Perfectionism as a Moderator of the

Organizational Constraints—Job Satisfaction Relationship

by

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Abstract

The current study examines rumination—a specific facet of perfectionism—and hypothesizes that higher levels of rumination intensify the negative relationship between organizational constraints and job satisfaction. Individuals living in India and having full-time employment in an organization participated via Amazon.com's Mechanical Turk (MTurk). A moderated multiple regression analysis was conducted to examine the potential moderating effects of rumination in the relationship between organizational constraints and job satisfaction. The results showed a moderate negative relationship between organizational constraints and job satisfaction, as expected, but no moderator effect of rumination, inconsistent with this study's hypothesis. Sampling issues, methodological issues, and theoretical issues are discussed as possible explanations for the failure to identify the moderator role of rumination. Finally, a call for further research on the role of perfectionism in the workplace is emphasized.

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Perfectionism as a Moderator of the

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Being "perfect" has been embedded in our consciousness as the ultimate goal for an

individual to attain in areas as varied as business, social relationships, appearance, and

athletics (Haase & Prapavessis, 2004). Whether it is through newspapers, magazines, movies,

or television, one cannot go too far without coming across someone's instructions to be

perfect. Magazine covers feature the airbrushed bodies and faces of celebrities and models.

The voices of even the most talented singers are digitally enhanced to reach perfection.

Whether it is achieving the best body or learning the ideal way to manage time, individuals in

our society are constantly pushed to be perfect.

This constant call for perfection in our popular culture can influence the behavior of

individuals in both positive and negative ways. The personality trait called perfectionism is

related to many meaningful outcomes and this construct has received attention in personality

research and clinical psychology for decades. Past research has broadly focused on the

negative mental health outcomes that occur among individuals high in perfectionism. For

example, Flett, Hewitt, and Heisel (2014) found that perfectionism was positively associated

with mental health outcomes such as anxiety and depression. Chen (2009) found that

"minding mistakes," or being over-concerned with one's errors, had a significant negative

correlation with mental health amongst Chinese adolescents. Similarly, a variety of studies

have shown that too great a concern with failure results in higher levels of neuroticism

among individuals (Egan, Piek, & Dyck, 2015; Rusting & Larsen, 1997; Ozbilir, Day, &

Catano, 2014; Leonard & Harvey, 2008), which also increases the likelihood of mental and

physical health issues (Lahey, 2009).

Past literature has also focused on the psychological effects of perfectionism in school settings (Damian, Stoeber, Negru-Subtirica, & Baban, 2016; Rice, Richardson, & Ray, 2016; Stoeber, 2012). The literature has emphasized both the drawbacks and benefits of perfectionism on academic achievement. Perfectionists who combine high performance with flexible standards have more effective study habits and higher self-determination (Rice et al., 2016). Conversely, for example, individuals who strive for high performance but set inflexible standards may experience decreased achievement motivation and academic self-confidence (Rice et al., 2016). An explanation for this decrease may be that individuals high in perfectionistic concerns interpret their high achievement negatively **(**Damian et al., 2016). The standards on which they evaluate their work may increase, but their achievement may not, ultimately leading to decreased achievement motivation.

Though the effects of perfectionism have been studied extensively in clinical and educational settings, perfectionism has been relatively ignored in the work context. This has resulted in a dearth of research investigating the role of perfectionism in the workplace. Despite the negative consequences of perfectionism explored in clinical settings, one might expect perfectionism to have both positive and negative effects in the organizational setting. For instance, work by Stoeber and Rennert (2008) demonstrated that perfectionists' tendency to set high goals and strive to achieve them is correlated with higher work engagement and lower strain and job burnout. However, perfectionists differ in the ways that they assess and adhere to their standards, influencing their behavior as employees (Stoeber & Rennert, 2008). Perfectionists who set high but inflexible standards tend to experience a chronic concern that they are not meeting their workplace goals. This increased anxiety makes them more vulnerable to job strain and job burnout (Stoeber & Rennert, 2008). Thus, as in the school

setting, perfectionism may have undesirable consequences at work. Further investigation is needed on the role of perfectionism in organizations in order to better manage the consequences.

