

The Mediating Influence of Job Satisfaction on the Relationship between HR Practices and Cyberdeviance

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Abstract

Despite the many advantages and benefits the Internet offers to the workplace, it also allows people to misuse it while at work. Misusing the Internet during work hours for non-work related purposes is referred to as cyberdeviance. As our theoretical understanding of cyberdeviance is still limited, the purpose of this paper is to explore the role of HR practices in influencing cyberdeviance. It also seeks to examine whether job satisfaction mediates the link between HR practices and cyberdeviance. A survey of 273 administrative employees in four universities in Jordan, who were randomly selected using a cluster technique, was conducted. Frequencies, descriptive statistics, correlation, multiple regression, and hierarchical regression analyses were performed to analyze the data. Factor analyses revealed four dimensions of HR practices i.e. performance appraisal, compensation practice, career advancement, and employment security, while job satisfaction yielded two dimensions i.e. satisfaction with pay, and satisfaction with workload. Results showed that all four dimensions of HR practices were significantly able to explain 68.8% of the variance in cyberdeviance. Satisfaction with pay was found to partially mediate the link between performance appraisal and cyberdeviance. On the other hand, satisfaction with workload was a partial mediator between performance appraisal and cyberdeviance, and between career advancement and cyberdeviance. Recommendations for future research and practice, and limitations of the study are also highlighted.

Keywords: Cyberdeviance, HR Practices, Internet, Job Satisfaction, Jordan

Introduction

The Internet has been dubbed as the “double-edged” sword as it offers both benefits and detriments to the work lives. It has facilitated communication both within an organization and with other organizations, and has enabled employees to be more productive due to increased accessibility to information (Chen, Chen, & Yang, 2008; Henle & Blanchard, 2008). At the same time, it has also invited a myriad of problems at work. For instance, it offers an opportunity for employees to engage in new forms of deviant behavior during work hours such as surfing non-work related sites (Roman, 1996; Tapia, 2006), playing games online, performing personal banking online, updating personal blogs/websites, or using email for personal purposes (Weatherbee, 2010). In other words, according to Lim and Teo (2005), the Internet has given people more chances to waste time in the cyberspace in the name of doing work. For Lim (2002) and her colleagues (Lim & Teo, 2005), such phenomenon is referred to as cyberdeviance.

Previous surveys on Internet-related misbehavior indicated that cyberdeviance is rife in organizations. For instance, the latest survey conducted by Salary.com in 2012 in the USA showed the prevalence of cyberdeviance. Of more than 3200 individuals surveyed between

February and March 2012, 64% of them indicated that they visited non-work related websites every day during work hours (Gouveia, 2012). In a 2008 survey by the Internet Data Corp, it was reported in the USA that 40% of workplace Internet use was not business related and 60% of all online purchases were made during regular work hours (StaffMonitoring.com, 2013). According to the second annual survey by America Online and Salary.com, the biggest distraction at work is personal use of the Internet, which was committed by 52% of the 2,706 respondents during July 2006 (Malachowski & Simonini, 2012). If indeed the statistics reflect the true scenario at work, organizations will end up having losses in productivity and performance. So as wasting time in the cyberspace in the name of doing work can hurt the bottom line of an organization, ways to address such phenomenon need to be found.

According to Robbins and Judge (2010), human resource (HR) practices are one of the factors in the organization that could shape and determine employee responses at work, and may potentially have influence on cyberdeviance. But to date, few studies have considered the influence of such practices on cyberdeviance. Such neglect is unfortunate as studies have found that conducive work environment is important for positive job performance (Arthur, 2011; Bushra, Usman, & Naveed, 2011; Lian & Tui, 2012; Zahari & Shurbagi, 2012).

