

## DEFINING BITTERNESS IN THE WORKPLACE

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DEFINING BITTERNESS IN THE WORKPLACE

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A Thesis

Submitted to

the Graduate Faculty of

Auburn University

in Partial Fulfillment of the

Requirements for the

Degree of

Master of Science

Auburn, Alabama  
August 7, 2006

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THESIS ABSTRACT  
DEFINING BITTERNESS IN THE WORKPLACE

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Master of Science, August 7, 2006  
(M.S., Auburn University, 2006)  
(B.A., University of Tennessee, 2000)

62 Typed Pages

Directed by Philip M. Lewis

It is important to study bitterness among workers because the consequences of becoming bitter may be detrimental to both the organization and the individual worker. A questionnaire was developed to measure bitterness which included the constructs of avoidance, frustration, job satisfaction, negative affect, powerlessness, and rumination.

Data analysis showed that the data fit the model well. Significant differences were seen among Bitter and Not Bitter participants in how they responded to questions about frustration, job satisfaction, powerlessness, and rumination. Over thirty-two percent of the participants reported they were bitter as a result of mistreatment at work, which could lead to several negative emotional and behavioral consequences at work.

Style manual used: Publication Manual of the American Psychological Association, Fifth Edition

Computer software used: Statistical Package for the Social Sciences 12.0 and Analysis of Moment Structures 4.0

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## INTRODUCTION

In the field of organizational psychology, the role of emotions has been studied extensively, but the concept of bitterness has virtually been ignored. According to Lewis and Pipes (2001), characteristics of bitter people include feelings of mistreatment or loss, believing the loss or mistreatment was unjustified and undeserved, losing a sense of self, and a sense of hopelessness. It is important to study bitterness among workers because the consequences of becoming bitter may be detrimental to both the organization and the individual worker. For example, bitterness may lead to greater work conflicts and decreased job performance, which can lead to negative emotional and behavioral consequences at work. However, bitterness is only one of many possible outcomes to organizational conflict and stress. For this reason it is useful to investigate the dynamics of its emergence.

Because of the lack of research on workplace bitterness, research on other related constructs and their impact in the workplace is explored to determine how that literature might inform a study of bitterness among individuals in the workplace. This includes studies of job satisfaction, negative affect, rumination, frustration, avoidance, and powerlessness. Although there are many constructs that could have been explored, these variables seem to have pertinence to bitterness because the characteristics of these variables seem to be rooted within the same domain. The emergence of these constructs in the workplace appears to have a logical connection with bitterness in the workplace.

Therefore, these six variables were chosen because of their relevance to the construct of bitterness.

### *Job Satisfaction*

Job satisfaction refers to the feelings and attitudes that we hold towards our jobs. Studying bitterness in the workplace is important because it can help us to understand why only certain people who experience workplace stress become dissatisfied with their job (Stanton, Bachiochi, Robie, Perez, & Smith, 2002). The research in this area is abundant because of how important the understanding of job satisfaction is to organizational effectiveness. The levels of the individuals' moods and their beliefs about their jobs have been found to significantly contribute to the prediction of job satisfaction (Weiss, Nicholas, & Daus, 1999). Job satisfaction in turn has been shown to be related to many other aspects of organizational behavior, including absenteeism/turnover, motivation, and performance. Job dissatisfaction is a direct outcome of stress (Stanton et al., 2002). If the stress is in the form of mistreatment at work, those who will become bitter as a result of the mistreatment will also experience a lack of job satisfaction. I believe that job satisfaction is a component of bitterness because if an individual is bitter at work, they are not satisfied with one or several aspects of work.

According to Locke (1976), there are several categories of dissatisfying events that can lead individuals to be dissatisfied with their jobs. The categories include:

- **Task activity** – did not enjoy the work, was given an undesired assignment, or perceived work as meaningless
- **Amount of work** – too much or too little work, work was hard or difficult
- **Smoothness** – work did not go smoothly, too many distractions or interruptions

- **Failure** – did not finish a task or problem, failed to improve performance, caused an accident
- **Demotion or lack of promotion** – demoted, did not get promotion or given no opportunity for promotion
- **Responsibility** – too much or too little responsibility, given responsibility without training, unclear responsibility
- **Negative verbal recognition or lack of recognition for work** – received no recognition for accomplishments; was criticized, blamed, not thanked, received a complaint about work
- **Money** – did not get desired raise, no overtime, salary unfair compared to others
- **Interpersonal atmosphere** – co-workers or customers were unfriendly, hostile; got along poorly with co-workers
- **Physical working conditions** – temperature extremes, poor lighting, poorly designed machinery, bad location, or bad weather

These events often result in feelings of anger and frustration (Keenan & Newton, 1984). The present investigator believes that the appraisal of these events can lead to bitterness.

Locke (1976) also describes the different types of agents that can cause the dissatisfying event. They include:

- **Self**
- **Supervisor**
- **Co-worker**
- **Subordinate**

- **Organization/management**
- **Customer**
- **Non-human agent**

These different types of agents can be a major source of frustration for those who encounter stressful situations at work (Spector, 1978). Most stressful events that a person encounters on a daily basis involve other individuals (Folkman, 1992). In the present study, descriptions of adverse events at work will be examined to determine the extent to which bitterness is associated with various types and sources of stressors.

#### *Individual Differences in Emotional Responses at Work*

There are undoubtedly individual differences in how people react to adverse events at work. Not everyone reacts with bitterness. Similarly, job satisfaction is influenced by differences among individuals. One study found that thirty-six percent of the differences in job satisfaction ratings were due to individual differences (Ilies & Judge, 2002). This can help to explain why some people within the same work environment can experience satisfaction with their jobs while some of their coworkers do not. For example, people who score high in Negative Affectivity are predisposed to experience negative emotions such as anger and fear (Judge, Heller, & Mount, 2002). Research in individual differences is important because it suggests that some people may be predisposed to be more bitter than others. Clearly, not all people who experience stress at work become bitter.

