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CYBERBULLYING AND THE WORKPLACE: AN ANALYSIS OF JOB SATISFACTION
AND SOCIAL SELF-EFFICACY

by

Andrew S. Jones

A thesis submitted in partial fulfillment
of the requirements for the Doctor of Philosophy
degree in Psychological and Quantitative Foundations in the
Graduate College of
The University of Iowa

May 2019

Thesis Supervisor: Professor Saba Rasheed Ali

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PH.D. THESIS

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the thesis requirement for the Doctor of Philosophy degree
in Psychological and Quantitative Foundations at the May 2019 graduation

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ABSTRACT

Relatively little research has been devoted to understanding the implications of adult cyberbullying on workers. However, recent research focused on how cyberbullying affects adults has indicated cyberbullying has negative implications for job satisfaction of workers. The purpose of this study was to use Social Cognitive Career Theory (SCCT) as a framework to investigate the impact of cyberbullying in the workplace by examining the relationship between cyberbullying and both job satisfaction and social self-efficacy. The results of this study indicate that among individuals who are cyberbullied, higher rates of cyberbullying has a significant negative relationship with social self-efficacy, and social self-efficacy was negatively related to job satisfaction and also mediated the relationship between cyberbullying and job satisfaction. The findings of this study suggest cyberbullying is a workplace environmental condition that should be studied in SCCT due to its potential to negatively impact career development by indirectly influencing job satisfaction through a person's social self-efficacy. Counselors and organizational leaders should consider this issue when designing interventions to combat workplace bullying.

Keywords: cyberbullying, job satisfaction, Social Cognitive Career Theory

PUBLIC ABSTRACT

Relatively little research has been devoted to understanding the implications of adult cyberbullying on workers. However, recent research has begun to focus on how cyberbullying affects adults and results has indicated cyberbullying has negative implications for job satisfaction of workers. This study set out to investigate the impact of cyberbullying in the workplace by examining the relationship between cyberbullying and both job satisfaction and social self-efficacy.

In this study, 205 participants were recruited through the online data-collection service Mechanical Turk (MTurk). A link to the survey was posted on the MTurk website and the survey collected data on participants' experiences with workplace cyberbullying, perceived social self-efficacy, and overall job satisfaction. The results suggested cyberbullying was negatively related to social self-efficacy. In other words, the more individuals were exposed to cyberbullying in the workplace the less confident they were in their ability to engage in social interactional tasks necessary to maintain interpersonal relationships. Furthermore, the results suggested social self-efficacy was negatively related to job satisfaction and served as a mediator in the relationship between cyberbullying and job satisfaction. In this study being cyberbullied led to lower social self-efficacy, and having lower social self-efficacy was associated with lower levels of job satisfaction. These results provide some preliminary information on the role of cyberbullying in workers' lives and offer information for counselors who may be working with individuals who use social media regularly in their workplaces.

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CHAPTER 1

INTRODUCTION

Cyberbullying and the Workplace: An Analysis of Job Satisfaction and Social Self-efficacy

Cyberbullying has become an important public health issue that affects millions of people each year (Patchin, 2013). According to the Merriam-Webster online Dictionary (2014), cyberbullying is defined as “the electronic posting of mean-spirited messages about a person often done anonymously.” Cyberbullying includes, but is not limited to, sending demeaning messages or threats, spreading rumors online, and posting hurtful or threatening messages on social media sites (“Cyber Bullying Statistics,” 2013). Cyberbullying is traditionally associated with children and adolescents, but recent statistics show it is becoming an increasing problem among adults (Pew, 2015). The Pew Research Center found 40% of adult internet users have experienced some type of cyberbullying or online harassment (Pew, 2015). The most common ways adults have experienced cyberbullying is through verbal harassment with the purpose of embarrassing an individual, threats of physical harm, and cyber stalking and sexual harassment (Pew, 2015). Among adults, men reported experiencing more online cyberbullying with young adult users (age 18-29) experiencing much higher rates of cyberbullying than their older adult counterparts (Pew, 2015). A major issue facing adults is cyberbullying in the workplace, which has been increasing as technology has become more advanced and integral to our work lives (Pew, 2015). Given that adults are experiencing more cyberbullying in the workplace, this is a critical issue for counselors to consider when working with adults. As such, more information is needed to better understand what cyberbullying is and how it is affecting those involved. Career counselors should be especially concerned with cyberbullying since it may lead to mental health problems which affect work and career development (Baruch, 2005)

The limited existing research provides evidence that cyberbullying has a negative influence on factors affecting career development, such as job satisfaction and performance (Baruch, 2005). However, the research has not been fully examined within a theoretical framework. Providing a framework for career counselors to use and understand cyberbullying in the workplace and its negative influence on job satisfaction is crucial to future research and conceptualization of this issue. The purpose of this study is to use Social Cognitive Career Theory (SCCT) as a framework to investigate the impact of cyberbullying in the workplace by examining the relationship between cyberbullying and both job satisfaction and social self-efficacy among individuals who are cyberbullied at work.

