; Lee, Gerhart, Weller, & Trevor, 2008; Morrell, Loan-Clarke, Arnold, & Wilkinson, 2004a; Morrell Loan-Clarke, Arnold, & Wilkinson, 2004b).
As described, a shock is a particularly jarring event that initiates psychological analyses involved in quitting (Holtom et al., 2005). Shocks can be expected or unexpected; positive, neutral or negative; and job related (organizational) or non job-related (personal) (Lee & Mitchell, 1994). Examples of shocks include promotion (positive and job-related), a poor performance evaluation (negative and job-related), a pregnancy (positive and non job-related), and a divorce (negative and non job-related). Shocks in any category could be expected or unexpected. Additionally, how any particular type of event is interpreted could be different for different individuals. For example, a pregnancy may be a positive shock for one person, but negative for someone else. An example of a neutral shock might be an unsolicited job offer from an outside

<table>
<thead>
<tr>
<th>Sign of Shock</th>
<th>Matching Frame</th>
<th>Evaluation of Shock</th>
<th>Relative Dissatisfaction</th>
<th>Search for Job Alternatives</th>
<th>Evaluate Job Alternatives</th>
<th>Quit Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>+ 0</td>
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<td>+ 0</td>
<td>N.A.</td>
<td>N.A.</td>
<td>Automatic</td>
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<tr>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Controlled</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>a</td>
<td>b</td>
<td>Fit Judgment and Rational Analysis</td>
<td>Controlled</td>
</tr>
</tbody>
</table>

Table 1.

*Unfolding Model Decision Paths* (based on Lee & Mitchell, 1994)
organization when the individual is not looking for alternative work (T. Lee, personal communication, October 16, 2009).

To better understand shocks and the unfolding model, a discussion of its origin and other relevant components is warranted. The unfolding model partially stems from Beach (1990)’s image theory, which involves the notion of “screening.” Screening is a fairly quick process that determines whether incoming information is compatible with an individual’s images. Images (another core feature of the unfolding model) are defined as someone’s values, goals, and plans for goal attainment (Beach, 1990). Beach describes three main images that individuals hold. The first is the value image which encompasses general values, standards, and principles that define a person. The second value image is the trajectory image which involves the goals that an individual holds for themselves that direct their behavior. Finally, the strategic image involves the behavioral tactics and strategies that individuals use to attain their goals.

Screening involves evaluating new or incoming information against personal criteria (images) which is what Beach refers to as the “compatibility test.” In terms of the unfolding model, shocks are compared to the individual’s images and if the shock and surrounding circumstance are deemed incompatible, thoughts of leaving are initiated (Holtom et al., 2005). Shocks can survive the screening process if they are sufficiently jarring. Failure of a compatibility test leads people to consider and deliberate.

Path 1

Path 1 is initiated when an individual experiences a shock that is positive, neutral or negative, that leads to a scan of their memory for a rule of thumb or past experience and they find a matching script for the shock. A script is basically a personal heuristic
that is developed from previous experience or from the observation of others in a similar circumstance (Lee, et al., 1999). When someone experiences a shock, they conduct a scan of their memory to match this event with something that they have experienced in the past (Lee & Mitchell, 1994). If a script is present, then the quit/stay decision is automatic because the individual has learned from their past experiences or observations of others the appropriate reaction to this sort of event. In this path, the individual makes the automatic decision to quit or stay with their job without considering their current level of job satisfaction and without having job alternatives in mind (Lee et al., 1999).

Although scripts only have a direct impact on quit decisions in decision path 1, Lee and colleagues (1999) specify that scripts can exist in the other paths as well by coexisting with other factors. They provide an example in which an individual experiences a shock, and they have a matching frame, but they decide not to enact their script because it is too difficult or inappropriate. In this situation it may be that the individual has a matching frame, but they have learned from their previous experience with this specific shock that their reaction the first time resulted in a negative outcome. In turn, they would choose not to enact the same response in the current situation and would follow one of the other unfolding model paths. In sum, while scripts only directly lead to a quit decision in path 1, they may play a role in the other paths as well.

Path 2

In the second decision path (path 2), the same basic process occurs in that the individual experiences a shock. The shock can again be positive, neutral or negative; however, Lee and Mitchell (1994) argue that this particular decision path is most likely to result from a negative shock because individuals in this path do not consider alternatives
before leaving. They conduct a search of their memory for a match, but in this case there is no existing script to follow. This individual then evaluates the shock as well as their current level of satisfaction with the organization. After deliberating, the individual will finally make the decision to quit based on evaluation of the image violation and current level of satisfaction. As in decision path 1, the individual makes the decision to leave the organization without having alternative available jobs.

**Path 3**

Decision path 3 involves the exact same process as decision path two, however in decision path 3 the person decides to search for alternatives before leaving the current organization. These individuals experience a shock that is in violation with their images, they then evaluate their current level of dissatisfaction. However, before making the decision to quit, they search for other job alternatives. This step is what distinguishes path 3 from path 2. Once the alternatives are identified they evaluate the alternatives, choose the best alternative, and finally, quit their job (Lee & Mitchell, 1994). Lee and colleagues (1999) specify that alternatives need not be offers in hand, but simply perceived as highly likely to lead to later action. In addition the authors explain that alternatives may not be other jobs per se but could be non-work options as well, for example, if someone decides to pursue a hobby full-time instead of working.

**Path 4**

Decision path 4 is different from all of the previous paths in that a shock does not occur. Lee and Mitchell (1994) claim that this path is initiated by a routine or periodical reassessment of one’s satisfaction with the job that occurs naturally, rather than being based on a shock. In other words, there is no single, specific event that causes the person
to re-evaluate their current condition; rather it happens as a result of natural processes or routine. Path 4 is divided into two different possibilities. In this path the individuals assesses their current level of dissatisfaction and either quit without job alternatives in mind (path 4a) as in path 2, or quit after searching for and evaluating specific job alternatives (path 4b) as in path 3.