Brief and Weiss (2002) found that individuals who score high in negative affectivity react with more emotional responses when experiencing negative job satisfaction, because they are more sensitive to negative stimuli. Individuals with high

levels of negative affect tend to have a “cognitive bias through which they approach and interpret their life experiences” (Watson & Clark, 1984). Since these individuals perceive their work environment in a negative light, these workers are prone to experience more job dissatisfaction (Watson, Pennebaker, & Folger, 1987). In addition to being dissatisfied with their jobs, high negative affect individuals also exhibit more withdrawal behaviors (Necowitz & Roznowski, 1994). These individuals also tend to ruminate over the shortcomings of themselves and others, which can lead to greater work conflict and lower levels of job satisfaction. Bitterness is a negative state and perhaps as those who are high in negative affectivity are predisposed to experience negative emotions and be less satisfied with their jobs, negative affectivity can predispose people to become bitter. I believe that negative affectivity is a component of bitterness and thus I have included it as a variable comprising the construct of bitterness.

If one experiences negative emotions and is unable to effectively deal with them, this can lead to emotional and behavioral consequences. Rumination is defined as “the thoughts and behaviors that focus the individual’s attention on the negative mood and the causes and consequences of this mood” (Rusting & Nolen-Hoeksema, 1998). According to Sukhodolsky, Golub, and Cromwell (2001), there are three processes that comprise rumination:

1. memories of past anger experiences
2. attention to immediate anger experiences
3. counterfactual thoughts about anger experience

Since rumination involves a focus on the negative events, it can lead to an increase in the angry mood (Rusting & Nolen-Hoeksema, 1998). Individuals that

experience discrepancies with goal attainment will also experience more rumination (Watkins & Mason, 2002). Both negative affectivity and rumination may be implicated in the development of bitterness. Rumination may occur as a result of a perceived injustice that was not deserved (Rusting & Nolen-Hoeksema, 1998). Based on the characteristics of bitter individuals by Lewis and Pipes (2001), the feelings of an undeserved and unjustified mistreatment experienced by bitter individuals can also result in rumination. Therefore, I include rumination as a component of bitterness.

Frustration is another construct that can prolong the negative mood of an individual. Organizational frustration occurs when there is an “interference with goal attainment or maintenance” (Spector, 1978). Frustration can arise when an individual feels that the path to their goals is obstructed in any way. An organization’s structure, rules, and procedures can interfere with goal attainment (Spector, 1978). When a person is frustrated at work, this may result in negative emotional and behavioral consequences. Spector (1978) reports that there are several responses to organizational frustration which include:

1. attempts to find alternatives that help with goal attainment
2. acts of aggression directed at the organization
3. withdrawal from the situation

It seems likely that in certain individuals in certain circumstances bitterness may also result. Two of the major sources of frustration stem from organizational climate and role conflict (Keenan & Newton, 1984). When an individual experiences an adverse work environment or ambiguity with their job role, frustration can arise. If the frustration is persistent or severe enough, this may lead to turnover or the individual may just try to

avoid the difficult situation at work as much as possible (Spector, 1978). The level of frustration and stress that one experiences depends upon one's ability to cope in these stressful situations (Latack, 1986). Frustration is among the most frequently reported outcomes of stressful events at work (Keenan & Newton, 1984). If the source of stress at work is mistreatment, the frustration that arises can develop into bitterness if the frustration persists. Consequently, I include frustration as a component of bitterness.

Avoidance occurs when the individual copes by mentally and behaviorally disengaging themselves from the situation (Zuckerman & Gagne, 2003). Avoidance, a type of coping which is associated with greater dysfunction, occurs when an individual actively avoids confronting the problem or engages in substitute activities such as eating or smoking binges to indirectly reduce emotional stresses (Billings & Moos, 1981). Avoidance coping is more likely to be used when the individual perceives that they cannot control what is happening and their situation cannot be changed (Folkman, 1992). Avoidance can include either person-oriented strategies such as reaching out to other people or task-oriented strategies, such as engaging in other tasks (Endler & Parker, 1990). In an organization, individuals may engage in avoidance by not participating in certain activities or avoiding certain coworkers or supervisors. This form of coping enables the person to escape the stressful situation by not entering it (Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986). When avoidance coping is used by an individual, it may suggest a sense of powerlessness to control the situation (Armstrong-Stassen, 2005). Becoming bitter is a result of not being able to effectively cope with a situation and feeling like the situation is out of their control which also characterizes the avoidant style of coping. Accordingly, I believe avoidance is a component of bitterness.

Individual differences may also be implicated in the experience of powerlessness. In an organization, powerlessness can be defined as the perception of having “little or no control over one’s work and decisions affecting their jobs” (Armstrong-Stassen, 2005). Individuals are more likely to exhibit negative behaviors on the job as a response to frustration when they have an external locus of control (Storms & Spector, 1987). Individuals with an external locus of control are those that feel they have little or no control over what happens to them. When an individual feels that there is little or nothing they can do to rectify the situation, they may feel a sense of powerlessness. In addition to feelings of powerlessness, individuals with an external locus of control tend to be less satisfied with their job, perceive less control, and have more intentions to quit (Spector, 1982). Powerlessness is more likely to trouble those with an internal locus of control because these individuals are used to feeling in control of all aspects of their lives (Rotter, 1966).

According to Greenhalgh and Rosenblatt (1984), powerlessness can arise when an employee feels that they have a lack of protection against a supervisor or coworker’s actions, unclear role expectancies, a culture that fosters an authoritarian environment, or unfair organizational rules and procedures. If an individual is mistreated at work, they are more likely to become bitter at work because they feel powerless to do anything about the mistreatment. People who feel they have some level of control over the mistreatment are less likely to become bitter. As a result, I believe powerlessness is a component of bitterness.

Based on these research findings, I hypothesize that bitterness in the workplace is a multidimensional construct that can be defined as an affective state stemming from job

dissatisfaction and perceptions of mistreatment which results in feelings of frustration and powerlessness to do anything to rectify the situation. In addition to job satisfaction, frustration, and powerlessness, I believe that the constructs of rumination, high negative affectivity, and avoidance/withdrawal will be highly correlated with the phenomenon of bitterness. I will be using a construct validation approach to validate a six component model of bitterness. I will be constructing a bitterness questionnaire that has the six components to see if the six variables contribute to an overall construct of bitterness and if it differentiates between bitter and non-bitter people who report having been mistreated at work

## METHOD

### *Subjects*

The sample consisted of 302 faculty and staff members from a large state university. Recruitment involved emailing all the faculty and staff members of the university to ask for their participation in this study. In all, emails were sent to approximately 2,429 individuals.