Secondly, scholars also argue that HR practices have a dismal effect on work-related outcomes (Wright, Gardner, & Moynihan, 2003), suggesting the need to consider a mechanism that mediates between the two. To address this limitation, the present study considered job satisfaction as a generative mechanism that helps explain the link between HR practices and cyberdeviance. This is because separate studies have shown that HR practices are associated with job satisfaction (e.g., Absar et al., 2010; Goyal & Shrivastava, 2012; Hunjra et al., 2010; Javed, Rafiq, Ahmed, & Khan, 2012; Petrescu & Simmons, 2008; Poon, 2004; Širca, Babnik, & Breznik, 2012), and subsequently job satisfaction has been shown to be related to negative work outcomes (e.g., Hausknecht, Hiller, & Vance, 2008; Singh & Loncar, 2010; Wang & Yi, 2011). By incorporating these two streams of research in a single study, it is possible to postulate the mediating link of job satisfaction on the relationship between HR practices and cyberdeviance.

Given the existing gaps in the current body of knowledge, the present study sought to explore the role of HR practices in influencing cyberdeviance at work, and to investigate whether job satisfaction can help explain why HR practices are able to affect cyberdeviance. In achieving these objectives, this paper is organized as follows. A review of relevant literatures leading toward the formulation of the research hypotheses will be offered next. Then, a brief discussion on the method employed to carry out the study is presented. Results and discussion of the findings, and some concluding remarks will follow.

Literature Review

Cyberdeviance

Cyberdeviance is defined as an employee's voluntary use of the company's Internet access during work hours for non-work related purposes (Lim, 2002). Various types of cyberdeviance can be identified from the literature such as playing games online, performing personal banking online, updating personal blogs/websites, or frittering away organizational time using email for non-work related reasons (Weatherbee, 2010). These acts reflect the novel ways the Internet has allowed employees to misbehave at work.

Literature indicates different terminologies used to refer to the same domain of cyberdeviance. Some of the terminologies are as follows:

- a. Cyberdeviance – Employees' non-work related use of company provided email and the Internet while working (Henle & Blanchard, 2008).
- b. Cyberslacking - The usage of e-mail and Internet opportunity unrelated to job in office hours (Phillips & Reddie, 2007).
- c. Cyberslouching – Unproductive Internet surfing (Urbaczewski & Jessup, 2002).

The different terminologies used may reflect the difficulty of conceptualizing cyberdeviance or its variant as what accounts for deviant acts in the cyberspace is not clear cut. However, many scholars seem to be in agreement that prolonged misuse of the Internet during work hours for personal reasons is detrimental to the organization and should be effectively managed (e.g., Lim, 2002; Ugrin, Pearson, & Odom, 2007; Weatherbee, 2010; Weatherbee & Kelloway, 2006).

HR Practices

HR practices refer to a set of approach to acquiring, developing, managing, motivating and gaining the commitment of an organization's key resources, i.e. its employees (Ahmed, 1999). Wright and Kehoe (2008) identified three purposes of HR practices: (1) to improve the knowledge, skills and abilities of employees; (2) to provide opportunities provide opportunities to employees to participate in substantive decision-making regarding work and organizational outcomes; and (3) to motivate employee behavior. According to Wright and Kehoe (2008), different HR practices are meant for different functions. For instance, training and development programs are used to help employees improve their skills and abilities while quality circles and suggestion systems are practices that encourage employee participation. On the other hand, HR practices such as compensation and job have a motivational function. As this set of HR practices is also meant to discourage employees from engaging in negative or counterproductive behavior, this study is concerned with these practices.

Job Satisfaction

Job satisfaction is a form of workplace attitude (Robbins & Judge 2010; Saari & Judge, 2004). Locke (1976) referred to job satisfaction as a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences. A large body of research works have shown the influence of job satisfaction on both positive and negative work outcomes (e.g., Darratt, Amyx, & Bennett, 2010; Judge, Scott, & Ilies, 2006; Kaplan, Ogut, Kaplan, & Aksay, 2012; Wang & Yi, 2011).