Though it has a long history, perfectionism has been defined in many different ways. Burns' (1980) early conceptualization described the trait as a unidimensional and maladaptive construct. According to Burns, perfectionism is characterized by the setting of unrealistic standards and equating self worth to one's adherence to these standards. However, this unidimensional approach to perfectionism was overly simplistic, limited to clinical settings, and overemphasized the negative aspects of perfectionism (Stairs, Smith, Zapolski, Combs, & Settles, 2012).

More recent approaches view perfectionism as a complex and multidimensional construct with specific behavioral outcomes, most notably Frost, Marten, Lahart, and Rosenblate (1990), Hewitt and Flett (1991), and Hill, Huelsman, Furr, Kibler, Vicente, and Kennedy (2004). Though each of these multidimensional conceptualizations of perfectionism has unique strengths and has seen use in the published literature, Hill and his colleagues' (2004) approach is adopted in the current study. Here, perfectionism comprises eight dimensions (see Table 1) that capture the important constructs provided by Frost et al.'s (1990) and Hewitt and Flett's (1991) perfectionism measures. Each dimension of perfectionism captured by Hill et al. (2004) can help predict individual differences in various areas.

Of the many areas in organizational psychology where perfectionism could be examined, the organizational constraints—job satisfaction relationship might be particularly important. Organizational constraints have been shown to have a positive relationship with a

number of important organizational outcomes, including job burnout and job dissatisfaction (Best, Stapleton, & Downey, 2005). Organizational constraints are aspects of the workplace that hinder an individual from doing his or her job. Constraints hurt an individual's progress towards achieving organizational goals (Best et al, 2005). As people strive to meet their goals they may not feel satisfied if something hinders this process; one might expect this relationship to be especially strong for perfectionists (Rice et al., 2016).

Peters, O'Connor, and Rudolf (1980) enumerated eleven common organizational constraints, including things that interfere with one's ability to complete objectives like poor equipment, organizational rules, other employees, and inadequate training. Although the major concern of organizational constraints research is job performance, it has been shown to relate to job satisfaction (e.g., Coffey, Dugdill, & Tattersall, 2004; Keenan & Newton, 1984; Kristof-Brown, Zimmerman, & Johnson, 2005; Pindek & Spector, 2016). For instance, Spector and Jex (1998) studied these constructs and found a negative correlation ($r = -.38$) between organizational constraints and overall job satisfaction. Another study done by Liu, Nauta, Li, and Fan (2010) examined job context constraints and job satisfaction and found another direct negative correlation ($r = -.31$).

In an experimental study, Peters et al. (1980) examined affective response differences in a lab experiment in which situational constraint variables (lack of required information, supplies, equipment, etc.) were explicitly manipulated across two conditions. The researchers found that in laboratory settings, situational constraints limited individual performance (Peters et al., 1980). This is due to the affective consequences of situational constraints, which tend to evoke negative emotional states that inhibit satisfaction among individuals (Sonnentag, Mojza, Demeroiti, & Bakker, 2012). People perform better and express more

positive affective responses in work settings in which constraints are absent (Peters et al.,

1980; Phillips & Freedman, 1984; Steel & Mento, 1986).

Previous research has described a set of variables called hindrance stressors as

obstacles within one's job–such as a lack of information or supplies–that interfere with one's

ability to achieve valued goals (Podsakoff, Lepine, & Lepine, 2007). Organizational

constraints are conceptualized similarly and reflect aspects of the work environment that

inhibit task performance (Pindek & Spector, 2016). Like organizational constraints,

hindrance stressors have been shown to induce counterproductive work attitudes (Rodell &

Judge, 2009) like job dissatisfaction (Boswell, Olson-Buchanan, & Lepine, 2004;

Cavanaugh, Boswell, Roehling, & Boudreau, 2000; Schaubroeck, Cotton, Jennings, 1989).

The literature reviewed above demonstrates a consistent, negative relationship

between organizational constraints and job satisfaction. However, the effects of constraints

may differ among individuals. Dispositional influences may moderate employee perceptions

of organizational constraints (Best et al., 2005). I propose that the organizational

constraints—job satisfaction relationship will be moderated by rumination, a facet of

perfectionism described by Hill et al. (2004). Rumination involves an individual repetitively

and passively focusing on symptoms of distress and on the possible causes and consequences

of these symptoms (Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008). Rumination is a

cognitive response style that compels individuals to focus on things that could go wrong, or

that have already gone wrong (Hilt, McLaughlin, & Nolen-Hoeksema, 2010).