### *Procedure*

Participants read an information letter that provided a brief explanation of the study and assured them of complete anonymity. If they decided to participate in the study, they were given a link that would bring them to an online questionnaire. A follow-up e-mail was sent to all faculty and staff members one week after the initial e-mail as a reminder to participate in the study and to thank participants who had already completed the questionnaire.

Participants were asked to provide a description of a time in which they felt mistreated at work and answer four questions about the situation they described. Participants were classified into the three bitterness categories based on their responses to question five of the questionnaire that stated “would you say that you currently feel bitterness about how you were mistreated?”. Participants who responded “yes” were classified as “Bitter”. Participants who responded “no” were classified as “Not bitter”. Those participants who did not provide an event in which they felt mistreated were not classified as either “Bitter” or “Not bitter”.

### *Design*

A bitterness questionnaire was developed by combining six scales that measured the variables of avoidance, frustration, job satisfaction, negative affect, powerlessness, and rumination. The six questionnaires that were chosen were the most reliable and valid measures available for measuring the six variables. The criterion that was used to select items for use in the bitterness questionnaire was that the item must have a significant correlation with the other items in the same scale. Therefore, items with non-significant correlations were not used because of their impact on the reliability of the scale.

### *Component Measures*

*Job Diagnostic Survey.* Hackman and Oldman's (1974) five-item General Satisfaction subscale was used to measure general job satisfaction. The instrument has an established coefficient alpha of .77. It includes such items as "Generally speaking, I am very satisfied with this job" and "I frequently think of quitting this job" (reverse scored). The items on the scale are rated on a 7-point Likert-type scale that ranged from (1) "Disagree strongly" to (7) "Agree strongly." The negative items were reverse scored so that high scores on the measure indicate a high level of job satisfaction (see Appendix A).

*Powerlessness.* Keenan and Newton (1984) developed a fourteen-item instrument to measure environmental frustration and the perceived control the individual has in their work environment. The instrument has an established coefficient alpha of .79. It includes such items as "Now and again I feel thwarted in my efforts to do a good job" and "I rarely run into obstacles trying to get things done at work" (reverse scored). The items on the scale are rated on a 5-point Likert-type that ranged from (1) "Strongly disagree" to (5) "Strongly agree." Seven items from this scale were used. Only a few items were

selected from the original scale to ensure that the final Bitterness Scale was not too lengthy. The standard cutoff for reliability coefficients is .3. Items were selected for use from the original scale if their coefficient alpha was above the cutoff value. Positive items were reverse scored so that high scores on this measure indicate a high level of powerlessness (see Appendix B).

*Rumination.* Sukhodolsky, Golub, and Cromwell (2001) developed a nineteen item instrument to measure anger rumination. The instrument has an established coefficient alpha of .93. It includes such items as “I ponder about the injustices that have been done to me” and “Whenever I experience anger, I keep thinking about it for awhile.” The items are rated on a 4-point Likert-type scale that ranged from (1) “Almost never” to (4) “Almost always.” Eight items from this scale were used. Items were selected for use from the original scale if their coefficient alpha was above the cutoff value of .3. Positive items were reverse scored so that high scores on this measure indicate a high level of rumination (see Appendix C).

*Negative Affect.* Watson, Clark, and Tellegen (1988) developed a twenty-item instrument to measure negative affectivity. The instrument has an established coefficient alpha of .87. The scale consists of several words that describe different emotions and feelings. It includes items such as “irritable” and “distressed” and respondents were asked to rate the extent to which they feel that way. The items are rated on a 5-point Likert-type scale that ranged from (1) “Very slightly or not at all” to (5) “Very much.” Twelve items from this scale were used. Items were selected for use from the original scale if their coefficient alpha was above the cutoff value of .3. The positive items were reverse

scored so that high scores on this measure indicate a high level of Negative Affect (see Appendix D).

*Avoidance.* Zuckerman and Gagne (2003) developed a forty-item instrument to measure the avoidant coping strategy. The instrument has an established coefficient alpha of .82. It includes such items as “When things go badly at work...I try to forget the whole thing” and “I take direct action to get around the problem.” The items on the scale are rated on a 5-point Likert-type scale that ranged from (1) “Strongly disagree” to (5) “Strongly agree.” Ten items from this scale were used. Items were selected for use from the original scale if their coefficient alpha was above the cutoff value of .3. The positive items were reversed scored so that high scores on this measure indicate a high level of avoidance (see Appendix E).

*Frustration.* Peters, O’Connor, and Rudolf (1980) developed a three-item instrument to measure frustration with work. The instrument has an established coefficient alpha of .84. It includes such items as “Being frustrated comes with this job”, “Trying to get this job done was a very frustrating experience”, and “Overall, I experienced very little frustration on this job” (reverse scored). The items on the scale are rated on a 7-point Likert-type scale that ranged from (1) “Strongly disagree” to (7) “Strongly agree.” The positive item was reverse scored so that high scores on this measure indicate a high level of frustration (see Appendix F).

The forty-five items described above were combined into a single questionnaire for the present study. The scale is comprised of items from the Job Satisfaction, Powerlessness, Rumination, Negative Affect, Avoidance, and Frustration scales.

Respondents were asked to rate the forty-five items on a 5-point Likert-type scale ranging from (1) “Strongly disagree” to (5) “Strongly agree” (see Appendix G).

### *Statistical Analysis*

A reliability analysis was conducted on each of the six abbreviated scales to determine the suitability of the scale for the present sample. Items within these scales were deleted if doing so led to a significant increase in Cronbach’s Alpha. Cronbach’s Alpha of .70 was used as the standard for this analysis. Responses to the 45 items were also analyzed using confirmatory factor analysis.