Hypotheses Development

HR practices and cyberdeviance

The present study considered the role of performance appraisal, compensation, career advancement, and job security in influencing cyberdeviance because these practices are purported to motive employee behavior at work to perform as expected. Although studies to date are yet to look into the effect of these HR practices on cyberdeviance, evidence indicates that these practices are associated with negative work outcomes such as absenteeism and turnover (e.g., Allen, Shore, & Griffeth, 2003; Alnaqbi, 2011; Pfeifer, 2010; Pizam & Thornburg, 2000). In fact, literature on deviance suggests that HR practices are found to be negatively linked with deviant workplace behavior (e.g., Arthur, 2011; Shamsudin, Subramaniam, & Ibrahim, 2011). According to Lee and Wu (2011), good HR practices set conducive work conditions and environment to enable employees to perform their job. Expectedly, under such work environment employees are less likely to engage in deviant

behavior while at work, such as playing games online or shopping online or doing online banking during work hours. Hence, the following hypothesis is offered:

H1: Employees who perceive HR practices as being favorable are less likely to engage in cyberdeviant activities while at work.

Job satisfaction and cyberdeviance

To date, studies that looked into the effect of job satisfaction and cyberdeviance are limited and the evidence seems to be mixed. For instance, while Garrett and Danzinger (2008) revealed that job dissatisfaction was not significantly associated with personal use of Internet during work, Askew (2012) found that job satisfaction was unrelated to cyberloafing on a desktop but was related to cyberloafing on a cellphone. Galletta and Polak (2003), on the other hand, found a significant association between job satisfaction and Internet abuse.

Despite the mixed evidence, job satisfaction has the potential to increase employee engagement in cyberdeviance because past research works have indicated that it was significantly associated with specific deviant behavior outcomes such as absenteeism (e.g., Hausknecht et al., 2008), turnover (Singh & Loncar, 2010; Wang & Yi, 2011), theft (Kulas, McInnerney, DeMuth, & Jadwinski, 2007), and even general deviant workplace behavior (e.g., Darratt et al., 2010; Kidwell & Valentine, 2009).

According to Farrell (1983), dissatisfied individuals at work have theoretically four possible behavioral responses: exit, voice, loyalty, and neglect. Rusbult, Farrell, Rogers, and Mainous (1988) defined neglect as "... passively allowing conditions to deteriorate through reduced interest or effort, chronic lateness or absences, using company time for personal business, or increased error rate" (p. 601). Based on Farrell's conceptualization, cyberdeviance can be considered as a form of neglect as dissatisfied employees respond to the unfavorable work conditions by misusing the Internet to engage in non-work related purposes during the company's time. Galletta and Polak (2003) suggested that job dissatisfaction is likely to increase Internet abuse because users are likely to be detached from aspects of their jobs and engage in Internet abuse by substituting other activities. Hence, the following hypothesis is formulated:

H2: The more satisfied employees are with their job, the less likely they are to engage in cyberdeviance while at work.

HR practices, job satisfaction, and cyberdeviance

It has been said that HRM is composed of the policies, practices, and systems that influence employees' behavior, attitude, and performance (Guest, 2001; Noe, Hollenbeck, Gerhart, & Wright, 2009). However, many scholars believe that the HRM practices and policies do not directly shape employee attitudes and behavior; rather there exists a generative mechanism that explains how those practices are able to influence them (e.g., Huselid & Becker, 2011; Jiang, Lepak, Hu, & Baer, 2012). Within the HR literatures, the integration of mediation or moderation is possibly employed to help explain further how and why HR practices lead to cyberdeviance at work.

The present study considers job satisfaction as a possible mediating mechanism in enhancing theoretical understanding of the effects of HR practices on cyberdeviance. It is possible to theoretically conjecture the link because separate and distinct studies found HR practices to

positively affect job satisfaction (e.g., Absar et al., 2010; Goyal & Shrivastava, 2012; Petrescu & Simmons, 2008; Širca et al., 2012).

Literature indicates that employees are likely to develop a positive affect and attitude when the organization is perceived to implement favorable HR practices (e.g., Edgar & Geare, 2005; Širca et al., 2012). Good HR practices set conducive work conditions and environment that make the employees feel satisfied and motivated toward the accomplishment of their job performance (Lee & Wu, 2011). Several scholars (e.g., James & James, 1989; James et al., 1978; Koys & DeCotiis, 1991; Schneider, 1975) noted that employees develop a general perception of their work environment based on their cognitive interpretation and assessment of whether the psychological climate is good or bad. As noted by Lee and Wu (2011), the good or bad experience with the organization consequently results in the employees being satisfied and proud with it. Because cyberdeviance is a possible response to frustrating job experiences, therefore it is postulated that job dissatisfaction is likely to influence cyberdeviance (Lieberman et al., 2011). Based on the above arguments, the following hypothesis is formulated:

H3: Job satisfaction mediates the link between HR practices and cyberdeviance at work.