More specifically, I propose that the organizational constraints—job satisfaction

relationship will be stronger for individuals with higher levels of rumination, and that the

relationship will be attenuated with lower levels of rumination. I suggest two rationales for

this hypothesis. The first reason is logical: when individuals ruminate, they ruminate over things. Hill et al. (2004) suggests that ruminators worry about "past errors, less than perfect performance, or future mistakes" (p. 81). Therefore, it would make sense to imagine that they also ruminate over organizational features that limit their performance, or organizational constraints.

Rumination can intensify organizational conflict by interfering with problem-solving strategies. When perfectionists encounter conflicts, their cognitive resources are spent trying to understand and solve the conflict (Bolger & Zuckerman, 1995). Self-focused ruminators report a reduced likelihood of implementing any real solution to constraints they are faced with because they are more focused on the obstacles that are inhibiting their task performance (Sonnentag et al., 2012). By not being able to find a solution to the problem, individuals will continue to ruminate (Hilt et al., 2010). The extent to which ruminators continuously worry about their constraints contributes to their dissatisfaction, thus increasing the strength of the constraints—satisfaction relationship. For people who do not ruminate, the constraints may not be such a salient feature of their work environment, and other features of their work life may thus influence their satisfaction.

The second reason that rumination may moderate the organizational constraints—job satisfaction relationship is through neuroticism. Past studies have shown that individuals high in certain perfectionistic characteristics are also high in neuroticism (Egan et al., 2015). Neuroticism is a dimension of personality that reflects the extent to which one is self-conscious, anxious, moody, and insecure (Barrick, Mount, & Judge, 2001). Perfectionists who are high in neuroticism are predisposed to be more sensitive to unpleasant emotional stimuli, and are therefore more likely to be in undesirable moods (Rusting & Larsen, 1997).

Similarly, individuals high in neuroticism are more likely to process information in a negative way, which continues to accentuate unpleasant experiences. Even further, in their study of organizational constraints, Grant and Lagan-Fox (2006) demonstrated that individuals high in neuroticism have higher stressor exposure, poorer physical health, and job dissatisfaction. In particular, workers with high neuroticism process organizational stressors more often than workers with normal levels of neuroticism. As a result, one might expect that individuals high in neuroticism would attend to the negative aspects of these constraints more so than other individuals, influencing their overall job satisfaction.

To extend this reasoning, Egan et al. (2015) found the dimension of rumination to be positively correlated with neuroticism. When exposed to stress, individuals high in neuroticism perceive the stress as more disruptive to their success than less neurotic individuals (Grant & Lagan-Fox, 2006). The individuals ruminate over this disruption, which exacerbates the stressor-strain relationship via negative cognitive appraisal (Hemenover, 2001). Ruminators high in neuroticism will not only focus more on the negative stressors they face, but they will also intensify the effects that these constraints have on their work satisfaction (Hemenover, 2001). If high ruminators have more negative thought, then they are more likely to evaluate their satisfaction in a negative way.

When perfectionists are overly concerned with past mistakes or future errors, it plays a potent role in the workplace. Since rumination interferes with an individual's ability to implement solutions to a problem (Bolger & Zuckerman, 1995; Lyubomirsky & Nolen-Hoeksema, 1995; Sonnentag et al., 2012), high ruminators are going to be less likely to overcome constraints in the workplace. A perfectionist who is highly ruminative may have more difficulty dealing with mistakes. Individuals high in neuroticism are more likely to have

ruminative thoughts characterized by negative tone, self-criticism, and self-blame for the

problems they face. If faced with an organizational constraint, high ruminators will

constantly think about this constraint, which interferes with their task performance

(Lyubomirsky & Nolen-Hoeksema, 1995). Perfectionists want to measure up to their high

standards, but rumination will effect how they evaluate organizational constraints and their

task performance. This makes each organizational constraint critical to their overall

satisfaction (Greenberg, Pyszcyznski, Burling, & Tibbs, 1992). Each organizational

constraint gives ruminators more opportunities to focus on the negative aspects of their work,

thus influencing their job satisfaction.

In summary, the aim of this research is to better understand the role of a specific facet

of perfectionism, called rumination, in the workplace. Based on the literature and the

rationales described above, I propose that for those high in rumination, the organizational

constraints—job satisfaction relationship will be stronger than for those low in rumination.