Confirmatory factor analysis is often used in the development of operational constructs (Gorsuch, 1983). If the fit indices indicate a good fit of the data to the model, this will provide support for construct validity of the six components of the bitterness scale. This method was used to determine if the items load as predicted on the six conceptually distinct factors of job satisfaction, powerlessness, rumination, negative affect, avoidance, and frustration. The results were then used to specify which dimensions were associated with self-described bitterness.

A one-way multivariate analysis of variance (MANOVA) was also conducted to determine whether there were differences in how the questionnaire items were answered among the people who reported they were bitter (Bitter), were not bitter (Not bitter), or did not provide an event in which they felt mistreated. This analysis was used to determine the relationship between the three different bitterness categories and the questionnaire variables: job satisfaction, powerlessness, avoidance, negative affect, rumination, and frustration. The results of the MANOVA can be used to further refine the

model of bitterness by excluding variables that do not show significant differences between those who are bitter and those who reported being mistreated but are not bitter.

Two raters determined the severity of each mistreatment. An independent samples T-Test was performed on these ratings to see if there were any significant differences between those who reported bitterness and those who reported they were not bitter as a result of mistreatment. If the differences between the bitter and not bitter groups are statistically significant, one can conclude that those who reported bitterness had mistreatments that were more severe than those who were not bitter. If the differences between the two groups are not statistically significant, one can conclude that individual differences of the participants and not severity of mistreatment led to bitterness. The three rating categories that were used to rate the levels of mistreatment were mild, moderate, and significant. These three rating categories were not further defined for the raters.

The narrative descriptions of mistreatment events at work were also analyzed and categorized by source to determine the most prevalent sources of mistreatment at work. Knowing the most common sources of mistreatment at work can be used to aid future research about the causes of bitterness at work.

## RESULTS

Three hundred two participants completed the questionnaire. Participants included 125 males (41.4%) and 177 females (58.6%). Twenty-five (8.3%) participants were under the age of 25, 43 (14.2%) participants were between the ages of 26-35, 69 (22.8%) participants were aged 36-45, and 165 (54.6%) participants were aged 46 or older. Two hundred sixty-four (87.4%) participants were Caucasian, 22 (7.3%) participants were African American, 8 (2.6%) participants were Asian, 4 (1.3%) participants were Hispanic, and 4 (1.3%) participants classified themselves as Other. Forty-three (14.2%) participants had been working at their current job for less than 2 years, 75 (24.8%) participants had been working for 2-5 years, 49 (16.2%) participants had been working for 6-10 years, and 135 (44.7%) participants had been working at their current job for more than 10 years. One hundred thirty-eight (45.7%) participants were faculty members and 164 (54.3%) participants were staff members. Ninety-seven (32.12%) participants reported that they were bitter from all the participants who completed the questionnaire. Out of all of the population that was invited to participate, the number of individuals who reported bitterness was 3.99%.

A reliability analysis of internal consistency was conducted for all six scales using SPSS. No items were deleted from these scales. The reliability analysis of the five-item Job Satisfaction Scale produced a Cronbach's Alpha of .70 (see Appendix H). The seven-item Powerlessness Scale produced a Cronbach's Alpha of .79 (see Appendix I). The eight-item Rumination Scale produced a Cronbach's Alpha of .88 (see Appendix J). The

twelve-item Negative Affect Scale produced a Cronbach's Alpha of .88 (see Appendix K). The ten-item Avoidance Scale produced a Cronbach's Alpha of .83 (see Appendix L). The three-item Frustration Scale produced a Cronbach's Alpha of .78 (see Appendix M). The reliability analysis of the forty-five item Bitterness Scale produced a Cronbach's Alpha of .88 (see Appendix N).

### *Confirmatory Factor Analysis*

A confirmatory factor analysis was conducted using the statistical program Analysis of Moment Structures (AMOS). This analysis allows for the testing of a hypothesized model to see whether the observed data fit the structure of the model by examining how the observed variables (i.e. behaviors) are linked to their underlying latent factors (i.e. unobserved variables) (Byrne, 2001). In this study, the behaviors are the self-report responses to the Bitterness Questionnaire. The unobserved variables include job satisfaction, powerlessness, rumination, negative affect, avoidance, frustration, and bitterness. By testing this model, the investigator is able to determine whether there is a relationship between the responses to the questionnaire and the unobserved variables. If there is a good fit of the model and the data, it can be concluded that bitterness is influenced by the unobserved variables. The confirmatory factor analysis for the Bitterness scale produced all significant path coefficients between the items and the latent variables except for the path between Avoidance and Bitterness ( $p < .001$ ) and also the path between Negative Affect and Bitterness ( $p < .001$ ). The chi square value for the scale was significant,  $\chi^2(939, N=302)=2492.28, p=.000$ . When the chi square value is significant, this means that the model is not an adequate fit for the data. However, the chi square test does have some limitations. Its sensitivity to sample size has led many

researchers to adopt other measures of fit to properly evaluate the fit of the model (Byrne, 2001).

The fit indices show how much the model deviates from the null hypothesis of no relationships (see Appendix O). A good model fit indicates that the data fits the hypothesized relationships between the observed and unobserved variables. The Comparative Fit index was developed to take sample size into account and values range from .00 to 1.00. Any value above .95 is considered to be a good fit for the data. The Comparative Fit Index value for this scale was .956 which suggests that the model is a good fit. The Tucker-Lewis index is another widely used fit index with a cutoff of .95. The Tucker-Lewis value for this scale is .951. The Root Mean Square Error of Approximation (RMSEA) is one of the most informative fit indices because it takes into account the complexity of the model (Byrne, 2001). Values below .08 indicate a good fit. The value for this scale is .074 which also suggests a good model fit. Since all of these fit indices indicate a good fit of the data to the model, this means that the construct of bitterness is influenced by the unobserved variables of job satisfaction, powerlessness, rumination, negative affect, avoidance, and frustration. However, the path coefficients between Bitterness and Avoidance and Bitterness and Negative Affect were not significant which leads to the conclusion that these two variables are not essential in the model. The evidence for model fit shows strong support for the construct validity of the questionnaire. This supports my original hypothesis that bitterness is an affective state stemming from job dissatisfaction and perceptions of mistreatment which results in feelings of frustration and powerlessness to do anything to rectify the situation. The construct of rumination is also significantly correlated with bitterness.