Cyberbullying

Cyberbullying is a unique form of bullying because there is no face-to-face confrontation. Because of this, victims of cyberbullying may be more likely to feel helpless or dehumanized during the online attack (Wang, Nansel, & Ianotti, 2011). Research by Wang et al. (2011), indicates mental health is negatively influenced by cyberbullying. In their study, Wang et al. (2011) found youth victims of school cyberbullying generally reported higher levels of depression than individuals who were victims of traditional face-to-face bullying. Cyberbullying also seems to have implications for the perpetrator. Although cyberbullies are less likely to report feelings of depression than are victims of cyberbullying, they are more likely to report depression than those who do not experience cyberbullying. The findings of this study indicate cyberbullying may be more detrimental than traditional face-to-face bullying in terms of depression. In addition, cyberbullying may not only negatively affect the mental health of the victim, but it may also negatively affect the mental health of the individual carrying out the cyberbullying (Wang et al., 2011).

Beyond depression, cyberbullying also can influence other areas of mental health (Goehert, Else, Matsu, Chung-Do, & Chang, 2010). Researchers found among a group of multiethnic high schoolers, substance abuse was approximately 2.5 times more likely to occur in victims of cyberbullying, and victims of cyberbullying were about 2 times as likely to report depression and 3.2 times more likely to attempt suicide. The results from Goehert et al. (2010) support the notion that cyberbullying can have negative effects on the mental health of the victim through increased depression and suicidality, and they demonstrate other potential consequences of cyberbullying such as using substances to cope. While research suggests cyberbullying can have an effect on mental health and well-being, it is less clear how cyberbullying is affecting individuals in their workplace.

Cyberbullying and the Workplace

The literature on adult bullying tends to focus on workplace bullying that happens face to face (D'Cruz, 2013). Bullying in the workplace has been a major concern of companies and employees for several decades (Einarsen, 2011). In recent years, advancements in technology and the proliferation of social media networking sites have led to increased incidences of cyberbullying in the workplace (Piotrowski, 2012). It has become easier than ever to reach people through cyber-communication, which has created negative outcomes.

Baruch's 2005 study found cyberbullying to be prevalent at the same level as bullying via traditional face-to-face contact among employed adults. Privitera and Campbell's (2009) study investigated the prevalence of cyberbullying in the workplace, and found 10.4% of their all male sample reported experiencing cyberbullying. Other studies have found anywhere from 9-20% of their participants have been victimized by cyberbullying, and these numbers are expected to increase unless workplace policies start acknowledging the serious nature and adverse effects of

cyberbullying (Baruch, 2005; Privitera & Campbell, 2009; Sprigg et al., 2012). In a more recent study of 158 trainee doctors, 73 (46.2%) reported experiencing at least one act of cyberbullying (Farley et al., 2015). This research provides evidence that workplace cyberbullying creates adverse effects and is associated with increased anxiety, reduced job satisfaction, lower performance, and increased absenteeism (Baruch, 2005). These negative outcomes can significantly affect a person's overall functioning. It is possible that these negative outcomes can also lead to lower job satisfaction. However, this research is relatively new and inconclusive.

The existing research suggests cyberbullying is negatively affecting workers' job satisfaction (Sprigg et al., 2012). Sprigg et al. (2012) conducted a study in the United Kingdom and found 14–20% of employees experienced cyberbullying on at least a weekly basis (Sprigg et al., 2012). In addition, eight out of ten respondents had experienced cyberbullying on at least one occasion in the past six months (Sprigg et al., 2012). Further, the authors found participants who experienced cyberbullying tended to report greater mental strain and lower job satisfaction than those who had experienced traditional workplace bullying (Sprigg et al., 2012). Further, Farley et al. (2013) conducted a study that concluded cyberbullying has negative outcomes, such as increased symptoms of depression and anxiety that can also negatively affect job satisfaction. Other studies have found similar results with employed adults reporting greater anxiety and depression and lower job satisfaction in relation to being bullied in the workplace (Hoel, Einarsen & Cooper, 2003). A more recent study on cyberbullying and job satisfaction demonstrated a stronger negative relationship between cyberbullying exposure and job satisfaction when compared to face to face bullying (Coyne et al., 2016). This finding is instrumental in highlighting the need to further investigate the role of cyberbullying in the workplace.

Since a proliferation of social media outlets and e-correspondence are used in a variety of workplaces, it becomes increasingly important for researchers interested in employment issues to better investigate how cyberbullying affects work issues such as job satisfaction. However, one issue with the current literature is the lack of theoretical models to better understand how cyberbullying is directly or indirectly affecting job satisfaction. Given the need to further understand the role of cyberbullying in workplace satisfaction, a theoretical model is needed and will be discussed next.