Method

Participants

To study my hypothesis, I used data obtained from individuals with full-time

employment who were participating in Amazon.com's Mechanical Turk (MTurk) service

(https://www.mturk.com). Through MTurk, a unique web-based tool well suited for the

collection of survey data, registered users (workers or Turkers) meeting specific inclusion

criteria are compensated for completing online tasks. For my study, respondents completed

measures of perfectionism, job satisfaction, and organizational constraints as part of a larger

study (Semcho, 2014). As a part of that study, workers were required to have registered India

as their primary location. Though 1,204 participants validly responded to the questionnaires,

I limited my analyses to the 563 (46.8%) participants who were employed full time in an organization.

Mean age of the participants in my sample was 29.12 years ($SD = 7.28$). A majority of my participants were male (71.6%); 160 were female (28.4%). Almost two-thirds of the participants, 370 (65.7%) reported Hindu as their primary religion. In terms of income, 68 participants (12.1%) reported < Rs 1 lakh, 234 participants (41.6%) reported Rs 1 lakh – Rs 3.4 lakh, 233 participants (41.4%) reported Rs 3.4 lakh – Rs 17 lakh, 19 participants (3.4%) reported Rs 17 lakh – Rs 30 lakh, and 9 participants (1.6%) endorsed > Rs 30 lakh. These categories correspond to "lower class," "lower middle class," "middle class," "upper middle class," and "wealthy upper class" according to Press Trust of India (2011).

Concerning the primary job category of the participants in the data set, 106 participants (18.8%) were in the "Manager, official or legislature" job category, 196 (34.8%) were in the "Professional" job category that requires a post-graduate university degree, 171 (30.4%) were in the "Associate professional" category that requires a university degree, 61 (10.8%) were in the "Clerk" job category, 10 (1.8%) were in the "Service/shop worker/sales worker" job category, 1 (0.2%) was in the "Skilled agricultural and fishery worker" job category, 4 (0.7%) were in the "Craft and trades" job category, 4 (0.7%) were in the "Plant worker/machine operator" job category, 1 (0.2%) was in the "Elementary" job category, and 9 (1.6%) reported inclusion in the "Other job" category.

Measures

Perfectionism Inventory (PI). The PI is a 59-item self-report questionnaire that measures perfectionism on eight subscales (Striving for Excellence, Organization, Planfulness, High Standards for Others, Concern Over Mistakes, Need for Approval,

Rumination, and Perceived Parental Pressure). The rumination subscale is measured by the response to 7 items (for example, "I spend a lot of time worrying about things I've done, or things I need to do"). Item responses on the questionnaire are measured on a 5-point Likert scale from 1 (Strongly disagree) to 5 (Strongly agree). Previous research has reported strong construct validity and adequate internal reliability (Cronbach's alpha ranging from .83 to .91; Hill et al., 2004).

Organizational Constraints Scale (OCS). The OCS is a self-report questionnaire that lists 11 areas of constraints (poor equipment or supplies, organizational rules and procedures, other employees, supervisor, lack of equipment or supplies, inadequate training, interruptions by other people, lack of necessary information about what to do or how to do it, conflicting job demands, inadequate help from others, and incorrect instructions). Respondents are asked to indicate how often it is difficult or impossible to do his or her job because of each item, and all items are summed into a total score (Peters et al., 1980). Item response choices range from 1 (less than once per month or never) to 5 (several times a day). Previous research has reported adequate construct validity and internal reliability (Cronbach's alpha ranging from .80 to .90; Baka & Bazinska, 2016)

Overall Job Satisfaction Scale (OJS). The OJS is a self-report questionnaire that measures overall job satisfaction. The scale comprises four items that have strong factor loadings across six specific job satisfaction facets (Satisfaction with Empowerment, Satisfaction with Job Fulfillment, Satisfaction with Pay, Satisfaction with Work Group, Satisfaction with Security, and Satisfaction with Work Fulfillment; Schneider, Hanges, Smith, & Salvaggio, 2003). Respondents are asked to answer the questions on the degree to which they are satisfied ranging from 1 (very satisfied) to 5 (very dissatisfied). Previous

research has reported good internal reliability (Cronbach's alpha around .82; Schneider et al., 2003).