The MANOVA produced significant results with Wilks'  $\Lambda = .728$ ,  $F(12,586)=8.39$ ,  $p=.000$ . Analyses of variances (ANOVA) on each dependent variable were performed as follow-up tests to the MANOVA. Using the Bonferroni method, each ANOVA was tested at the .025 level. This analysis showed that there were significant differences in how the three groups of participants answered the items in the questionnaire for four out of the six variables. The ANOVA on the job satisfaction scores was significant,  $F(2,298)=25.31$ ,  $p=.000$ . The ANOVA on the powerlessness scores was significant,  $F(2,298)=26.98$ ,  $p=.000$ . The ANOVA on the rumination scores was significant,  $F(2,298)=17.63$ ,  $p=.000$ . The ANOVA on the frustration scores was significant,  $F(2,298)=19.70$ ,  $p=.000$ . The ANOVA on the avoidance scores was not significant,  $F(2,298)=2.06$ ,  $p=.129$ . The ANOVA on the negative affect scores was not significant,  $F(2,298)=1.36$ ,  $p=.259$  (see Appendix P).

Post hoc analyses were conducted to determine whether there were significant differences in how each of the three bitterness groups answered the items in the questionnaire in comparison to the other two groups. For job satisfaction, there were significant differences between all groups except for Not bitter and Blank. For powerlessness, there were significant differences for all groups except for Not Bitter and Blank. For rumination, there were significant differences among all of the groups. For frustration, there were significant differences for all groups except for Not bitter and Blank. For avoidance, there were no significant differences among any of the groups. For negative affect, there were no significant differences among any of the groups (see Appendix Q). These post hoc results are consistent with the confirmatory factor analysis

results that showed Avoidance and Negative Affect as having non-significant path coefficients with Bitterness.

Descriptive statistics showed that people who were not bitter scored the highest on the job satisfaction items. People who reported that they were bitter scored the highest on the powerlessness, rumination, and frustration items (see Appendix R). Severity ratings were assigned to the narrative descriptions to see whether there were differences in severity between those who reported bitterness and those who reported they were not bitter. Two undergraduate students completed the ratings. Participants who were bitter ( $M=1.8542$ ,  $SD=.6869$ ) had severity ratings that were slightly higher than participants who were not bitter ( $M= 1.7958$ ,  $SD=.7296$ ). The severity rating means for both groups would be categorized as slightly below moderate. An independent samples T-test was performed and it was found that the differences between these two groups were not significantly different,  $t(165) = -1.050$ ,  $p=.295$ . The intraclass correlation coefficient for the two raters was significant,  $r=.4527$ . This means that the ratings given by the two raters were significantly correlated with each other.

Descriptions of adverse events at work were examined to determine the extent to which bitterness results from various types and sources of stressors. The following stressors accounted for the types of mistreatment: interpersonal atmosphere (25%), negative verbal recognition (23.86%), demotion or lack of promotion (19.32%), money (13.64%), amount of work (6.81%), responsibility (4.55%), physical working conditions (3.98%), task activity (2.27%), and smoothness (.56%). The following agents accounted for the sources of stressors: organization/management (43.75%), supervisor (32.39%), coworker (22.73%), and subordinate (1.14%).

## DISCUSSION

The reliability analysis showed that the six subscales of the bitterness questionnaire had adequate internal consistencies. Since all of the six subscales were reliable, they were adequate measures of the six variables in the hypothesized model. All of the fit indices indicate that the hypothesized model represents a good fit to the data. The model is accounting for a large proportion of variance in the measured items. The construct of bitterness was adequately tapped with the items measuring job satisfaction, powerlessness, rumination, frustration, avoidance, and negative affect even though the path coefficients between Bitterness and Avoidance and Bitterness and Negative Affect were not significant. This means that the remaining four measured variables are associated with the latent variable bitterness and that the forty-five item questionnaire can be considered to be comprised of these four different variables. For the job satisfaction items, those who were not bitter scored the highest. For the powerlessness, rumination, frustration, negative affect, and avoidance items, those who reported they were bitter scored the highest.

The MANOVA produced results that showed that there were significant differences in how the three categories of respondents answered the items for job satisfaction, powerlessness, rumination, and frustration. The MANOVA Post Hoc Analyses showed that there are significant differences between those who report they are bitter and both those who have felt mistreated and are not bitter and those who did not

report having been mistreated at work. There were significant differences in how the respondents answered the items for all variables except for avoidance and negative affect. Even though most of the literature states that negative affect has a large influence on aspects of job satisfaction, it seems as if it does not play as strong of a role in “stressor-strain” relationships (Chen & Spector, 1991). In the present study there also does not appear to be a relationship between negative affectivity and self-reported bitterness. Based on these results, I would conclude that avoidance and negative affect do not contribute much to the construct of bitterness. The variables of frustration, job satisfaction, powerlessness, and rumination seem to have a stronger relationship with the construct of bitterness and should therefore remain as important factors in the model.

From the descriptions of mistreatment, it was found that interpersonal atmosphere, negative verbal recognition or lack of recognition of work, and demotion or lack of promotion accounted for the majority of events in which participants felt they were mistreated. Some examples of mistreatment included hostile coworkers or supervisors who yelled, belittled, or threatened them. Some participants recalled being blamed for something they did not do or receiving no recognition for work they did. In addition, some participants felt mistreated when they did not receive a promotion they felt they deserved. The greatest source of mistreatment was from the organization/management. A number of participants believed the administration and system at work had mistreated them in some manner.

I believe that there is a phenomenon that can be called bitterness in the workplace. Over thirty-two percent of the participants reported that they were bitter as a result of

mistreatment at work. This shows that a large number of people feel that they are bitter which could lead to several negative emotional and behavioral consequences at work.