Social Cognitive Model for Understanding Cyberbullying and Job Satisfaction

Social Cognitive Career Theory (SCCT; Lent, Brown, & Hackett, 1994) is a framework that can be used to understand how cyberbullying affects a person's job satisfaction. SCCT is rooted in Bandura's (1986) Social Cognitive Theory (SCT) and explores how career and academic interests develop and are turned into action. The focus of SCCT is on three primary tenets: self-efficacy, outcome expectations, and goals (Lent et al., 1994). It is believed these tenets are influenced bi-directionally through the interaction of environmental and person variables (Lent et al., 2004). More recently, Lent and Brown (2006) applied SCT to explain work satisfaction. This new model expands the theoretical implications of SCT to better explain how concepts such as self-efficacy, work outcomes, and goals influence an individual's satisfaction with their work or jobs (Lent & Brown, 2006). One of the aims of the model was to understand the experience of satisfaction in vocational pursuits. The model explains the interconnections between social cognitive variables, personality/affective traits, and contextual variables to explain their effect on work satisfaction (Lent & Brown, 2006). The classes of variables that compose the model include self-efficacy, work conditions and environmental supports, resources, and obstacles. Self-efficacy refers to personal beliefs about one's capability to perform

tasks necessary for success in a work context and is assumed to influence job satisfaction as feeling efficacious is inherently satisfying (Lent & Brown, 2006). It is also believed that increased self-efficacy motivates goal behavior, which influences job satisfaction. Work conditions, such as supports and obstacles, are believed to influence job satisfaction by promoting self-efficacy and goal directed behaviors or impeding goal process and lowering outcome expectations (Lent & Brown, 2006). Because cyberbullying can have an effect on workplace conditions, which can in turn lead to lowered self-efficacy beliefs, these constructs will be discussed next in relation to cyberbullying.

Environmental Obstacles. Many aspects of the workplace, such as environmental obstacles, may affect job satisfaction (Lent & Brown, 2006). Common examples of workplace obstacles include stressors, conflict, overload, and ambiguity (Beehr & Glazer, 2005). Environmental barriers can affect job satisfaction indirectly due to their negative effects on goal progress, self-efficacy, and poorer outcome expectations (Lent et al., 2005). As such, cyberbullying could be considered an environmental barrier or obstacle in the workplace within the social cognitive framework.

More specifically, difficulties can arise when there is a disconnect between expectations of one's work environment and the actual work environment, and these discrepancies have been shown to decrease job satisfaction (Kristof-Brown, Zimmerman, & Johnson, 2005). When people accept a job, they typically hold expectations and beliefs that their work environment will be respectful. When faced with cyberbullying, this creates a discrepancy between a person's expectations of the work environment and the actual work environment. Cyberbullying in the workplace can also create an atmosphere of conflict that can be detrimental to those directly or indirectly involved (Madan, 2014). Research has demonstrated conflict in the workplace

decreases job satisfaction (Beehr & Glazer, 2005). Thus, cyberbullying can act as an environmental barrier that has a direct effect on self-efficacy and outcome expectations.

Cyberbullying can also affect goal progress of individuals. Cantor and Sanders (1999) demonstrated access to goal-relevant resources is likely to promote satisfaction, while goal-thwarting conditions may have the opposite effect. Cyberbullying has the potential to thwart access to resources because it has been shown to increase anxiety and depression and lead to increased absenteeism (Baruch, 2005). When people miss work for fear of cyberbullying, the work environment is not only affecting job satisfaction, but it is also diminishing a person's ability to perform the tasks at work. This is an issue for victims of cyberbullying and has larger implications for the work environment as a whole. By using their SCT work satisfaction framework and applying it to cyberbullying in the workplace, researchers might better understand how cyberbullying affects job satisfaction.

Self-Efficacy. According to Social Cognitive Theory (Bandura, 1986), the goals people set for themselves and the progress they make on their goals are partly determined by their self-efficacy. Self-efficacy beliefs are also assumed to have important implications for the experience of satisfaction and other affective states (Lent & Brown, 2006). Self-efficacy has been found to predict job satisfaction in employed workers (Caprara, Barbaranelli, Borgogni, & Steca, 2003). Traditional bullying has been shown to correlate negatively with overall self-efficacy and cyberbullying has been shown to negatively correlate with self-esteem (Kokkinos & Kipritsi, 2012; Patchin & Hinduja, 2010). However, studies have yet to investigate the relationship between self-efficacy and cyberbullying. Further, the studies that have investigated workplace bullying have generally examined bullying in relation to general self-efficacy versus task specific self-efficacy. One important aspect of self-efficacy is social self-efficacy, which has been

defined as a person's confidence in their ability to engage in social interactional tasks necessary to maintain interpersonal relationships (Smith & Betz, 2000). Past research has shown social self-efficacy is one of the most important personal resources in the workplace (Heuven, Bakker, Schaufeli, & Huisman, 2006) and since cyberbullying often occurs within social networks, it is possible social self-efficacy may be more strongly affected by cyberbullying.

Cyberbullying may also be indirectly related to job satisfaction via self-efficacy. Lent and Brown (2006) suggest negative working conditions could decrease self-efficacy beliefs, which could directly lead to lower job satisfaction. For example, an individual working in a job that requires them to have a high degree of social self-efficacy (e.g., effectively communicate with others) may experience a decrease in self-efficacy if they experience cyberbullying, which may then result in decreased job satisfaction (Locke & Sadler, 2007). There is currently a lack of research on cyberbullying and job satisfaction, and Lent and Brown's (2006) model can help guide research in this area. Therefore, the purpose of this study was to investigate the relationship between cyberbullying and job satisfaction and social self-efficacy in a sample of individuals who all experienced cyberbullying. Furthermore, the mediating role of social self-efficacy on job satisfaction for those who have experienced cyberbullying was examined. The pathways that were examined are illustrated in Figure 1.