Method

Procedure and Sample Characteristics

Data were obtained through the use of questionnaire survey which was personally distributed to the administrative staff in public and private universities in Amman, Jordan. Participants were administrative staff with access to the Internet while at work. Prior to the design of the questionnaire, a pilot test was conducted to ensure that the prepared items were easily understood. Issues, concerns and suggestions raised by the participants in the pilot study stage were noted. Their feedback and comments were incorporated into the final questionnaire.

Cluster sampling was used to identify the number of universities (and hence the participants) to be included in the sample. Based on the cluster sampling four universities were randomly selected. After that an approval to conduct the survey was granted from the respective university administration. Out of 284 questionnaires sent personally by hand to the participants in different departments and sections of the university, only 273 cases were usable for final data analysis. Participants took an average between 15 and 20 minutes to complete the survey. The data collection was carried out for the period of five months from February until June 2011.

Of the 273 participants, about 47% were men. The average age was 32.7, and on average they had worked with the university close to 6 years ($SD = 2.58$). As expected, the majority of the participants were Arab (98.2%). Very few of them were of non-Arab nationality, possibly of Turk and Turkish descent, who can speak the Arabic language fluently. The participants were either mainly married (54.2%) or single (44%), while a small percentage were divorced. Most of the participants had attained on average undergraduate level of education. The average monthly salary was JD450. They were also asked whether their job requires them to use the computer and the majority affirmed such usage. On average, the computer usage was 5.6 hours per day.

Measures

Cyberdeviance

Two categories of cyberdeviance were used to measure cyberdeviance: browsing and emailing activities, following Lim and Teo (2005). Browsing activity refers to using company's Internet

access to browse non-work related websites while at work, and e-mailing activities refer to sending, receiving and checking non-work related e-mails while at work. These two categories had 11 items. Participants were asked to read the possible activities that people could carry out when using the Internet at work as listed, on a six-point scale, ranging from '1' "Constantly" to '6' "Never" during working hours. The use of this instrument was deemed to be appropriate as it was reported to have psychometric properties of .85 for the browsing activities and .90 for the e-mailing activities (Lim, 2002; Lim & Teo, 2005).

Human resource practices

Employees' perceptions of performance appraisal, employment security, compensation, and career advancement were used to operationalize human resource practices. These specific and distinct dimensions were particularly chosen because they were deemed to be relevant in explaining deviant behavior in general (e.g., Schnake, Williams, & Fredenberger, 2007; Zhao & Zhou, 2008). The items to measure the specific practices were adapted from two studies of Delery and Dotty (1996), and Snell and Dean (1992). The use of the instruments from these studies was based on their wide application in various studies earlier (Ahmad & Schroeder, 2003; Chi, Huang, & Lin, 2009; Hsu, Lin, Lawler, & Se-Hwa, 2007). All items were measured to on a 5-point Likert scale, ranging from '1' "Strongly agree" to '5' "Strongly disagree."

Job satisfaction

Job satisfaction refers to affective feelings toward the more specific job or work role (Kooij, Jansen, Dijkers, & De Lange, 2010). The instrument used to measure job satisfaction was Measure of Job Satisfaction (MJS), which was originally devised by Price Waterhouse (Van Saane, Sluiter, Verbeek & Frings-Dresen, 2003). This instrument has been used extensively by many researchers (Adams & Bond, 2000; Barrett, & Yates, 2002; Traynor & Wade, 1993; Van Saane, Sluiter, Verbeek & Frings-Dresen, 2003). Traynor and Wade (1993) reported the Cronbach's alpha of the scale at .95. Participants were asked to think about their current job and indicate their degree of satisfaction or dissatisfaction on a five-point scale, ranging from '1' "Very dissatisfied" to '5' "Very satisfied" on items such as "My workload," "The degree to which I am fairly paid for what I contribute to this university," and "The hours I work."