Procedure

The original survey task with the questionnaires was administered on the MTurk website and was available to all eligible participants. Participants gave informed consent after being presented with all relevant study information. Participants received 1 USD if they participated (.5 USD if they supplied invalid responses; see Semcho, 2014). Appalachian State University Institutional Review Board (IRB) approved the original study (IRB #12-0229); the current study was exempt from IRB review (IRB #17-0777).

Results

Tests of statistical assumptions indicated that the data were appropriate for a moderated multiple regression analysis. Both predictors (organizational constraints and rumination) were correlated with the outcome variable (job satisfaction), but multicollinearity was not a concern as the correlation between the predictors was only .20. A histogram indicated that the standardized residuals were normally distributed, but the normal P-P plot of the standardized residuals of regression was somewhat non-linear. The data points fit a somewhat S-shaped curve. To test for outliers, I used Mahalanobis, Cook's, and Leverage statistics. Cases were eliminated if they exceeded criterion levels for 2 out of the 3 standards. Examination of bivariate scatter plots resulted in the elimination of 19 cases as outliers. The final sample size was 484, which reflects outliers eliminated and cases eliminated due to incomplete data.

Table 2 displays descriptive statistics and correlations for the three study variables. To test the hypothesis that rumination moderates the relationship between organizational

constraints and overall job satisfaction, a moderated multiple regression analysis was

conducted using the PROCESS macro in SPSS (Hayes, 2012). Organizational constraints and

rumination were mean centered and entered in the first step of the regression analysis. In the

second step of the regression analysis, the interaction term between rumination and

organizational constraints was entered. The results after Step 2 of the regression are

presented in Table 3. Together, the predictor variables accounted for a statistically significant

proportion of variance in overall job satisfaction, $F_{3, 484} = 19.47$, $p < .001$, $R^2 = .11$. This

indicates that 11% of the variance within job satisfaction is due to these 2 predictors.

     The analysis showed that the level of organizational constraints significantly

predicted overall satisfaction, $b = -.32$, $t_{484} = -7.37$, $p < .001$. In other words, for every unit

increase in constraints, job satisfaction decreased by .32 points. However, the rumination

variable did not predict overall job satisfaction, $b = -.01$, $t_{484} = -.21$, $p = .84$. Importantly, the

interaction between rumination and organizational constraints was not significant, $b=.13$, t_{484}

$= 1.73$, $p = .08$, which suggests that in these data the effect of organizational constraints on

satisfaction is not moderated by rumination.

     Even though the moderation effect was not statistically significant, simple slopes for

the association between organizational constraints and overall job satisfaction were tested for

low (-1 SD below the mean), moderate (mean), and high (+1 SD above the mean) levels of

rumination. Each of the simple slope tests revealed a negative association between

organizational constraints and job satisfaction with rumination levels, low ($b = .39$, $t_{484} = -$

6.02, $p < .001$), moderate ($b = -.31$, $t_{484} = -7.37$, $p < .001$), and high ($b = -.23$, $t_{484} = -3.82$, $p <$

$.001$). Each of these slopes is independently significant, but they are not significantly

different from each other, consistent with the conclusion that rumination does not moderate

overall job satisfaction. Figure 1 plots the simple slopes for these data.

Discussion

Rumination was examined as a moderator of the relationship between organizational

constraints and job satisfaction. I expected that the negative relationship between

organizational constraints on job satisfaction would strengthen as levels of rumination

increased. I hypothesized this moderator relationship due to past research on rumination

(Bolger & Zuckerman, 1995; Egan et al., 2015; Hill et al., 2004), which indicated logical and

psychological rationale for rumination as a moderation variable.

The finding of a statistically significant correlation between organizational constraints

and job satisfaction was consistent with prior research on organizational constraints and

levels of job satisfaction (Boswell et al., 2004; Coffey et al., 2004; Peters et al., 1980; Pindek

& Spector, 2016; Phillips & Freedman, 1984). However, the moderated multiple regression

analysis failed to show the interaction between rumination and level of organizational

constraints to have statistical significance in accounting for variance in job satisfaction. This

finding was not consistent with my prediction.

Given the strong logical argument for my hypothesis and the nature of the previous

research, this result was a surprise. Below, I offer three factors that could provide some

explanation for this result: sampling issues, methodological issues, and theoretical issues.