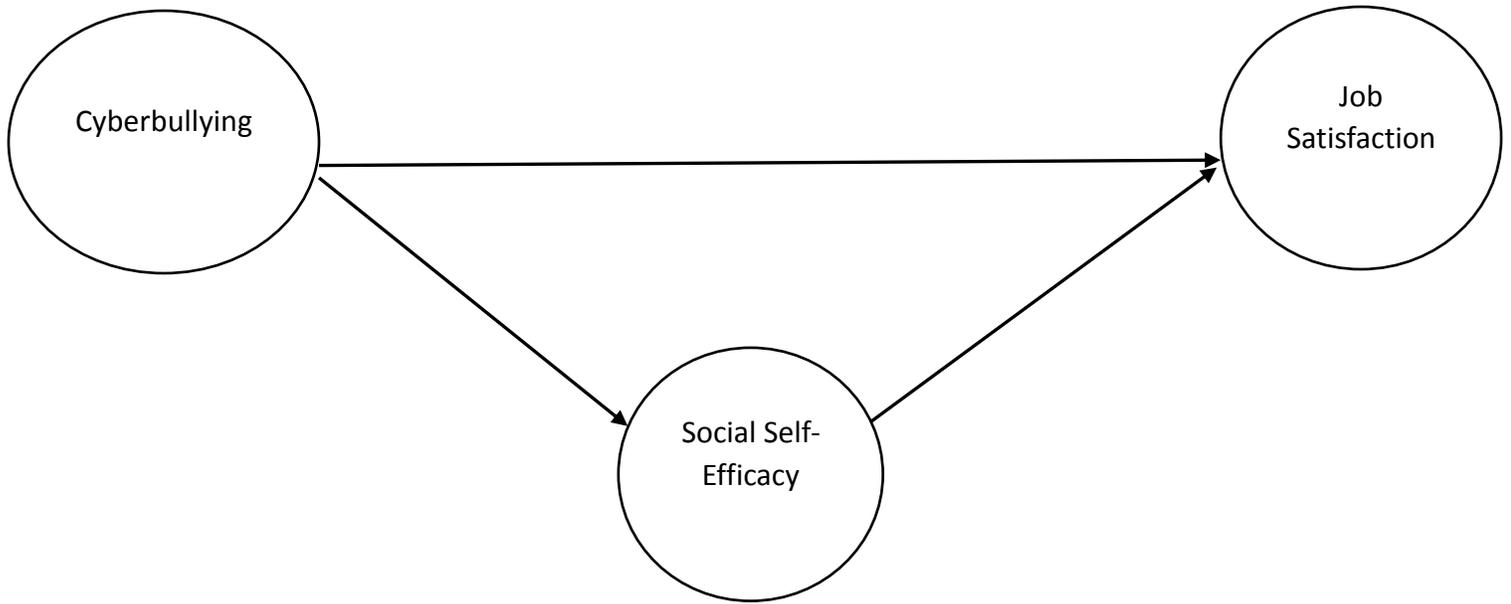


Figure 1. Illustration of pathways examined in the study

Hypotheses

Given the SCT model of work satisfaction's propositions, the following hypotheses were tested on a sample of individuals who experienced cyberbullying: (1) Higher reports of cyberbullying will be negatively related to job satisfaction, (2) Higher reports of cyberbullying will be negatively related to social self-efficacy, (3) Social self-efficacy will be negatively related to job satisfaction, and (4) Social self-efficacy will mediate the relationship between cyberbullying and job satisfaction.

CHAPTER 2

METHODOLOGY

Participants

Participants were 205 employed adults. The majority of respondents (62.4%) fell within the 25-34 age range, 16.59% fell within the 18-24 age range, 15.61% fell within the 35-44 age range, 3.41% fell within the 45-54 age range, and 1.95% of the sample fell within the 55+ age range. 59% of the sample was male. 42% of participants responded while in North America, 31.2% Asia, 12.2% Oceania, 7.3% Europe, 2.4% Middle East, 2% South America, 1% Africa, and 3.9% other/unknown. 42.4% identified as Asian, 36.1% White, 6.8% Black/African American, 6.3% Hispanic or Latino, 4.9% American Indian or Alaska Native, and the remaining 3.4% identified with another racial/ethnic group. Participants represented a wide array of occupations. The most prevalent occupational fields included professional, scientific or technical services (n = 40, 20%), management of companies or enterprises (n = 27, 13%), health care or social assistance (n = 27, 13%), and education (n = 24, 12%). Other participants reported working in manufacturing (n=17, 8.3%), retail (n=15, 7.3%), and construction (n=10, 4.9%).