Result

Data were analyzed using SPSS Version 19 Software. Data were first checked for missing values and outliers before they were subject to further tests. Factor analysis was run on the main constructs: cyberdeviance, job satisfaction, and HR practices. Based on factor analysis, cyberdeviance was found to be unidimensional, contrary to the original theoretical exposition. Each HR practice was also found to be unidimensional, and job satisfaction was found to have two components i.e. satisfaction with pay and satisfaction with workload. These two components were then treated as separate variables in the later analyses, and hence the research hypotheses were modified accordingly. After factor analysis was performed, reliability, correlation, and multiple regression analyses were then run.

Table 1 shows the mean, intercorrelations and reliability coefficients of the main variables. As indicated, the instruments that measured the main variables were deemed to be reliable, as the alpha coefficients were all beyond the acceptable level of .60 (Nunnally, 1978). The correlations between HRP and cyberdeviance showed expected result i.e. all correlations were negative and significant. Similarly, the relationship between job satisfaction and cyberdeviance was also significant and negative, consistent with expectation.

Table 1: Mean, Intercorrelations, and Reliability Coefficients of Main Variables

	PA	CP	ES	CA	SW	SP	CD	Mean	α
PA	1							3.105	.930
CP	.850**	1						3.140	.863
ES	.715**	.752**	1					2.903	.886
CA	.841**	.796**	.746**	1				3.049	.804
SW	.649**	.610**	.620**	.645**	1			2.672	.879
SP	.770**	.736**	.718**	.648**	.647**	1		3.115	.930
CD	-.767**	-.677**	-.621**	-.735**	-.694**	-.723**	1	3.150	.928

Note.

** Correlation is significant at the .01 level (2-tailed).

PA = Performance appraisal; CP = Compensation practice; ES = Employment security; CA = Career advancement; SW= Satisfaction with workload; SP= Satisfaction with pay; CD= Cyberdeviance

To test the first and the second hypotheses, regression analysis was performed separately. Prior to the analysis, the assumptions of the test were checked. No significant violation to normality, linearity, homoscedasticity, multicollinearity, and independence of errors was found.

Based on the regression analysis, the four dimensions of HR practices were found to explain 61.8% of the total variance in cyberdeviance ($R^2 = .618$, $F = 108.466$, $p < .01$), supporting H1 (refer to Table 2 without mediator). But of the four HR practices, only performance appraisal and career advancement were found to be significant predictors of cyberdeviance.

In a separate regression analysis, the two dimensions of job satisfaction were treated as the independent variables while cyberdeviance the dependent variable. As expected, satisfaction with pay and satisfaction with overload explained significantly 61% of the total variance in cyberdeviance, thus supporting H2.

HR Practices, Satisfaction with Pay, and Cyberdeviance

To test the mediating effect of job satisfaction on the relationship of HR practices and cyberdeviance, hierarchical multiple regression analysis was run following the steps of Baron and Kenney (1986). In the first step, all dimensions of HR practices were entered as the independent variables and cyberdeviance as the dependent variable. In the second step the mediating variable of job satisfaction was regressed against cyberdeviance. In the final step the independent variables of HR practices and job satisfaction were entered into the model as the predictor variables while cyberdeviance as the dependent variable.

In the first model, the independent variables of performance appraisal, compensation practice, career advancement, and employment security were found to significantly explain 61.8% of the total variance in cyberdeviance, as indicated earlier. The significant result fulfilled the first step in the mediating test, which means that the second step could be pursued.

Then, in the second model, the predictor variables of specific HR practices were regressed against satisfaction with pay. The model was also found to be significant ($R^2 = .635$, $F = 116.789$, $p < .01$). The model showed that all the independent variables were positively associated with satisfaction with pay and explained significantly 63.5% satisfaction with pay. The significant result fulfilled the second step in the mediating test, which means that the third step could be pursued.