Decision path 4 is grounded in most previous turnover research (e.g., Hom & Griffeth, 1995) because the majority of prior studies do not consider shocks as playing a role in the turnover process, but rather believe that turnover results from low levels of job satisfaction (Lee et al., 1999). However, the unfolding model has contributed to the literature by suggesting that there are more factors than just job dissatisfaction, driving individuals’ decisions to quit. We know that previous turnover theories involving satisfaction as the core component do not explain much of the variance in turnover. The concept of shocks may help to further explain who decides to leave, how quickly they do so, and why they decide to leave. As a result, numerous researchers have set to empirically test the model.

Prior to Lee and colleagues (1996) the unfolding model was simply theoretical in nature; however, these researchers set to empirically test the unfolding model by surveying and interviewing nurses who had recently quit their jobs. They obtained reliable and valid indicators of the theory’s decision paths and replicated the essential features of each decision path across multiple cases. They did so by holding interviews with nurses who had quit their jobs as well as administering a survey to these nurses with items matched to the questions asked during the interview which pertained to the core components of the unfolding model (i.e. shocks, scripts, image violations, satisfaction,
Three individuals independently categorized responses to interview questions and then came to consensus. They had high initial agreement and 100 percent final agreement among three scorers for the interview questions indicating high interrater reliability.

Additionally, eight of the ten correlations between the interview questions and the matched survey responses were significant. Moreover, the nurses’ responses to the survey assessing components of the decision paths were correlated with path judgments made by the authors from the interview responses. For example, they found that a classification of use of decision path 1 based on the interviews was positively correlated with the probability a nurse reported a shock in the survey, but negatively correlated with the probability a nurse considered other job options, gathered information about other job options, and had offers in hand when they quit. Such consistent correlations were found for all four paths of the unfolding model. Overall, Lee and colleagues (1996) found that 33 of the 44 nurses (75%) followed one of the four paths presented in the unfolding model when deciding to quit their job. Specifically, 14% of leavers followed decision path 1, 7% followed decision path 2, 27% followed decision path 3, 14% followed decision path 4a and 14% followed decision path 4b.

This study was unable to classify all quitters into the five paths outlined by the unfolding model due to some ambiguities with the relevant constructs. Firstly, the original unfolding model (Lee & Mitchell, 1994) specifies that scripts should only occur in decision path 1. However, Lee et al. (1996) found that scripts were present in some cases that followed paths 3 and 4. The authors conclude that scripts that directly lead to quitting are only present in decision path 1, but that scripts that facilitate quitting are
theoretically compatible with decision paths 3 and 4. An additional issue emerged regarding offers in hand. Specifically, the unfolding model specifies that holding job offers in hand and evaluation of alternatives only occur in path 3 and 4b. However, Lee and colleagues (1996) found that some form of offers and evaluation of alternatives took place in cases from decision path 2 and 4a. The authors suggest that offers need not be concrete but simply perceived as highly likely. Additionally, the authors suggest that alternatives need not be other jobs per se, but the pursuit of alternative roles (i.e., going back to school).

In an attempt to resolve the ambiguities faced by Lee et al. (1996), Lee et al. (1999) took the recommendation of the authors and revised the unfolding model to make some issues more clear. They also used a sample of accountants, instead of nurses. They conducted their study with surveys containing questions about the presence or absence of shocks, scripts, image violations, job satisfaction, search, evaluation, and offers. By following the more specific version of the unfolding model, the researchers were able to classify a greater proportion of individuals into paths than in the 1996 study. Overall, they were able to classify 212 of 229 participants (92.5%) into one of the four decision paths. These findings indicate that the majority of turnover incidents can be classified according to the unfolding model, which lends further support for its importance in the study of voluntary turnover.

Overall, using exit interviews of leavers, studies show that approximately 58-62% of employees leave because of a shock (Holt et al., 2007; Holtom & Inderrieden, 2006; Holtom, Mitchell, Lee, & Eberly, 2008; Holtom et al., 2005). Although these findings lend support that shocks are influential in the turnover process, it is important to note that
the unfolding model in its current state is not falsifiable. Nearly any quitting behavior can be classified into one of the four decision paths. Moreover, the amount of variance explained by the unfolding model remains unknown because of the retrospective methodology used by unfolding model researchers.

Additionally, much of the research examining the unfolding model has focused on the same issue of “classification accuracy” by following similar (in many cases identical) methods that were utilized in the previous two studies (e.g., Donnelly & Quirin, 2006; Holt et al., 2007; Holtom et al., 2005; Morrell, Loan-Clarke, Arnold, & Wilkinson, 2008; Niederman et al., 2007). For example, Donnelly and Quirin (2006) interviewed accountants who had quit their job within the past year over the phone and asked them to “recall and describe the onset and evolution of their decision to quit their employer” (p. 67). From here the subjects were asked to respond to questionnaire items reflecting the existence or absence of shocks, scripts, image violations, search, and evaluation of alternatives. The authors also provided follow-up surveys to subjects to validate the interpretations of the researchers from the initial phone interviews. Correlations between interpretation of interviewers and the follow-up survey were positive and significant (Donnelly & Quirin, 2006). The researchers then used the information provided by the interviews and follow-up surveys to classify individuals into the unfolding model paths. The results of this study revealed that 7% of leavers followed decision path 1, 26% followed decision path 2, 21% followed decision path 3, 36% followed decision path 4a and 10% followed decision path 4b.

Aside from studies concerned with classification accuracy, the majority of remaining studies still used retrospective methods to assess shocks (e.g., Holtom &
Inderrieden, 2006; Lee et al., 2008; Morrell et al., 2004a; Morrell et al., 2004b).

Therefore, there is very little research focusing on shocks as predictors of turnover.