Measures

Workplace Cyberbullying. Bullying and cyberbullying behaviors in the workplace were measured using the Negative Acts Questionnaire Revised (NAQ-R; Einarsen et al., 2009). Twelve items were used from the NAQ-R to look specifically at interpersonal bullying behaviors in the workplace that could apply to both bullying and cyberbullying. For each of the 12 items, respondents were asked to indicate how often they had been exposed to the behavior in question during the last 6 months. Response categories were coded from 1 to 5 with the alternatives “never,” “now and then,” “monthly,” “weekly,” and “daily.” Sample items include, “having

insulting or offensive remarks made about you,” and “being the subject of excessive teasing and sarcasm.” Cronbach’s alpha for the 22 items in the NAQ-R was .90, indicating excellent internal consistency. The NAQ-R has also demonstrated construct validity as seen by high scores on the NAQ-R correlating with poor mental health, increased absenteeism, and greater inclination to leave one’s job (Einarsen et al., 2009). Following the NAQ-R, participants were provided the option to indicate whether the negative acts took place online, in-person, both, or neither. This allowed us to identify which participants were subjected specifically to cyberbullying and only use those participants in the analyses. Alpha in your sample? Maybe not needed for SEM

Job Satisfaction. Job satisfaction was measured using Scarpello and Campbell’s (1983) single item job satisfaction measure. Participants’ responded to the question, “Overall, how satisfied are you with your job?” on a Likert scale ranging from 1 (“not at all”) to 5 (“very much so”). According to Wanous et al. (1997), single-item measures take up less space, are more cost-effective, and may contain more face validity than multiple-item measures. In a meta-analysis, convergent validity was demonstrated as the averaged correlations between single item measures of job satisfaction and scales was found to average .63 with a corrected mean correlation of .67 (Wanous et al., 1997).

Social Self-Efficacy. Self-efficacy was measured using the Social Self-Efficacy portion of the Self-Efficacy Scale developed by Sherer, Maddux, Mercandante, Prentice-Dunn, Jacobs, and Rogers (1982). The Social Self-Efficacy Scale assesses a person’s beliefs about their interpersonal skills. This is a 6-item subscale in which participants rated their responses to items using 5-point scale with higher scores indicating higher self-efficacy. Example items include, “it is difficult for me to make new friends,” and “I have acquired my friends through my personal abilities at making friends.” The Self-Efficacy Scale as a whole is the most extensively

researched and commonly used scale of general self-efficacy. The social self-efficacy portion of the scale has been shown to have adequate reliability (Cronbach's $\alpha = .71$; Sherer et al., 1982). It has also demonstrated criterion validity by its ability to predict past vocational success and construct validity by confirming several predicted relationships on self-efficacy subscales of other personality measures (Sherer et. al., 1982). What about your alpha? Maybe not needed for SEM

Procedure

Participants were recruited through the online data-collection service Mechanical Turk (MTurk). Amazon Mturk has been shown to be an inexpensive way for social scientists to collect data from demographically diverse samples and yield data that as reliable as those obtained through more traditional methods (Buhrmester, Kwang, & Gosling, 2011). A link to the survey was posted on the MTurk website that indicated the survey was on cyberbullying in the workplace and compensated participants \$.25 for survey completion. During the survey, respondents answered questions regarding instances of cyberbullying in the workplace, current job satisfaction, and social self-efficacy.

946 participants initially completed the survey. The sample was then reduced in several steps. 211 participants were excluded for failure to meet the inclusion criteria of being at least 18 years old and working in an environment with co-workers or for taking the survey multiple times. An additional 118 people were excluded who reported they did not experience any cyberbullying behaviors at work. Finally, 412 participants were excluded who indicated only experiencing traditional face-to-face bullying at work but not cyberbullying. This left a final sample of 205 participants. All 205 participants completed the survey in full and we were left with no missing data.

Data Analysis

The measurement model examined the fit of the latent variables used in the subsequent models. Specifically, this model tested the fit of the twelve cyberbullying items used as the observed latent variables and the 6 social self-efficacy items used as indicators of the latent self-efficacy variable. Once a good fitting measurement model was established, structural equation modeling was used to test the hypotheses of the study. In the structural equation model, the associations between the latent cyberbullying measure, the latent self-efficacy measure, and the latent job satisfaction measure were examined. A test of mediation was also performed to determine whether self-efficacy mediated the association between bullying and job satisfaction.

All models and mediation analyses were evaluated in Mplus 7.11 (Muthén & Muthén, 2012). Maximum likelihood with robust standards errors (MLR) was used as the estimator. This estimator can account for the non-normality of the data (Asparouhov, 2005). Model fit was evaluated using five fit statistics. Specifically, the chi-square test, the root mean square error approximation (RMSEA), the comparative fit index (CFI), the Tucker-Lewis index (TLI), and the standardized root mean square residual (SRMR) were all used to evaluate the fit of the model to the data. A model that fits the data well will typically have a small, non-significant chi-square statistic, a RMSEA less than .05, a CFI and TLI greater than .90, and a SRMR less than .10 (Kline, 2011).

Mediation analyses for both models were conducted using the MODEL INDIRECT statement in Mplus. This statement uses the delta method (Olkin & Finn, 1995) to evaluate mediation. This method is similar to the Sobel test and has been recommended as a mediation test that can be used in path analysis that can produce accurate standard errors (MacKinnon, 2008)

CHAPTER 3

RESULTS

The means, standard deviations, and range of each of the variables used in the study are reported in Table 1. The correlations of each of the variables with all of the other study variables are reported in Table 2.