Bitterness has implications for many aspects of work. People who reported bitterness were also more likely to be dissatisfied with their jobs. Some participants reported lower morale because of their mistreatment. For example, some participants felt that they did not receive a promotion or tenure because of the system at work. Even though they had the qualifications and worked hard, those who were promoted were those who followed the status quo and never questioned authority. This also led to feelings of frustration because they felt powerless to do anything to rectify the situation. Other participants reported bitterness because their coworkers were being paid the same or more than them even though they had less qualifications and less experience. Some participants reported that their hard work was never recognized, and when they did receive any feedback, it was criticism. This could result in lower job productivity if employees feel that they are not appreciated by their coworkers or supervisors. Rumination can also impede job productivity. One participant stated that the mistreatment endured at work was so severe that this individual kept thinking about the negative events at work on a daily basis.

In conclusion, it is worth doing more research on this construct because even though bitterness seems to be prevalent in the workplace, there has been no research done in this area. For future research, one could make adjustments to the model by taking out the negative affect and avoidance items. Since there were no significant differences in how those who were bitter and not bitter answered the items for these two constructs and there were not significant path coefficients between these two constructs and Bitterness,

perhaps a more refined model would yield even better fit statistics than the present one. In addition, it would be useful to examine the influence of the sources of mistreatment that lead an individual to experience bitterness at work to better our understanding of this construct.

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## APPENDICES

Appendix A  
*Job Satisfaction Items*

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Reference: Hackman, J. & Oldman, G. (1974). *The Job Diagnostic Survey: An instrument for the diagnosis of jobs and the evaluation of job redesign project*. New Haven, CT: Yale University, Department of Administrative Services.

1. Generally speaking, I am very satisfied with this job.
2. I am generally satisfied with the kind of work I do on this job.
3. I frequently think of quitting this job.
4. Most people on this job are very satisfied with the job.
5. People on this job often think of quitting.

Appendix B  
*Powerlessness Items*

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Reference: Keenan, A. & Newton, T. (1984). Frustration in organizations: Relationships to role stress, climate, and psychological strain. *Journal of Occupational Psychology*, 57, 57-65.

1. There are times when my efforts to just do my job efficiently as possible are blocked by other people.
2. There a lot of petty and arbitrary rules at work.
3. I rarely run into obstacles trying to get things done at work.
4. There are occasions when my job would be easier if people were more cooperative.
5. Often the system at work prevents you from doing things in a more efficient way.
6. Now and again I feel thwarted in my efforts to do a good job.
7. Sometimes at work I just have to put up with other people's incompetence.

Reverse Coded Items

2. The rules at work are fair and reasonable.
5. The system at work helps me to do this job in an efficient way.

Appendix C  
*Rumination Items*

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Reference: Sukhodolsky, D., Golub, A., & Cromwell, E. (2001). Development and validation of the anger rumination scale. *Personality and Individual Differences, 31*, 689-700.

1. I re-enact the anger episode in my mind after it has happened.
2. When something makes me angry, I turn this matter over and over again in my mind.
3. Memories of even minor annoyances bother me for a while.
4. Whenever I experience anger, I keep thinking about it for awhile.
5. I ponder about the injustices that have been done to me.
6. I keep thinking about events that angered me for a long time.
7. I ruminate about my past anger experiences.
8. I think about certain events from a long time ago and they still make me angry.

Reverse Coded Items

6. I do not dwell on the injustices that have been done to me.

Appendix D  
*Negative Affect Items*

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Reference: Watson, D., Clark, L., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063-1070.

In general, I tend to feel....

1. scared
2. afraid
3. upset
4. distressed
5. jittery
6. nervous
7. ashamed
8. excited
9. interested
10. enthusiastic
11. determined
12. bitter

Appendix E  
*Avoidance Items*

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Reference: Zuckerman, M. & Gagne, M. (2003). The COPE revised: Proposing a 5-factor model of coping strategies. *Journal of Research on Personality*, 37, 169-204.

In general when things go badly at work....

1. I admit to myself that I can't deal with it, and quit trying.
2. I blame someone for what happened to me.
3. I try to forget the whole thing.
4. I concentrate my efforts on doing something about it.
5. I take additional action to try to get rid of the problem.
6. I take direct action to get around the problem.
7. I try to come up with a strategy about what to do.
8. I try to be optimistic in spite of what happened.
9. I accept the reality of the fact that it happened.
10. I look for something good in what is happening.

Appendix F  
*Frustration Items*

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Reference: Peters, L., O'Connor, E., & Rudolf, C. (1980). The behavioral and affective consequences of performance-relevant situational variables. *Organizational Behavior and Human Performance*, 25, 79-96.

1. Trying to get this job done was a very frustrating experience.
2. Being frustrated comes with this job.
3. Overall, I experienced very little frustration on this job

Appendix G  
*Bitterness Questionnaire*

---

We all have had good and bad experiences at work. We are trying to learn more about the bad experiences some people have had and how they do or do not get over them. Please answer the following questions. Your name will not be requested, so this questionnaire will be anonymous. Thank you for your cooperation.

1. Can you easily recall a time when you feel you were mistreated at work? If yes, please provide a description of how and when you were mistreated.  
[If you cannot easily recall being mistreated at work, please skip to question 6]

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Please answer the following questions in relation to the situation you described above.

2. How do you feel at present about how you were mistreated?

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3. What have you done to try to respond to the mistreatment?

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4. What was the result of your response to the mistreatment?

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5. Would you say that you currently feel bitterness about how you were mistreated?  
Yes \_\_\_\_\_ No \_\_\_\_\_

Please indicate to the extent to which you agree or disagree with the following statements.