One possible explanation for my failure to find a moderating role for rumination in

the organizational constrains—job satisfaction relationship is based on my sample. My study

used archival data from full-time workers indicating India as their primary residence. Though

the use of full-time workers is a strength of the study, and basing the sample in India has the

potential to expand our understanding of these relationships beyond Western industrialized worker samples, using workers exclusively living in India may have influenced the study results.

Semcho's (2014) found the Indian sample to not be representative of the Indian population, as it overrepresented males, urban citizens, and Christians. Of the 1,204 individuals in Semcho's sample (which included full-time employed individuals and those not having full-time employment), 783 of participants were male (65.0%) and 420 were women (34.9%). The national percentages of males and females in India as reported by 2011 Census data suggest that the male participants in this sample were overrepresented while females were underrepresented (Census of India, 2011a). Of the participants who responded, 1,010 participants (83.9%) reported living in an urban agglomeration. Data from the Census of India (2011b) indicated that of the total population, only 31.2% live in urban environments, suggesting that the participants in this sample greatly overrepresented urban inhabitants. Religious affiliation of the participants was also non-representative of the Indian population, with 219 participants (18.2%) reporting that they were Christian, which is another overrepresentation. The overrepresentation of males, Christians, and people living in urban environments might not lessen the possible moderator role of rumination, but it does question the external validity or generalizability of the sample.

The sample is also very well educated and wealthy, more so than the general Indian population (Semcho, 2014). However, it is also important to consider that the data from Semcho's (2014) thesis is based on the entire sample of 1,204 respondents. Since my sample included only those with full-time employment, I might expect my sample to be even more educated, wealthy, and likely to speak English as a first language. There may also be a

tendency for the participants to be more male, more urban, and more Christian for the same

reason. Though my sample is clearly not representative of Indian workers, I did find that the

organizational constraints—job satisfaction correlation was consistent with previous studies.

Thus, it is not likely that sample characteristics explain why I did not find a moderator role of

rumination.

A second potential explanation for my results could be limitations of the method used

in the study. Social science researchers have used MTurk to recruit participants for a variety

of topics and research designs in the past (Johnson & Borden, 2012). Most believe that this

type of sample has great potential for organizational researchers. However, there are still

concerns regarding MTurk samples. First, there are concerns over compensation and

resulting motivation. If participants are primarily motivated to participate because of money,

then they might not take the procedure as seriously (Woo, Keith, & Thorton, 2015). While

compensation and resulting motivation is a valid concern, my study controlled for these

potentially inattentive response styles by deducting compensation from participants

providing invalid responses, and by eliminating those with invalid responses from the data

set. Detecting these invalid responses was based on an analysis of several items inserted in

the questionnaire. Data from 474 participants were eliminated (prior to my study) due to the

endorsement of infrequently endorsed items on the Infrequency Scale (IFS) at a rate above

the acceptable threshold (>2 items), suggesting potentially careless or inattentive response

styles.

Another potential limitation of MTurk concerns attentiveness. It is difficult to control

how much time participants spend on each section of the survey, which would make it easier

for them to rush through the study and obscure results (Johnson & Borden, 2012). It is

important to identify inattentive respondents in order to remove them from the data set. In the current study, one could assume that inattentive responding would result in the endorsement of items on the IFS, resulting in their elimination from the study's data set. Thus, though inattentiveness is a concern when using MTurk to collect data, it is unlikely that it would explain the current findings.

A third possible explanation for my failure to find a moderating effect for rumination is a characteristic of the statistical technique itself. My results do not show a significant interaction effect of rumination on the relationship between organizational constraints and job satisfaction. However, the lack of interaction effects might be due to the statistical limitations of moderator models in general. Past experimental studies frequently report finding statistically important interactions using moderated regression analysis (Aiken & West, 1991; Jaccard, Turrisi, & Wan, 1990). However, the authors have lamented the difficulties researchers can have in obtaining statistically significant interactions (Plomin & Daniels, 1984) in non-experimental settings. Despite my expectations for moderator effects and the ease with which these effects are found in experimental studies, significant moderator effects are difficult to detect in non-experimental field studies (Evans, 1985; Morris, Sherman, & Mansfield, 1986; Zedeck, 1971). My study was based on surveys where it is more difficult to obtain statistically significant interactions as compared to experimental studies (McClelland & Judd, 1993).