Using retrospective data to examine the impact that shocks have in the employee turnover process is problematic in and of itself because individuals may tend to overestimate the influence that the shock actually had in their decision to leave because of post decisional rationalization where individuals generate reasons post-hoc to explain to themselves and others why they quit (Lee et al., 1996; Westaby, 2005). Additionally, because shocks are events, when asking someone to report what happened before they left an organization it is highly likely that the individual experienced some sort of event before leaving, even if the event was not the ultimate driver of their decision. This would result in an overestimation of the influence of shocks in regards to turnover decisions. Another problem with retrospective reports is image enhancement (Golden, 1992; Huber & Power, 1985). For example, individuals may be concerned with their image and may claim that something justifiable drove them to a quit decision when in actuality they cannot explain why or finding a general dissatisfaction reason unjustifiable. Additional limitations of using retrospective reports include; oversimplifications where individuals may simply summarize an event without including all relevant information, faulty post-hoc attributions, and forgetting (Golden, 1992; Huber & Power, 1985; Miller, Cardinal, & Glick, 1997; Lee et al., 1996; Westaby, 2005) which can all lead to inaccurate recall of the event and decision process.

Only one predictive study involving shocks has been conducted to date (Kammeyer-Muller et al., 2005). Kammeyer-Mueller and colleagues examined shocks by asking individuals to report critical events before, rather than after organizational exit,
and used these reports to predict turnover at a later time point. The researchers assessed their scale, called the “discontinuation event” scale in which respondents judge how much recent significant events induced them to discontinue working. They found that discontinuation events predicted turnover beyond that accounted for by job satisfaction and joblessness. In their sample of 932 new hires of manufacturing, food distribution, health care, and education industries, they found that 26.5% of leavers experienced discontinuation events (shocks) before quitting. Although shocks did not play quite as strong of a role in this study, these results still demonstrate support for the unfolding model in that shocks were involved in a number of turnover incidents.

Kammeyer-Mueller and colleagues (2005) findings are encouraging because they demonstrate that shocks (i.e., discontinuation events) can predict turnover across a variety of industries. However, their findings also seem to demonstrate that previous studies using postdictive designs may have indeed found inflated evidence for the shocks-turnover relationship. Therefore, more predictive studies of this concept need to be conducted to extend on the findings of Kammeyer-Mueller and collaborators (2005), as well as to adequately and appropriately test tenets of the unfolding model.

The current study attempts to do this by using a newly developed, predictive measure of events, known as the Turnover Events and Shock Scale (TESS; Griffeth, Hom, Allen, Morse, & Weinhardt, 2008). The TESS goes beyond the “discontinuation events” scale of the Kammeyer-Mueller study in that it consists of a broad set of common workplace events that have theoretical and practical grounds to be considered turnover-related shocks (Griffeth et al., 2008). Specifically, it focuses directly on workplace events that induce people to think about quitting—a defining attribute of shocks—rather than
simply “significant” (Griffeth et al., 2008). To elaborate, in keeping with Lee and Mitchell’s (1994) definition of shocks, Griffeth et al. (2008) recruited working professionals attending evening business classes to record workplace events that prompted them to think about leaving their current employer rather than just significant or stressful events.

An additional limitation of the unfolding model is that the focus lies on a single event having a dramatic influence on an employee’s perception of their job (Griffeth et al., 2008). It may be the case that a single event is so intense that it alone leads to a quit decision. However, the decision to actually leave an organization is a very serious one (Porter & Steers, 1973) and it may be that one single event is not sufficient to lead to such a drastic decision. The unfolding model is framed in such a way that it only considers the presence or absence of a shock. However, there might be more than just this dichotomy to consider. An event may occur that jars an employee to deliberate about their job, but it may not be compelling enough for them to quit their job based on its single occurrence. For example, if you flip a coin once, you only have a 50% chance of getting heads, but if you flip a coin twice you should expect to get a head. Similarly, if multiple events occur and force the employee into multiple deliberations, the impact of these events would be greater simply because the employee has more opportunities to reevaluate their position. The TESS also addresses this limitation by examining the frequency with which events occur.

**Turnover Events and Shock Scale (TESS)**

The Turnover Events Shock Scale (TESS) is a quantitative and psychometrically valid measure of perceptual shock concepts (Griffeth et al., 2008). The first step in the
development of the TESS involved conducting interviews with focus groups of fulltime employees attending evening classes in order to obtain common workplace events using the critical incidents technique. This resulted in 55 events that prompted thoughts of leaving. After such events were collected, four studies were conducted for scale development and validation of the TESS. Using four different samples, Griffeth and colleagues (2008) found that the measure explained 23% of the variance in quit intentions, as well as explaining unique variance in actual turnover. Additionally, the researchers demonstrated that events are empirically distinct from job satisfaction and organizational commitment, and that all shocks significantly predicted turnover when controlling for tenure, job attitudes, and perceived alternatives. The authors also tested the cross-cultural validity of the measure and found that the TESS measurement model fit data provided by a Mexican sample and found a common factor structure between the Mexican and American samples. For a more elaborate description of the development of the TESS, see Appendix B. Overall, the TESS was found to be a valid measure of workplace events that can be used in predictive research designs to validate turnover theories such as the unfolding model.

It is important to point out that the TESS assesses both events and shocks because the measure simply asks individuals if a specific event happened to them in the last six months. Many events occur daily in organizations which may not be considered shocks because they do not prompt thoughts of leaving. However, events that are experienced multiple times may become shocks because of the frustration that they create. The measurement of events is valuable in itself because events may lead to shocks, which in turn lead to turnover intention and actual turnover. Measuring events provides practical
value to organizations because organizations can become aware of events that are occurring to their employees and can attempt to address these negative events as a way to reduce turnover.

Additionally, the TESS specifically focuses on negative and job-related events that are hypothesized to be under the organization’s control. This may be seen as a weakness when assessing events or shocks in general because it is missing those events that are not under the control of the organization, such as personal issues that may arise in an employee’s life. However, from a practical standpoint, this may be the most beneficial way to measure events because events that are controllable by the organization are those that are most likely to allow amelioration in attempts to reduce shock driven turnover within an organization (Griffeth et al., 2008).

Both Holtom and colleagues (2005) and Abelson (1987) stress the importance of distinguishing between avoidable and unavoidable turnover (the avoidable-unavoidable distinction was designed to show the organization’s potential for controlling turnover; Campion, 1991). They argue that it is a waste of time and money to attempt to retain employees who leave for personal reasons or reasons outside of the organization’s control. Another reason to focus on this subset of events is provided by Morrell and colleagues (2004a) who found that negative and work-related shocks are more likely to result in quit decisions that are avoidable when compared to positive and personal shocks. The more that turnover is avoidable, the more potential for directed intervention and prevention (Morrell et al., 2004b).