	Strongly Disagree	Disagree	Agree	Strongly Agree	Does Not Apply
6. I re-enact the bad situation in my mind after it has happened.	1	2	3	4	5
7. There are times when my efforts to just do my work as efficiently as possible are blocked by other people.	1	2	3	4	5
8. Generally speaking, I am very satisfied with this job.	1	2	3	4	5
9. Trying to get this job done is a very frustrating experience.	1	2	3	4	5
10. I am generally satisfied with the kind of work I do on this job.	1	2	3	4	5
11. When something makes me angry, I turn this matter over and over again in my mind.	1	2	3	4	5
12. The rules at work are fair and reasonable.	1	2	3	4	5
13. Being frustrated comes with this job.	1	2	3	4	5
14. I rarely run into obstacles trying to get things done at work.	1	2	3	4	5
15. Memories of even minor annoyances bother me for awhile.	1	2	3	4	5
16. I frequently think of quitting this job.	1	2	3	4	5
17. Overall, I experienced very little frustration on this job.	1	2	3	4	5
18. Whenever I experience anger, I keep thinking about it for awhile.	1	2	3	4	5

	Strongly Disagree	Disagree	Agree	Strongly Agree	Does Not Apply
19. There are occasions when my job would be easier if people were more cooperative.	1	2	3	4	5
20. Most people here are very satisfied with their job.	1	2	3	4	5
21. I ruminate about my past anger experiences.	1	2	3	4	5
22. The system at work helps me to do this job in an efficient way.	1	2	3	4	5
23. I do not dwell on the injustices that have been done to me.	1	2	3	4	5
24. Now and again I feel blocked in my efforts to do a good job.	1	2	3	4	5
25. I keep thinking about events that angered me for a long time.	1	2	3	4	5
26. Sometimes at work I just have to put up with other people's incompetence.	1	2	3	4	5
27. People on this job often think of quitting.	1	2	3	4	5
28. I think about certain events from a long time ago and they still make me angry.	1	2	3	4	5

**In general when things go badly at work....**

	Strongly Disagree	Disagree	Agree	Strongly Agree	Does Not Apply
29. I admit to myself that I can't deal with it, and quit trying.	1	2	3	4	5
30. I blame someone for what happened to me.	1	2	3	4	5
31. I try to forget the whole thing.	1	2	3	4	5
32. I concentrate my efforts on doing something about it.	1	2	3	4	5
33. I take additional action to try to get rid of the problem.	1	2	3	4	5
34. I take direct action to get around the problem.	1	2	3	4	5
35. I try to come up with a strategy about what to do.	1	2	3	4	5
36. I try to be optimistic in spite of what happened.	1	2	3	4	5
37. I accept the reality of the fact that it happened.	1	2	3	4	5
38. I look for something good in what has happened.	1	2	3	4	5

**Generally in my life I tend to feel....**

39. excited	1	2	3	4	5
40. afraid	1	2	3	4	5
41. interested	1	2	3	4	5
42. distressed	1	2	3	4	5
43. jittery	1	2	3	4	5
44. nervous	1	2	3	4	5

Generally in my life I tend to feel...	Strongly Disagree	Disagree	Agree	Strongly Agree	Does Not Apply
45. ashamed	1	2	3	4	5
46. enthusiastic	1	2	3	4	5
47. bitter	1	2	3	4	5
48. upset	1	2	3	4	5
49. determined	1	2	3	4	5
50. scared	1	2	3	4	5

Please answer the following questions. They will be used for statistical purposes only.

51. Sex: Male \_\_\_\_\_ Female \_\_\_\_\_

52. Age: under 25 \_\_\_\_\_ 26-35 \_\_\_\_\_ 36-45 \_\_\_\_\_ 46 or older \_\_\_\_\_

53. Ethnicity: Caucasian \_\_\_\_\_ African American \_\_\_\_\_ Hispanic \_\_\_\_\_  
Asian \_\_\_\_\_ Other \_\_\_\_\_

54. How long have you been working in your current job?

Less than two years \_\_\_\_\_ 2-5 years \_\_\_\_\_ 6-10 years \_\_\_\_\_

More than 10 years \_\_\_\_\_

55. Which job category best describes your job?

Faculty \_\_\_\_\_ Administration \_\_\_\_\_ Research \_\_\_\_\_ IT \_\_\_\_\_

Technical \_\_\_\_\_ Office/Clerical \_\_\_\_\_ Other \_\_\_\_\_

Appendix H  
*Internal Consistency Estimates of Reliability  
for Job Satisfaction Items*

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	Corrected Item-Total Correlation	Alpha if Item Deleted
VAR 8	.5642	.6059
VAR 10	.3256	.7013
VAR 16	.5691	.6015
VAR 20	.3636	.6902
VAR 27	.4706	.6478

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Reliability Coefficient 5 items

Alpha = .7020

Appendix I  
*Internal Consistency Estimates of  
Reliability for Powerlessness Items*

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	Corrected Item-Total Correlation	Alpha if Item Deleted
VAR 7	.5447	.7637
VAR 12	.5877	.7543
VAR 14	.4831	.7739
VAR 19	.4511	.7802
VAR 22	.5672	.7588
VAR 24	.6211	.7487
VAR 26	.4111	.7858

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Reliability Coefficient 7 items

Alpha = .7933

Appendix J  
*Internal Consistency Estimates of  
Reliability for Rumination Items*

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	Corrected Item-Total Correlation	Alpha if Item Deleted
VAR 6	.4691	.8858
VAR 11	.5396	.8798
VAR 15	.6982	.8640
VAR 18	.6772	.8668
VAR 21	.7628	.8569
VAR 23	.5794	.8759
VAR 25	.7852	.8556
VAR 28	.7107	.8625

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Reliability Coefficient    8 items

Alpha = .8833

Appendix K  
*Internal Consistency Estimates of Reliability  
for Negative Affect Items*

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	Corrected Item-Total Correlation	Alpha if Item Deleted
VAR 39	.3484	.8832
VAR 40	.5851	.8691
VAR 41	.3914	.8786
VAR 42	.6459	.8651
VAR 43	.6061	.8676
VAR 44	.6368	.8657
VAR 45	.7172	.8607
VAR 46	.5400	.8715
VAR 47	.6329	.8659
VAR 48	.6545	.8646
VAR 49	.4161	.8778
VAR 50	.6873	.8623

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Reliability Coefficient    12 items  
Alpha = .8792

Appendix L  
*Internal Consistency Estimates of  
Reliability for Avoidance Items*

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	Corrected Item-Total Correlation	Alpha if Item Deleted
VAR 29	.5083	.8207
VAR 30	.4146	.8297
VAR 31	.2905	.8400
VAR 32	.6650	.8039
VAR 33	.6338	.8074
VAR 34	.5492	.8168
VAR 35	.7143	.8013
VAR 36	.5277	.8199
VAR 37	.5891	.8155
VAR 38	.4029	.8317