Table 1. Descriptive and Distribution Statistics for All Variables

	Mean	Standard Deviation	Range
Job Satisfaction	3.32	1.06	1.00-5.00
Cyberbullying Variables			
Humiliated	2.39	1.21	1.00-5.00
Unpleasant tasks	2.44	1.23	1.00-5.00
Gossip	2.48	1.19	1.00-5.00
Ignored	2.70	1.20	1.00-5.00
Offensive Remarks	2.34	1.20	1.00-5.00
Hints to quit	2.26	1.26	1.00-5.00
Reminders of errors	2.58	1.27	1.00-5.00
Hostility	2.52	1.29	1.00-5.00
Persistent criticism	2.43	1.24	1.00-5.00
Practical jokes	2.32	1.31	1.00-5.00
Allegations	2.24	1.26	1.00-5.00
Excessive teasing	2.35	1.27	1.00-5.00
Social Self-efficacy Variables			
Make new friends	2.95	1.33	1.00-5.00
Take initiative	3.18	1.16	1.00-5.00
Persist	3.36	1.17	1.00-5.00
Give up easily	2.86	1.14	1.00-5.00
Social gatherings	2.80	1.29	1.00-5.00
Personal abilities	3.61	1.06	1.00-5.00

Table 2. Correlation Matrix for All Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Humiliated																		
2. Unpleasant tasks	.679*																	
3. Gossip	.525**	.504**																
4. Ignored	.435**	.387**	.508**															
5. Offensive Remarks	.643**	.542**	.673**	.475**														
6. Hints to quit	.595**	.599**	.628**	.513**	.676**													
7. Reminders of errors	.494**	.489**	.583**	.481**	.708**	.597**												
8. Hostility	.567**	.463**	.531**	.620**	.647**	.612**	.665**											
9. Persistent criticism	.544**	.460**	.586**	.489**	.665**	.571**	.731**	.653**										
10. Practical jokes	.603**	.587**	.597**	.440**	.680**	.679**	.582**	.584**	.572**									
11. Allegations	.655**	.538**	.624**	.544**	.697**	.692**	.650**	.701**	.649**	.683**								
12. Excessive teasing	.637**	.571**	.671**	.547**	.743**	.676**	.714**	.713**	.678**	.678**	.794**							
13. Job satisfaction	.061	.051	-.068	-.172*	-.113	.015	-.216**	-.154**	-.233**	.004	-.087	-.090						
14. Make new friends	.346**	.302**	.267**	.367**	.325**	.296**	.355**	.329**	.420**	.255**	.390**	.406**	-.120					
15. Take initiative	.203**	.182**	.168**	.067	.252**	.181**	.149**	.105**	.113**	.217**	.102	.134	.186**	-.013**				
16. Persist	.194**	.214**	.227**	.284**	.202**	.203**	.240**	.231**	.224**	.193**	.231**	.190**	-.080	.437**	.036			
17. Give up easily	.360**	.260**	.302**	.192**	.303**	.361**	.237**	.323**	.209**	.253**	.291**	.342**	.134	-.002	.4373**	.037		
18. Social gatherings	.345**	.358**	.337**	.334**	.388**	.358**	.438**	.435**	.389**	.397**	.437**	.470**	-.186**	.510**	-.087**	.152	.014	
19. Personal abilities	.045	.038	.065	.035	.047	.084	.037	.016	.055	.112	.023	.046	.128	-.220**	.438**	.048	.216**	-.106

Measurement Model

The measurement model, which examines the fit of the latent variables used in the subsequent structural models, initially had a poor fit for the data ($\chi^2 (134) = 317.21, p < .001$; RMSEA = .08; CFI = .89; TLI = .88; SRMR = .09). The standardized estimates were then inspected, which demonstrated the Take Initiative, Give up Easily, and Personal Abilities variables from the social self-efficacy scale had factor loadings less than .2. Therefore, they were removed from the model and the model was run again. In this model, the fit statistics improved ($\chi^2 (89) = 156.78, p < .001$; RMSEA = .06; CFI = .96; TLI = .95; SRMR = .04). Each of the observed indicated variables factor loadings were significant ($p < .001$).

Structural Equation Model. The structural equation model tested the basic hypotheses and demonstrated good fit for the data ($\chi^2 (102) = 190.62, p < .001$; RMSEA = .07; CFI = .94; TLI = .94; SRMR = .05). All fit statistics, with the exception of the chi-square test statistic, suggested the model fit the data well. However, the rest of the fit statistics suggested the model fit well with the data, thus this model was used. Standardized beta coefficients for each of the pathways are presented in Table 3 and the structural equation model is presented in Figure 2.