Campion (1991) found that “turnover due to higher wages and career opportunity, lack of promotion, dissatisfaction with schedule, supervision, or working conditions, and
reduction in force was somewhat avoidable, whereas turnover due to personal factors was unavoidable” (p. 206). Some of these reasons for turnover are consistent with items found in the TESS, for example, “conflict with supervisor/manager/boss,” “the working environment was unsafe,” “a poor performance appraisal,” “a major change in my work schedule,” and “a pay cut, inadequate or untimely pay increases, low pay, or delays in receiving pay checks.” Therefore, the TESS assesses those events that may be avoidable and the organization can attempt to ameliorate in order to reduce the prevalence of turnover in their organization.

However, the current study not only contributes to the literature by utilizing a predictive measure of events, but also by testing a heretofore untested implication of the theory regarding attitudinal variables by examining the interaction between shocks and attitudinal variables. Perhaps prior research finds only weak relationships between the attitudinal constructs and turnover because simply having lower levels of satisfaction and commitment are typically not enough to push someone to actually quit their job. In other words, a shock(s) may be the straw that breaks the camel’s back and compels the individual into action by leading the individual to turnover. The following sections will provide a more detailed explanation of how the attitudinal variables and shocks may interact together to predict turnover.
The Relationship between Attitudinal Antecedents and Turnover

Among the varying theories of turnover, there are a few common constructs that are consistently found. Two such constructs are job satisfaction (Hom & Kinicki, 2001; Hulin et al., 1985; Lee, 1988; March & Simon, 1958; Mobley, 1977) and organizational as well as other forms of commitment (Chang, 1999; Jaros, 1997; Meyer & Allen, 1991; Porter et al., 1974; Somers, 1995). Historically, it has been theorized that leaving an organization is assumed to mean that the leaver has a negative affective assessment of the job and as a result, attitudinal variables such as satisfaction and commitment are expected to predict turnover (Hom et al., 1979). However, such attitudinal variables have only weak to modest relationships with turnover and account for only 4-5% of the variance in turnover (Griffeth et al., 2000). It appears as if researchers may be missing a portion of the process. Some argue that perhaps having low base rates for turnover may be part of the reason why attitudinal variables are poor predictors of turnover (Hom et al., 1979). However, Griffeth et al., (2000) only revealed correlations between satisfaction and turnover of -.22, and between commitment and turnover of -.27. When these correlations were corrected for measurement errors in the predictor, sampling error, and variations in the turnover base-rate across studies, the corrected correlations were only a bit stronger than the correlations prior to correcting for base rates. Such weak relationships are found mainly because it is believed that turnover is a complex and complicated phenomenon (Mobley et al., 1979). A deeper look into the attitudinal antecedents of turnover is necessary to understand the role that such variables play in the turnover process.
Attitudinal Variables and Shocks Interacting to Predict Turnover

Job satisfaction is “considered to be a stable attitude that is formed as a result of evaluation, emotion, and prior behavior” (Schleicher, Hansen, & Fox, 2011, p. 148). Alternatively, organizational commitment is defined by Porter and colleagues (1974) as the “strength of an individual’s identification with and involvement in a particular organization (p. 604). Given the definitions, satisfaction involves employees’ feelings toward their job, whereas organizational commitment refers to the degree to which an employee feels attached to their organization; as such these definitions are referring to different constructs (Schleicher et al., 2011).

Job satisfaction and organizational commitment are two of the most widely studied variables in all of organizational research (Spector, 1997), including the study of turnover. Although weak relationships between satisfaction and turnover and organizational commitment and turnover are found, meta-analyses have revealed that these variables are most strongly related to turnover intentions (Schleicher et al., 2001). Although direct relationships between the attitudinal variables of satisfaction and commitment to turnover are weak, it does appear that these variables do in fact play a role in the turnover process, perhaps through an indirect route (e.g., through intention; Hom et al., 1984; Tett & Meyer, 1993). The current study will examine the relationship between such variables interacting with events to predict turnover as well as turnover intentions.
The Current Study

The current study proposes an interactive role for satisfaction and commitment with events in the prediction of turnover. I propose that events will moderate the relationship between the attitudinal variables and turnover. The basic premise for this argument is that shocks are a potentially jarring force that leads individuals to evaluate their current condition within their organizations (Lee & Mitchell, 1994). If the individual is experiencing a negative condition (i.e., dissatisfaction or low commitment), this evaluation will lead to a more negative view of the job than someone who has not experienced such an event and was not forced into such deliberation. Ultimately, individuals who are dissatisfied and have low commitment and experience an event will be more likely to intend to leave and to actually leave the organization than employees who did not experience an event. This is consistent with the unfolding model because evaluation of satisfaction is part of the process for all paths aside from path 1. To extend further, individuals who experience multiple events will be even more likely to quit because they have been driven to multiple deliberations about their job. The more that they are forced to think about their negative condition from being prompted by events, the more strongly negative they will feel toward the organization.

The current study will examine actual turnover as well as turnover intention. An examination of turnover intention is proposed because intentions to quit have been supported empirically as the most powerful predictor of turnover behavior explaining, on average, about 25 percent of the variance in actual turnover and it is frequently proposed as the immediate precursor to actual turnover (Steel & Ovalle, 1984). Researchers have argued that “the study of intent to leave is important in its own right because it focuses on
the volitional component of turnover and avoids non-volitional determinants” (Spencer, Steers, & Mowday, 1983, p. 138). The first set of hypotheses are simply testing whether or not negative and job-related events (TESS) are related to turnover and turnover intentions. It is hypothesized that there is a positive relationship between such events and turnover and turnover intention. This is consistent with the unfolding model because a shock is an event that leads to thoughts of quitting, therefore it would be expected that if such an event occurred it would be related to turnover intention and perhaps actual turnover as well.

*Hypothesis 1a*: Events will be positively related to turnover intentions.

*Hypothesis 1b*: Events will be positively related to turnover.