Despite past research on the organizational constraints—job satisfaction relationship that led to the hypothesis that rumination would play a moderating role, my analysis did not show this effect. Sampling issues, methodological issues, and theoretical issues are all important to consider as alternative explanations for the results. Though I have provided

explanations of several issues that may have played a role in this study, they do not—

individually or collectively—provide an adequate explanation for why I did not observe the

moderation effect I anticipated. None of these issues would account for the observance of a

correlation between organizational constraints and job satisfaction consistent with previous

research *without* the anticipated moderating role of rumination. After considering deeply

many possible explanations for these results, I am left baffled. To further investigate the

specific role of rumination in the workplace, I encourage researchers to use experimental

methods that may increase the ease of finding statistically significant moderation effects

(McClelland & Judd, 1993).

Even though previous research on rumination indicates the possibility of a

moderating role, my results show no moderation effect. One plausible interpretation of my

results is that there is, in fact, no moderating role for rumination in the organizational

constraints—job satisfaction relationship. Ruminators are certainly ruminating on something,

but perhaps these individuals are focusing on themselves rather than their job contexts. In

other words, ruminators could be focused on their own activities and making sure their work

is perfect, rather than focusing on the larger context of their work (e.g., organizational

constraints). As noted before, ruminators worry about "past errors, less than perfect

performance, or future mistakes" (Hill et al., 2004, p. 81). This type of internal rumination

would explain why there is no moderating effect of rumination between work conditions and

work satisfaction. Indeed, examination of the items in the Rumination scale reveals the items

to be solely focused on rumination over individual anxieties and concerns (see example in the

Method, p. 13). If the items in the Rumination scale do not focus on the external contextual

stimuli of a workplace, then I would not expect this type of rumination to intensify the organizational constraints—job satisfaction relationship.

In conclusion, our society is increasingly focused on attaining perfection in a variety of areas. However, the role of perfectionism within the area of the workplace is dramatically understudied. Perfectionism is a complex characteristic that can lead to both positive and negative outcomes in the workplace. Understanding the consequences of perfectionism is important to better understand a perfectionist's job attitudes, as well as to help manage a perfectionist's workplace performance. Past research and logical reasoning provided the rationale that aspects of perfectionism might intensify the negative relationship between organizational constraints and job satisfaction, and I hypothesized that rumination, a facet of perfectionism, would be especially salient in this relationship. While my study did not find a significant moderating effect of rumination on the organizational constraints—job satisfaction relationship, it does provide a model for how facets of perfectionism might function in organizational relationships. I call for more research to be done following this model. In addition, I call for further research into the measures of rumination. Measures should include contextually focused rumination to help demonstrate the role in organizational relationships. Organizational psychology should expand its research on the effects of perfectionism in order to better understand its potential in the workplace.

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Table 1

Dimensions of perfectionism and sample items from the Perfectionism Inventory

Perfectionism Dimension	Construct Definition	Sample Item
Concern Over Mistakes	Tendency to experience distress over making a mistake	"If I make mistakes, people might think less of me"
High Standards for Others	Tendency to hold others to high ideals	"I get upset when other people do not maintain the same standards I do"
Need for Approval	Tendency to seek validation from others	"I compare my work to others and often feel inadequate"
Organization	Tendency to be orderly and neat	"I am well-organized"
Perceived Parental Pressure	Tendency to feel the need to perform perfectly to obtain parental approval	"My parent(s) have high expectations for achievement"
Planfulness	Tendency to plan ahead	"I find myself planning many of my decisions"
Rumination	Tendency to obsessively worry about past mistakes, less than perfect performance, or future errors	"I spend a lot of time worrying about things I've done, or things I need to do"
Striving for Excellence	Tendency for perfect results	"I drive myself rigorously"

Source: Hill et al. (2004)

Table 2

Descriptive statistics and correlations for study variables

	Organizational constraints	Rumination	Job satisfaction
Organizational constraints	.91		
Rumination	.20***	.78	
Job satisfaction	-.32***	-.09*	.88
Mean	1.90	3.27	3.93
SD	.73	.66	.66

Note. Entries on the main diagonal are Cronbach's coefficient alpha. * $p < .05$; *** $p < .001$.