Table 3. Standardized and Unstandardized Factor Loadings for the Cyberbullying and Social Self-Efficacy Latent Variables

Item	B (SE)	<i>B</i> (SE)
Cyberbullying		
Humiliated	1.00 (--)	.74 (.05)
Unpleasant tasks	.92 (.08)	.67 (.05)
Gossip	1.00 (.09)	.75 (.03)
Ignored	.85 (.09)	.63 (.05)
Offensive remarks	1.14 (.09)	.84 (.02)
Hints to quit	1.12 (.10)	.79 (.04)
Reminders of errors	1.14 (.10)	.79 (.03)
Hostility	1.15 (.10)	.79 (.03)
Persistent criticism	1.08 (.09)	.78 (.04)
Practical jokes	1.15 (.09)	.78 (.03)
Allegations	1.21 (.09)	.86 (.02)
Excessive teasing	1.26 (.10)	.89 (.02)
Social Self-Efficacy		
Make new friends	1.00 (--)	.73 (.07)
Persistence	.59 (.09)	.49 (.08)
Social gatherings	.94 (.15)	.71 (.06)

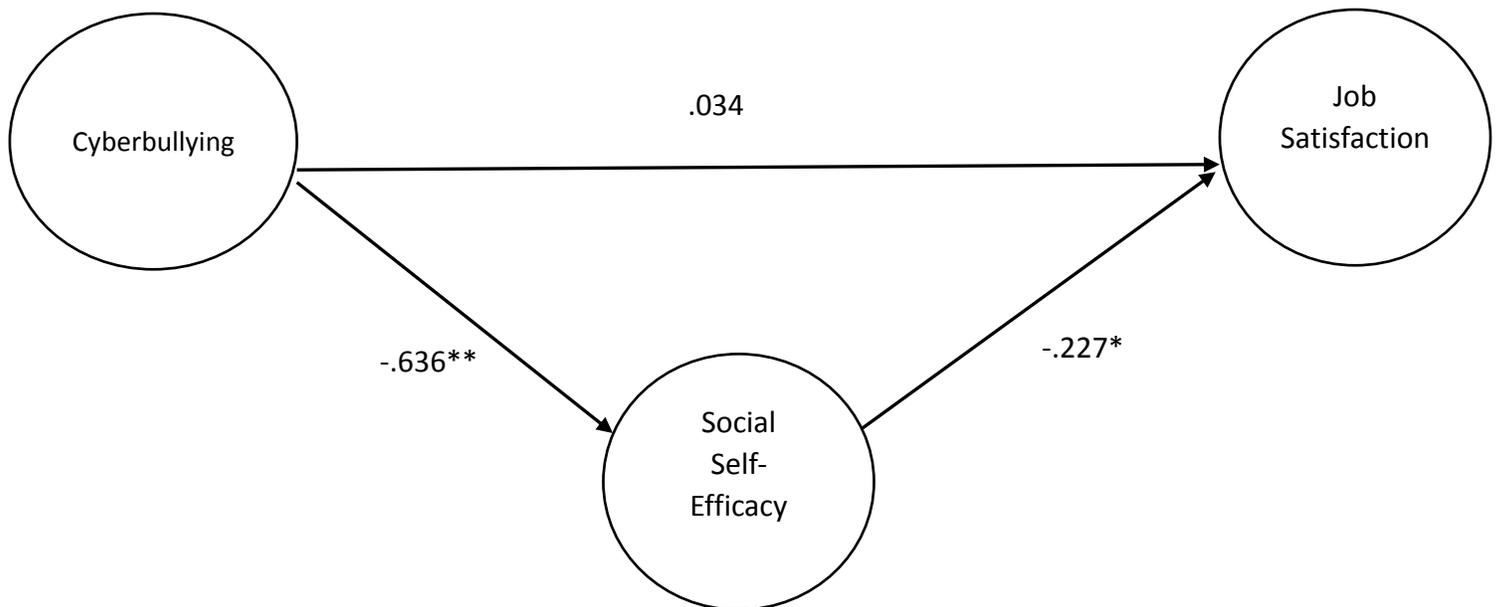


Figure 2. The Structural Equation Model, $\chi^2 (102) = 190.62, p < .001$; RMSEA = .07; CFI = .94; TLI = .94; SRMR = .05

* $p < .05$

** $p < .01$

There was no significant association between cyberbullying and job satisfaction, which does not support the first hypothesis. Results indicated a negative relationship between cyberbullying and social self-efficacy, which supports the second hypothesis. Cyberbullying accounted for 40% of the variance in social self-efficacy ($R^2 = .40, p < .001$). There was a significant association between social self-efficacy and job satisfaction, which supports the third hypothesis. The results of the mediation analysis for the cyberbullying on social self-efficacy model are presented in Table 4.

Table 4. Results of the Mediation Analysis for Cyberbullying on Social Self-efficacy Model

Bully → Job Satisfaction	Estimate	Standard Error	p-value
Total	-.11	.08	.18
Indirect			
Cyberbullying → Self-efficacy → Job satisfaction	-.14	.07	<.05*
Direct			
Cyberbullying → Job satisfaction	.03	.108	.76

These results suggest there was a significant indirect association between cyberbullying, social self-efficacy, and job satisfaction.

CHAPTER 4

DISCUSSION

The goal of this study was to investigate the impact of cyberbullying in the workplace among individuals who are cyberbullied. This was done by examining the relationship between cyberbullying and both job satisfaction and social self-efficacy. In order to achieve this goal, we examined four different hypotheses that were developed to align with a SCT work satisfaction perspective. The first hypothesis was higher reports of cyberbullying will be negatively related to job satisfaction. This hypothesis was addressed by assessing participants' experiences of cyberbullying in relation to their overall job satisfaction. Results did not support this hypothesis and no significant negative correlation was found between cyberbullying and job satisfaction. This result did not replicate findings of similar studies that found a negative correlation between cyberbullying and job satisfaction (Snyman & Loh, 2015).