The remaining hypotheses involve the notion that the attitudinal variables of satisfaction and commitment will interact with negative events to predict turnover and turnover intentions. These hypotheses are also consistent with the unfolding model, although not explicitly stated. To elaborate, Lee and Mitchell (1994) claim that a shock is an event that leads to deliberation about one’s job. They also include an evaluation of job satisfaction in all but one of their decision paths where low job satisfaction is likely to lead to turnover. As a result, it appears that they would agree that shocks would interact with satisfaction to predict turnover. The current study is simply extending this theory to include organizational commitment and turnover intentions. Specific predictions are made regarding the nature of the interactions.
Hypothesis 2a: Events will moderate the relationship between job satisfaction and turnover intentions, such that the negative relationship between satisfaction and turnover intentions will be stronger as the frequency of experienced events increases.

Hypothesis 2b: Events will moderate the relationship between job satisfaction and turnover, such that the negative relationship between satisfaction and turnover will be stronger as the frequency of experienced events increases.

Hypothesis 3a: Events will moderate the relationship between organizational commitment and turnover intentions, such that the negative relationship between commitment and turnover intentions will be stronger as the frequency of experienced events increases.

Hypothesis 3b: Events will moderate the relationship between organizational commitment and turnover, such that the negative relationship between commitment and turnover will be stronger as the frequency of experienced events increases.
Method

The data used for the current study is archival. It had been previously collected by Dr. Rodger Griffeth as part of a larger study on employee turnover. The surveys were administered online via the hospital’s computer network.

Participants

Participants were 1,142 registered nurses from a hospital in a large Midwestern city. Participants’ average age is 40.5 years and their mean hospital tenure is 9.4 years. Ninety-six percent are women, while 72.6% are married. Ninety-five percent are Caucasian. Seventy-five percent earned bachelors or higher degrees, while 70.5% worked full time.

Measures

Note: The higher the average of the following measures, the greater the value of the construct.

Job satisfaction. Job satisfaction was measured using Spector’s (1985) job satisfaction questionnaire. This survey contains 36 items that measure job satisfaction. The responses to the survey were evaluated on a 6-point Likert scale ranging from 1 = disagree very much to 6 = agree very much. A sample item from the scale is “I am satisfied with my chances for promotion.” A composite job satisfaction score was calculated by averaging responses across the items. In Blau (1999) the coefficient alpha for this scale was .89.

Events. Griffeth and colleagues (2008) Turnover Events Shocks Scale (TESS) was used. This measure assesses 40 workplace events and/or shocks. Respondents rated how frequently they experienced each event during the last six months, using a 5-point
scale ranging from 0 (did not occur in the last six months) to 4 (very often). A sample item from the TESS is “experienced a poor performance appraisal.” A composite shocks score was calculated by averaging responses across the items. Coefficient alpha for this scale with four factors ranges from .75 to .95 (Griffeth et al., 2008). A copy of the TESS items can be found in Appendix A. Additionally, a deeper description of the development of the TESS is provided in Appendix B.

**Organizational commitment.** Organizational commitment was measured using Porter et al.’s (1974) Organizational Commitment Questionnaire. The responses to the survey are evaluated on a 7-point Likert scale ranging from 1 = *strongly disagree* to 7 = *strongly agree*. Sample items from the scale include “In my job, I find that my values and the organization’s values are very similar,” and “I am proud to tell others that I am part of this organization.” A composite organizational commitment score was calculated by averaging responses across the items. The coefficient alpha for this scale ranges from .82 to .93 with a single factor structure (Mowday, Steers & Porter, 1979).

**Turnover Intentions.** Hom and colleagues (1984) 3-item intention to quit scale was used. The responses to the construct are evaluated on a 5-point Likert scale with different labels, depending on the question being addressed such as 1 = *no chance* to 5 = *100% chance*, and 1 = *definitely not* to 5 = *definitely yes*. An example from the behavioral intention to quit scale is “What are the chances you will leave the organization during the next 12 months?” A composite turnover intention score was calculated by averaging responses across the items. The coefficient alpha for this scale is .93 (Griffeth & Hom, 1988).
**Turnover.** Twelve months after the survey data collection, the hospital’s nursing department supplied the IDs of the study participants and identified who had quit and whether or not they left voluntarily. If the employee voluntarily left the organization, they were coded as 1 and identified as a leaver; if they were still a member of the organization they were coded as 0 and identified as a stayer.
Results

Means, standard deviations, correlations, and reliabilities for all measures are reported in Table 2. From this table, it is apparent all measures have excellent reliabilities. Also, it is apparent that the best single predictor of turnover was turnover intention ($r = .29, p < .01$).

<table>
<thead>
<tr>
<th>Hypothesis 1a</th>
<th>Linear Regression Analysis</th>
<th>p = .01</th>
<th>R² = .18</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Hypothesis 1b</th>
<th>Logistic Regression Analysis</th>
<th>p = .01</th>
</tr>
</thead>
</table>

Table 2. *Means, Standard Deviations, Correlations, and Reliabilities of All Variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>TESS</td>
<td>1.10</td>
<td>.69</td>
<td>.96</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>4.09</td>
<td>.67</td>
<td>-.76**</td>
<td>.91</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Org Commitment</td>
<td>5.31</td>
<td>.91</td>
<td>-.44**</td>
<td>.56**</td>
<td>.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turnover Intention</td>
<td>1.94</td>
<td>.94</td>
<td>.42**</td>
<td>-.44**</td>
<td>-.40**</td>
<td>.92</td>
<td></td>
</tr>
<tr>
<td>Turnover</td>
<td>.05</td>
<td>.23</td>
<td>.05</td>
<td>-.06*</td>
<td>-.14**</td>
<td>.29**</td>
<td>1</td>
</tr>
</tbody>
</table>

**p < 0.01.**
* p < 0.05.
Hypothesis 2a and 3a were tested via hierarchical regression analyses with turnover intention as the outcome variable. To test Hypothesis 2a, which predicted that events would moderate the relationship between job satisfaction and turnover intentions, the variables of job satisfaction and negative, job-related events were entered in the first step, and their product term was entered in the second step. All variables were mean centered prior to analyses to facilitate interpretation and reduce multicollinearity. To determine if the moderator was significant, the change in $R^2$ between blocks was examined. Consistent with Hypothesis 2a, the product term was marginally significant accounting for additional variance over and above the main effect terms, $\Delta F(1, 1001) = 3.01, p < .10, \Delta R^2 = .002$. As illustrated in Figure 1, the form of the interaction was consistent with Hypothesis 2a. Simple slopes tests revealed that the negative slope between job satisfaction and intention to quit was steeper for employees who experienced frequent events $B = -.45, t(1004) = -4.91, p < .01$ than employees who experienced infrequent events, $B = -.33, t(1004) = -6.17, p < .01$. 