Table 3

Moderated multiple regression for job satisfaction

	b	95% *CI*	*t*	*p*
Constant	3.91	3.85, 3.96	140.78	< .001
Rumination	-.01	-.10, .08	-.21	.84
Organizational constraints	-.32	-.40, -.23	-7.37	< .001
Interaction	.13	-.02, .28	1.73	.08

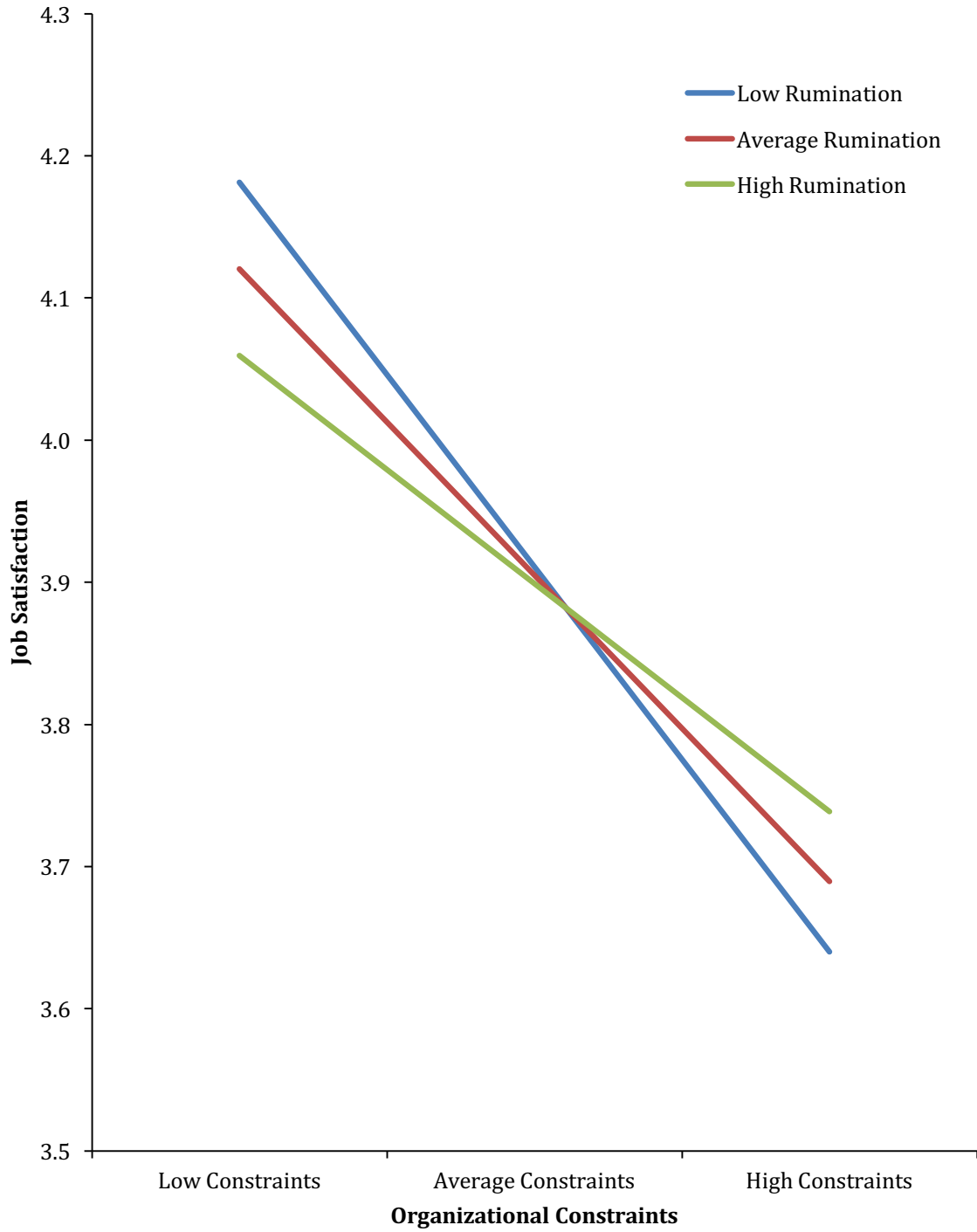*Note.* $R^2 = .11$, $F_{3, 484} = 19.47$, $p < .001$.

Figure 1. Simple slopes of organizational constraints predicting job satisfaction for low ruminators, average ruminators, and high ruminators.