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Reliability Coefficient 10 items

Alpha = .8343

Appendix M  
*Internal Consistency Estimates of  
Reliability for Frustration Items*

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	Corrected Item-Total Correlation	Alpha if Item Deleted
VAR 9	.6557	.6563
VAR 13	.5818	.7366
VAR 17	.6138	.7035

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Reliability Coefficient    3 items

Alpha = .7786

Appendix N  
*Internal Consistency Estimates of  
 Reliability for Bitterness Items*

	Corrected Item-Total Correlation	Alpha if Item Deleted
VAR 6	.2788	.8783
VAR 7	.3008	.8782
VAR 8	-.4290	.8895
VAR 9	.4004	.8763
VAR 10	-.3103	.8850
VAR 11	.4444	.8755
VAR 12	.2922	.8782
VAR 13	.4301	.8758
VAR 14	.4408	.8756
VAR 15	.6311	.8717
VAR 16	-.3485	.8886
VAR 17	.3083	.8779
VAR 18	.5032	.8749
VAR 19	.2791	.8784
VAR 20	-.1544	.8851
VAR 21	.5752	.8730
VAR 22	.1948	.8796
VAR 23	.5195	.8742

*Internal Consistency Estimates of  
Reliability for Bitterness Items*

	Corrected Item-Total Correlation	Alpha if Item Deleted
VAR 24	.4300	.8759
VAR 25	.6123	.8727
VAR 26	.2766	.8783
VAR 27	-.0777	.8843
VAR 28	.6473	.8718
VAR 29	.5668	.8736
VAR 30	.4498	.8756
VAR 31	.0187	.8818
VAR 32	.3644	.8769
VAR 33	.3778	.8767
VAR 34	.2991	.8781
VAR 35	.3000	.8780
VAR 36	.4536	.8759
VAR 37	.4252	.8763
VAR 38	.4806	.8748
VAR 39	.2870	.8781
VAR 40	.4290	.8762
VAR 41	.3670	.8774

*Internal Consistency Estimates of  
Reliability for Bitterness Items*

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	Corrected Item-Total Correlation	Alpha if Item Deleted
VAR 42	.6161	.8729
VAR 43	.5272	.8744
VAR 44	.5019	.8746
VAR 45	.5495	.8739
VAR 46	.4689	.8757
VAR 47	.5489	.8737
VAR 48	.6507	.8721
VAR 49	.2923	.8780
VAR 50	.5404	.8739

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Reliability Coefficient 45 item

Alpha = .8796

Appendix 0  
*Fit Measures for Bitterness Model*

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Fit Measure	Model
Discrepancy (Chi-square)	2492.276
Degrees of freedom	939
Probability	0.000
Discrepancy/df	2.654
Tucker – Lewis index	0.951
Comparative fit index	0.956
RMSEA	0.074
RMSEA lower bound	0.071
RMSEA upper bound	0.078

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Appendix P  
*MANOVA Tests of Between – Subjects Effects for Significant  
 Differences in Responses for Three Bitterness Groups*

Dependent Variable	Significance	Eta Squared
Job Satisfaction	.000*	.145
Powerlessness	.000 *	.153
Avoidance	.129	.014
Negative Affect	.259	.009
Rumination	.000*	.106
Frustration	.000*	.117

\* p<.05

Appendix Q  
*MANOVA Multiple Comparisons for Differences in Responses for  
 Each Bitterness Group in Comparison to Two Other Groups*

Dependent Variable		VAR 5 – Bitterness		Significance		
Job Satisfaction	Bonferroni	Blank	No	1.000		
			Yes	.000*		
		No	Blank	1.000		
			Yes	.000*		
		Yes	Blank	.000*		
			No	.000*		
		Powerlessness	Bonferroni	Blank	No	.416
					Yes	.000*
No	Blank			.416		
	Yes			.000*		
Yes	Blank			.000*		
	No			.000*		
Avoidance	Bonferroni			Blank	No	.197
					Yes	1.000
		No	Blank	.197		
			Yes	.232		
		Yes	Blank	1.000		
			No	.232		

*MANOVA Multiple Comparisons for Differences in Responses for Each Bitterness Group in Comparison to Two Other Groups*

Dependent Variable		VAR 5 – Bitterness		Significance		
Negative Affect	Bonferroni	Blank	No	.658		
			Yes	1.000		
		No	Blank	.658		
			Yes	.324		
		Yes	Blank	1.000		
			No	.324		
		Rumination	Bonferroni	Blank	No	.004*
					Yes	.003*
No	Blank			.004*		
	Yes			.000*		
Yes	Blank			.003*		
	No			.000*		
Frustration	Bonferroni			Blank	No	.404
					Yes	.000*
		No	Blank	.404		
			Yes	.000*		
		Yes	Blank	.000*		
			No	.000		

\*p<.01

Appendix R  
*MANOVA Descriptive Statistics – Mean Responses  
 for Three Bitterness Groups to Bitterness Items*

Variable	Bitter	Mean	SD	N
Job Satisfaction	Blank	3.2074	.4435	129
	No	3.2213	.5386	76
	Yes	2.7466	.6238	97
	Total	3.0624	.5727	302
Powerlessness	Blank	2.4592	.4741	129
	No	2.5736	.5403	76
	Yes	2.9740	.5946	97
	Total	2.6540	.5764	302
Avoidance	Blank	2.1567	.6014	129
	No	2.0236	.4150	76
	Yes	2.1586	.3921	97
	Total	2.1237	.4987	302
Negative Affect	Blank	1.8288	.4755	129
	No	1.7450	.4753	76
	Yes	1.8611	.4592	97
	Total	1.8181	.4708	302

*MANOVA Descriptive Statistics – Mean Responses  
for Three Bitterness Groups to Bitterness Items*

Variable	Bitter	Mean	SD	N
Rumination	Blank	2.5230	.5767	129
	No	2.2652	.5359	76
	Yes	2.7688	.5392	97
	Total	2.5371	.5846	302
Frustration	Blank	2.1823	.6273	129
	No	2.3333	.7364	76
	Yes	2.7612	.7457	97
	Total	2.4070	.7373	302