$\chi^2_{WALD} (N = 1054, 1) = 2.822, p < .10$, OR = 1.37.
To test Hypothesis 3a, which predicted that events would moderate the relationship between organizational commitment and turnover intentions, the variables of organizational commitment and negative, job-related events were entered in the first step, and their interaction term was entered in the second step. The interaction term did not add significant variance over and above the main effect terms, $\Delta F(1, 1036) = 0.33, p > .10, \Delta R^2 = .00$. Thus, Hypothesis 3a was not supported.

Hypothesis 2b and 3b were tested via logistic regression analyses with turnover as the binary, categorical outcome variable. To test Hypothesis 2b, which predicted that events would moderate the relationship between satisfaction and turnover, the variables of job satisfaction and negative, job-related events were entered in the first step, and their interaction term was entered in the second step. The logistic regression results for
Hypothesis 2b are reported in table 3. Consistent with Hypothesis 2b, the interaction term was marginally significant accounting for additional variance over and above the main effect terms ($\Delta \chi^2 = 2.72$, df = 1, p < .10, OR = .675). Upon examination of the odds ratios with TESS being centered at one standard deviation above and below the mean revealed that when TESS is fixed at one standard deviation above the mean, job satisfaction is associated with greater probability of turnover (OR = 1.85) than when TESS was fixed at one standard deviation below the mean (OR = 1.09). In short, as events become more frequent the negative relationship between job satisfaction and turnover becomes stronger. A plot of the interaction can be found in Figure 2.

Table 3. Results of logistic regression of job satisfaction on turnover

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Odds Ratio</th>
<th>Wald statistic</th>
<th>SE</th>
<th>Step 2</th>
<th>Odds Ratio</th>
<th>Wald Statistic</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Satisfaction</td>
<td>.72</td>
<td>.98</td>
<td>.34</td>
<td>.70</td>
<td>1.04</td>
<td>.35</td>
<td></td>
</tr>
<tr>
<td>TESS</td>
<td>1.14</td>
<td>.17</td>
<td>.31</td>
<td>.91</td>
<td>.07</td>
<td>.36</td>
<td></td>
</tr>
<tr>
<td>TESS x Satisfaction</td>
<td>.68</td>
<td>2.90</td>
<td>.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model $\Delta \chi^2$</td>
<td></td>
<td></td>
<td></td>
<td>2.72†</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pseudo R$^2$</td>
<td></td>
<td></td>
<td></td>
<td>.02</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

n = 995
† p < .10
To test Hypothesis 3b, which predicted that events would moderate the relationship between organizational commitment and turnover, the variables of organizational commitment and negative, job-related events were entered in the first step, and their interaction term was entered in the second step. The results of the analysis indicated a non-significant interaction ($\Delta \chi^2 = 0.56$, df = 1, p > .10, OR = .90). Thus, Hypothesis 3b was not supported.
Discussion

As described, the study was designed to test some of the core tenants of the unfolding model of voluntary turnover. Contrary to the majority of turnover theory, the unfolding model places a great deal of emphasis on the presence of shocks. Shocks are events that produce thoughts of quitting in individuals (Lee & Mitchell, 1994). The unfolding model also involves the assessment of current levels of job satisfaction after experiencing a shock. The current study combined these two tenants of the unfolding model to test the interaction between events and satisfaction in the prediction of turnover and turnover intention. Results of the study revealed little support for this hypothesis.

Specifically, the interaction between events and job satisfaction was marginally significant in predicting both turnover and turnover intention. Those with lower levels of satisfaction were more likely to intend to leave and to actually leave when experiencing frequently occurring negative, job-related events than those who have low satisfaction, but do not frequently experience negative, job-related events. This provides support for the notion that events and/or shocks may be the straw that breaks the camel’s back for dissatisfied workers to actually act on their dissatisfaction in the form of leaving the organization or developing intentions to leave the organization.

The current study expanded on this idea by also examining organizational commitment, predicting that it would operate in the same manner as job satisfaction. The results demonstrate that this is not the case. Specifically, events did not moderate the relationships between organizational commitment and turnover and turnover intentions. These findings were surprising in that both satisfaction and commitment are attitudinal variables hypothesized to be related to turnover and in the same direction. On the other
hand, the results reveal that the two constructs are indeed assessing different attitudinal beliefs which has been demonstrated in prior research as well (Schleicher et al., 2011).

A potential explanation for the null findings regarding organizational commitment and the weak findings involving satisfaction may be attributed to the low base rates of turnover and turnover intentions. Specifically, only 5.3% of the sample voluntarily left the organization during the study period which demonstrates that only a small portion of the participants actually quit their job. Additionally, the average turnover intention score was only 1.94 on a five point scale indicating that this particular sample demonstrated low intentions to turnover. This sample also scores relatively high on the satisfaction and commitment measures and low on the TESS measure indicating that this particular group of nurses are satisfied and committed to their jobs and are not experiencing many negative events and, as a result, do not have intentions to leave the current organization.