The second hypothesis was higher reports of cyberbullying will be negatively related to social self-efficacy. This hypothesis was addressed by assessing participants' experiences of cyberbullying in relation to their perceived social self-efficacy. Results of the study supported this hypothesis such that a significant negative relationship was found between these two variables. This demonstrates a direct link between cyberbullying and social self-efficacy and replicates previous findings (Olenik-Shamesh & Heiman, 2015). This consistency in findings illustrates a relationship between these variables.

The third hypothesis was social self-efficacy will be negatively related to job satisfaction. This hypothesis was addressed by assessing the participants' perceived social self-efficacy in relation to their overall job satisfaction. Results of the study indicated a significant negative

relationship between social self-efficacy and job satisfaction. In other words, individuals with lower perceived social self-efficacy had lower job satisfaction.

The fourth hypothesis was social self-efficacy will mediate the relationship between cyberbullying and job satisfaction. This was assessed in our structural equation model by examining the relationship between cyberbullying, social self-efficacy, and job satisfaction. The results of this study supported this hypothesis and demonstrated an indirect relationship between cyberbullying and job satisfaction through social self-efficacy. In this study, social self-efficacy mediated the relationship between cyberbullying and job satisfaction. In other words, being cyberbullied leads to lower social self-efficacy, and lower social self-efficacy is associated with lower levels of job satisfaction. This finding supports the proposition of the SCCT that self-efficacy mediates the relationship between environmental obstacles such as cyberbullying and job satisfaction. Cyberbullying has been demonstrated to an environmental obstacle for many workers (Baruch, 2005) and although it did not have a direct effect on job satisfaction in this study, its indirect effects on job satisfaction provide support for SCT work satisfaction proposition that environmental obstacles may influence job satisfaction by decreasing workers' self-efficacy.

Limitations and Future Directions

The results need to be considered within the limitations of the current study. One of the major limitations of this study is the use of cross-sectional data. Collecting cross-sectional data allowed for the examination of the correlations between the variables of interest but prevented determination of cause and effect relationships between the variables. Conducting an experiment or collecting longitudinal data on individuals related to cyberbullying, social self-efficacy, and job satisfaction may prove useful. This study looked at participants who experienced

cyberbullying in the last six months, and it may be interesting to conduct future studies with both shorter and longer time frames to help determine both the acute and chronic impact of cyberbullying on social self-efficacy and job satisfaction. Including follow-up measures would have also provided useful data to help determine if the negative correlations found in this study were ameliorated after a period of time. A follow-up study to determine the time frame it takes for job satisfaction and social self-efficacy to improve and the ways in which it improved (therapy, self-help books etc.) would provide meaningful data not provided in the present study. These data may prompt the development of solutions to the problems presented by cyberbullying.

Implications

Despite these limitations, the results of the present study offer some information about the indirect link between cyberbullying and job satisfaction and the importance of social self-efficacy in the study of both cyberbullying and job satisfaction. Cyberbullying in the workplace has been relatively unexplored through research when compared to traditional bullying and warrants further exploration so researchers can better understand the prevalence and impact of cyberbullying in the workplace. Cyberbullying could be considered an environmental obstacle within the framework of the SCT work satisfaction model because of its association to lowered social self-efficacy and in turn job satisfaction. These findings align with this model and the importance it places on self-efficacy beliefs in relation to work.

The results of this study are not only of importance to researchers, but may prove useful for workers and employers as well. Cyberbullying was shown to indirectly impact an individual's job satisfaction, which has important implications. If a person has less job satisfaction, this may increase their chances of absenteeism and the likelihood of turnover

(Baruch, 2005). A culture of bullying may also decrease the morale of the workplace and make it hard for employees to work cohesively and productively. A decrease in social self-efficacy may also make it hard for employees to advocate for themselves in the workplace and communicate effectively (Olenik-Shamesh & Heiman, 2015). A workplace environment where cyberbullying is accepted and not vigilantly monitored creates problems at both the individual and systems level and can be avoided through strict cyberbullying policies and enforcement of those policies. Policing employees' cyberbullying activities and creating a culture to report these types of acts is a way to avoid problems for employers. Being knowledgeable about what constitutes cyberbullying and discussing its existence in the workplace could be the first step to creating a healthier work environment.

The results of this study may be useful for counselors because of the major role work plays in a client's life (Lent & Brown, 2006). Work is a major part of a client's identity and cyberbullying may influence a person's ability to feel satisfied with their job. Employment and career counselors may need to consider how cyberbullying can affect clients, their lives, and their work. Minimally, it might be important for counselors to ask clients about their social self-efficacy and experiences with cyberbullying in work environments where there is higher usage of social media networks.

Conclusion

Cyberbullying is an ever growing issue in workplaces (Baruch, 2005). The findings of the current study provide some limited support for using the social cognitive view of work satisfaction and the study of cyber bullying within this framework. Results suggested cyberbullying may influence worker's social self-efficacy, which in turn is associated with lowered job satisfaction. These results provide some preliminary data on the role of

cyberbullying in workers' lives and provide information for counselors who may be working with individuals who use social media regularly in the workplace. Future studies may be able to expand upon this study to better understand the role of cyberbullying in workplace culture.

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