Next, in the third model, all the independent variables of performance appraisal, compensation practice, career advancement, employment security, and satisfaction with pay were entered into the regression equation as the independent variables, and cyberdeviance as the dependent variable. The model was also found to be significant ($R^2 = .649$, $F = 98.591$, $p < .01$). Table 2 shows the result.

Because the third model was found to be significant, the researcher proceeded with assessing the mediating effect of satisfaction with pay to see whether full or partial mediation was obtained. To achieve this, the beta values of the significant predictors in the first and the third model were compared.

Table 2 shows that the strength of the relationship between performance appraisal and cyberdeviance decreased after the inclusion of satisfaction with pay, but the relationship still remained significant. This indicates that satisfaction with pay partially mediated the link between performance appraisal and cyberdeviance. However, the strength of the relationship between career advancement and cyberdeviance increased after the inclusion of the mediating variable, suggesting that satisfaction with pay was not a mediator. Such result may indicate a direct rather than an indirect link between career advancement and cyberdeviance.

Table 2: Summary of the Results of Hierarchical Regression Analysis
(HR → Satisfaction with Pay → Cyberdeviance)

Without mediator		With mediator	
Independent variables	Std. beta	Independent variables	Std. beta
Performance appraisal	-.506**	Performance appraisal	-.387*
Compensation practice	.029	Compensation practice	.080
Career advancement	-.276**	Career advancement	-.289**
Employment security	-.076	Employment security	-.027
		Satisfaction with pay	-.289**
R ²	.654	R ²	.676
Adj. R ²	.648	Adj. R ²	.668
F	101.045	F	92.331
Sig.	.0001	Sig.	.00011

Note.

* $p < .05$, ** $p < .01$

HR Practices, Satisfaction with Workload, and Cyberdeviance

The same procedure as above was repeated to assess the mediating effect of satisfaction with workload. Table 3 shows the result. After the inclusion of the mediator of satisfaction with workload, the strength of the relationship between performance appraisal and cyberdeviance decreased, but the relationship still remained significant. This indicates that satisfaction with workload partially mediated the link between performance appraisal and cyberdeviance. With regards to career advancement, the beta value of career advancement decreased but still remained significant, suggesting that satisfaction with workload partially mediated the link between career advancement and cyberdeviance.

Table 3: Summary of the Results of Hierarchical Regression Analysis
(HR → Satisfaction with Workload → Cyberdeviance)

Without mediator		With mediator	
Independent variables	Std. beta	Independent variables	Std. Beta
Performance appraisal	-.506**	Performance appraisal	-.420**
Compensation practice	.029	Compensation practice	.034
Career advancement	-.276**	Career advancement	-.212**
Employment security	-.076	Employment security	-.001
		Satisfaction with workload	-.307**
R ²	.618	R ²	.667
Adj. R ²	.612	Adj. R ²	.661
F	108.466	F	106.938
Sig.	.0001	Sig.	.0001

Note.

* $p < .05$, ** $p < .01$

Discussion

The present study sought to investigate the effect of HR practices on cyberdeviance. Result indicates that a set of HR practices was able to predict cyberdeviance. The finding appears to lend support to the existing literatures on the negative contribution of HR practices on deviant behavior at work (e.g., Arthur, 2011; Allen, Shore, & Griffeth, 2003; Pizam & Thornburg, 2000; Shamsudin, Subramaniam, & Ibrahim, 2011), suggesting that workplace deviance is a response to unfavorable work environment (de Lara & Verano-Tacoronte, 2007; de Lara, 2007, 2009; Fitzgerald, Drasgow, Hulin, Gelfand, & Magley, 1997; Lim, 2005; Shamsudin, 2004). However, the evidence also indicates that different HR practices have different influencing effect on cyberdeviance. Performance appraisal and career advancement, in particular, were observed to be significant predictors of cyberdeviance with the former had a more significant influence on cyberdeviance than the latter, as revealed by the beta values.