Another explanation for why shocks were not a significant moderator to the commitment and turnover relationship could be attributed to the sample being studied. Specifically, nurses are easily transferrable in that they can move from organization to organization without experiencing much change in terms of their daily job duties. Perhaps job satisfaction is more highly valued in this sample because it is the job that they are committed to rather than the organization itself thus commitment to the organization is less relevant than commitment to the job. This particular sample may highly value their job but understand that they can move to and from different organizations and their job is not at stake if such a transition would occur. As a result, they may not weigh their levels of organizational commitment as strongly as they do their levels of job satisfaction.
Additionally, the unfolding model discusses the evaluation of job satisfaction after a shock, but does not explicitly mention organizational commitment in the theory. Perhaps there is justification for why shocks may impact employees’ satisfaction, but do not have the same effect with commitment. Do shocks primarily impact one’s attitudes about the job, but to a lesser extent one’s attitudes towards the organization? Although commitment is more strongly related to turnover than is satisfaction in this sample, perhaps the experience of negative, job-related events does not impact individuals’ levels of organizational commitment as strongly as it does levels of satisfaction. There is some support for this idea when examining the correlations between variables. Specifically, the TESS measure is much more strongly correlated with job satisfaction (-.76) than with organizational commitment (-.44). This suggests that perhaps events and/or shocks are more strongly impacting satisfaction levels than levels of organizational commitment. This finding is also consistent with previous research which has demonstrated that satisfaction and commitment are unique constructs.

As previously mentioned, numerous tests of the unfolding model have been conducted and have in fact found evidence that shocks are involved in a great number of turnover incidents (Holt et al., 2007; Holtom & Inderrieden, 2006; Holtom et al., 2008; Holtom et al., 2005). However, the methodology used to assess the unfolding model may not be ideal as addressed in the current paper. Specifically, previous studies have primarily collected shocks data retrospectively. That is, researchers asked individuals after they have left the organization their reason for leaving (Donelly & Quirin, 2006; Holt et al., 2007; Holtom et al., 2005; Holtom & Inderrieden, 2006; Lee et al., 2008; Morrell et al., 2004a; Morrell et al., 2004b; Morrell et al., 2008; Niederman et al., 2007).
Such retrospective methods may lead to faulty recall for numerous reasons previously discussed (Golden, 1992; Huber & Power, 1985; Miller, Cardinal, & Glick, 1997; Lee et al., 1996; Westaby, 2005). In an attempt to deal with this issue the current study utilized a predictive measure of events (TESS; Griffeth et al., 2008). The results of this study are in line with the results of Kammeyer-Muller and colleagues (2006) in that less support for the relation between events and turnover is found when using a predictive rather than a postdictive measure or design. Again, indicating that previous studies using retrospective methodology may have in fact found inflated evidence regarding the role of shocks in the turnover process.

Overall, the study provided some support that events and/or shocks are playing a role in the turnover process by interacting with satisfaction to predict turnover and turnover intentions. Therefore, shocks may be the straw that breaks the camel’s back, but further research needs to be conducted to make firm conclusions regarding this hypothesis.

Limitations

There are some limitations that should be pointed out with the current study. First, because of the nature of the survey there are some individuals that may not be accurately accounted for. Specifically, the survey was given and twelve months later the turnover data was collected. If an employee had previously taken the survey and then experienced an event or shock and ultimately left the organization, the data regarding their event experience will be missing. This would be characteristic of someone following path 2 of the unfolding model. For example, individuals who follow path 2 do not search for alternatives or evaluate alternatives before quitting. As a result, their quit decisions tend
to be faster than individuals who use path 3 where search and evaluation of alternatives are completed. Ultimately, it is possible that individuals following path 2 could have experienced a shock and left the organization between the time the survey was administered and the time that turnover data was collected. This would result in noise because the reasons that these individuals left are not captured by the survey due to the timing of the administration.

A second limitation is the base rate. As previously mentioned, this particular sample demonstrated low levels of turnover and turnover intentions. Having low base rates restricts the variance in the criterion and the magnitude of relations with predictors, which provides a disadvantage for testing relationships between variables and the criterion (Miller, Katerberg & Hulin, 1979).

Another area for discussion and potential limitation is the distinction between the shocks construct and the TESS measure that was used in the current study. The TESS assesses events, which may or may not be shocks. Although the measure was developed within the framework of the unfolding model by specifically asking individuals to come up with events that would lead them to quit their job (the definition of a shock), not every person would consider each event in the measure to be a shock. That is, the perception of these events may be different for every individual. For example, one individual may perceive a conflict with a supervisor to be a very influential event and an unusual occurrence which may lead them to question their current status within the organization. However, another individual may have conflicts with their supervisor on a regular basis and may simply see it as part of the job which would not necessarily induce thoughts of quitting. As a result, the TESS is a measure of events specifically which may be shocks to
some individuals. Although it is plausible that events may eventually become or lead to a shock overtime. Perhaps this is another possible explanation regarding the weak findings of the current study. Specifically, the TESS is a measure of events, not solely shocks. Perhaps if a more direct measure of shocks would have been utilized the results would have been more impressive. However, no such measure exists at this time and the TESS is the best predictive measure currently available. In order to address this concern future research should be conducted to develop a more direct measure of the shocks construct.

**Future Research**

As previously mentioned, there is no predictive measure directly assessing shocks existing in the literature at this point. Future research should be conducted to develop such a measure as to hopefully provide more promising results in regards to shocks predicting turnover behavior. That is, investigate a way to measure events that when experienced lead to an evaluation of the current condition within the organization and induce thoughts of quitting (the definition of a shock).

Additionally, this study tests whether or not events and/or shocks are the straw that breaks the camel’s back. That is, are events the impetus that provides the dissatisfied or uncommitted worker the final jar needed to get them to act on their negative condition? This question is basically inferring that shocks serve as a tipping point for dissatisfied workers to finally make the decision to quit the organization. These employees have finally reached their threshold for the amount of negative experiences that they can withstand and as a result, are intending to quit or actually quitting their jobs. Future research could better test this notion of a tipping point by using a repeated measures design rather than a cross-sectional method provided here. This would allow
researchers the opportunity to follow employees overtime and to determine the specific point where individual employees have reached their threshold.

**Practical Implication**

The results of this study demonstrate that events and shocks may in fact play a role in the turnover process. Specifically, shocks serve as a marginal moderator to the satisfaction-turnover and satisfaction-turnover intention relationships. If managers become aware of the negative events that are occurring within their organization they may be able to intervene before such events become shocks and/or result in turnover. Also, it may be useful to become aware of the employees who are experiencing dissatisfaction because results of this study show that individuals experiencing dissatisfaction will be more impacted by negative events than those who are not experiencing dissatisfaction. Therefore, using the experience of events and dissatisfaction as indicators of potential leavers may allow for resolution in an attempt to retain well-qualified employees. Again, the emphasis should be placed on avoidable turnover so that organizations can allocate resources toward an issue that they can actually change rather than attempting to retain employees who are leaving for reasons that the organization has no control over.
References


Appendix A: TESS items

<table>
<thead>
<tr>
<th>TESS Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. a supervisor who was critical or never satisfied.</td>
</tr>
<tr>
<td>2. bad decisions made by upper management.</td>
</tr>
<tr>
<td>3. a lack of freedom, autonomy to do my job.</td>
</tr>
<tr>
<td>4. the working environment was uncomfortable or &quot;political&quot;.</td>
</tr>
<tr>
<td>5. the working environment was unsafe.</td>
</tr>
<tr>
<td>6. a lack of confidence in management.</td>
</tr>
<tr>
<td>7. my future with the organization was uncertain.</td>
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<tr>
<td>8. a loss of respect from supervisors or co-workers.</td>
</tr>
<tr>
<td>9. promises made were not kept.</td>
</tr>
<tr>
<td>10. a poor performance appraisal.</td>
</tr>
<tr>
<td>11. petty work rules, practices, policies.</td>
</tr>
<tr>
<td>12. little opportunity on the job to be creative.</td>
</tr>
<tr>
<td>13. an increase in workload, duties, or hours without corresponding increase in pay or benefits.</td>
</tr>
<tr>
<td>14. the feeling I was not valued as a person.</td>
</tr>
<tr>
<td>15. the work schedule was inflexible</td>
</tr>
<tr>
<td>16. people here (boss, co-worker, customers) difficult to work with.</td>
</tr>
<tr>
<td>17. communication in the organization to be inadequate (e.g., downward only).</td>
</tr>
<tr>
<td>18. little or no feedback from my supervisor.</td>
</tr>
<tr>
<td>19. unclear or unrealistic organizational goals.</td>
</tr>
<tr>
<td>20. a stressful work environment due to demanding work or time pressures.</td>
</tr>
<tr>
<td>21. frequent changes in policy and practices.</td>
</tr>
<tr>
<td>22. little opportunity for growth and development.</td>
</tr>
<tr>
<td>23. weak management support in accomplishment of my goal/task.</td>
</tr>
<tr>
<td>24. an &quot;arbitrary&quot; change in rules, policies, or standards.</td>
</tr>
<tr>
<td>25. a major change in my work schedule.</td>
</tr>
<tr>
<td>26. unfair or unequal management practices (e.g., discriminatory, arbitrary punishment, termination, promotion, pay, benefits, performance ratings, or scheduling, etc.)</td>
</tr>
<tr>
<td>27. that benefits were inadequate or were recently cut.</td>
</tr>
<tr>
<td>28. a concern I will be demoted.</td>
</tr>
<tr>
<td>29. a concern I will be passed over for promotion.</td>
</tr>
<tr>
<td>30. managers/supervisors abuse of authority.</td>
</tr>
<tr>
<td>31. my work lacks challenge, is boring, or lacks variety.</td>
</tr>
<tr>
<td>32. little involvement in decision making that effects my job.</td>
</tr>
<tr>
<td>33. public embarrassment or criticism by my supervisor or co-workers.</td>
</tr>
<tr>
<td>34. little advancement opportunities in my present position.</td>
</tr>
</tbody>
</table>
35. conflict with supervisor/manager/boss.
36. there was a "negative" organizational culture (e.g., weak norms respecting/valuing people).
37. a pay cut, inadequate or untimely pay increases, low pay, or delays in receiving pay checks.
38. a change in supervisor/management or a major reorganization.
39. little recognition for a job well done, ideas, or task/goal accomplishment.
40. group/organizational morale was low.
Appendix B: Development of the TESS

The first step in the development of the TESS involved conducting interviews with focus groups of working students who attended evening classes in order to obtain common workplace events using the critical incidents technique. This resulted in 55 common events that prompted thoughts of leaving. After such events were collected, four studies were conducted for scale development and validation of the TESS. The first study involved conducting an exploratory factor analysis to examine the scales dimensionality, as well as, evaluating discriminant validity from other standard predictors of turnover such as job attitudes (i.e. job satisfaction and organizational commitment) and job alternatives (Griffeth, Hom, Allen, Morse, & Weinhardt, 2008). The first study also assessed the predictive validity of the measure by using it to forecast job longevity using survival analysis. The participants that comprised this sample were 1,142 registered nurses. The exploratory factor analysis resulted in a 6-factor solution which explained 47.35% of the total variance. Additionally, regression analyses were used to test the predictive validity of the measure. In fact, Griffeth and colleges (2008) found that the measure explained 23% of the variance in quit intentions as well as explaining unique variance in turnover.

In the second study, which consisted of 304 social workers, Griffeth et al. (2008) further validated the measure by conducting a confirmatory factor analysis (CFA) and comparing the validity of weighting shock indices by the causal impact of events on termination decisions (Griffeth et al., 2008). The results of the CFA demonstrated that the original 6-factor model fit the data well. The second study also indicated that shocks are empirically distinct from job satisfaction and organizational commitment (Griffeth et al., 2008).

The third study again estimated the predictive validity of the scale for forecasting job longevity. Using survival analysis on a sample of 300 salespeople from a department store chain indicated that all shock predictors significantly predicted turnover when controlling for tenure, job attitudes, and perceived alternatives (Griffeth et al., 2008).
The final study evaluated the cross-cultural validity of the TESS measure in two Mexican hospitals (Griffèth et al., 2008). The researchers found that the TESS measurement model fit the Mexican data and found a common factor structure between the Mexican and American samples. Additionally, in a predictive study, the TESS measure explained 6% of the variance in quit intentions in the Mexican sample (Griffèth et al., 2008).