According to Shamsudin, Subramaniam, and Ibrahim (2011), appraisal system is one of the most contentious HR practices as it tends to be perceived as being unfairly implemented. When raters are perceived to rate and assess employee performance unfairly, procedural justice is said to occur. Procedural justice reflects how fairly organizational procedures are designed (de Lara & Verano-Tacoronte, 2007) or how fair the processes are perceived to be used in determining outcome allocation (Lim, 2002). Researchers have generally found that procedural justice is linked with negative work outcomes (e.g., de Lara & Verano-Tacoronte, 2007; Skarlicki & Folger, 1997; Skarlicki, Folger, & Tesluk, 1999) such as cyberdeviance (de Lara, 2007, 2009; Lim, 2005). This also could explain the negative relationship found between performance appraisal and cyberdeviance at work.

Whilst to date no one study has looked into the effect of career advancement and growth on cyberdeviance, the result seems to be consistent with previous studies that found that career advancement reduced turnover intention (e.g., Jawahar & Hemmasi, 2006; Schnake, Williams, & Fredenberger, 2007; Zhao & Zhou, 2008). According to Rousseau (2004), an organization has an obligation to meet its psychological contract with its employees and one of the obligations is providing them with opportunities for career growth. According to the theory of met expectations (Porter & Steers, 1973), people's attitudes and behavior is the result of the degree to which the organization meets their expectations. When these expectations are met, employees will respond by contributing more to the organizational goals. Alternatively, when employees feel that the organization fails to carry out its obligation by failing to meet their expectations for career growth, they will respond accordingly i.e. respond negatively and one of the negative behavioral responses is in the form of cyberdeviance while at work.

The study also revealed significant relationship between job satisfaction and cyberdeviance. The finding seems to be consistent with previous literature on the negative influence of job satisfaction on cyberdeviance. Employees tend to engage in negative behavioral responses or negative deviance at work when they are dissatisfied with their job (e.g., Darratt, Amyx, & Bennett, 2010; Judge, LePine, & Rich, 2006; Kidwell & Valentine, 2009; Mount, Ilies, & Johnson, 2006).

Finally, the study explored the mediating effect of job satisfaction on the relationship between HR practices and cyberdeviance. Result showed that job satisfaction operates as a mediating link between HR practices and cyberdeviance. In general, the result is consistent with previous works that revealed the mediating role of job satisfaction as a significant mechanism in explaining work-related outcomes such as turnover (Poon, 2004), organizational commitment (Cheung et al., 2009), and organizational citizenship behavior (Ilies et al., 2009). This finding also provides empirical support for the argument that HR practices have a dismal effect on work-related outcomes (Wright, Gardner, & Moynihan, 2003).

The finding revealed that the dimensions of job satisfaction not only had a direct relationship to cyberdeviance, but they also mediated the relationship between relevant HR practices and cyberdeviance. Specifically, both satisfaction with pay and workload were found to partially mediate the relationship between performance appraisal and cyberdeviance. Further, the finding indicated that satisfaction with workload partially mediated the link between career advancement and cyberdeviance. The result suggests that when HR practices are deemed to be favorable, they are likely to increase employee satisfaction, which leads to reduced likelihood of their engagement in cyberdeviance at work.

The findings of the present study have a number of important implications to practice. Based on the findings, the present study recommends that managers and business practitioners re-visit their current practices of managing their human resources. In particular, specific attention should be given to performance appraisal and career advancement as these practices are likely to reduce the occurrence of cyberdeviance. In particular, HR managers need to understand that unfair and subjective performance ratings and lack of career opportunities could elicit undesirable responses from the employees. Hence, implementing an objective and fair assessment of employee performance and offering opportunities for the employees to grow within the organization are crucial to produce the desired behavioral and attitudinal work responses.

Although the findings have shed some light into the role of HR practices in affecting cyberdeviance, they have to be interpreted with caution. To what extent the finding can be generalizable to a larger population of employees in various occupations and across wider organizations is debatable as the sample consisted of administrative employees in universities. Future studies may wish to consider this issue. Secondly, due to the cross-sectional nature of the study, attributing causality to the findings is problematic.

Conclusion

The present study has sought to explore the role of HR practices in reducing cyberdeviance, a negative consequence brought by the application of the Internet technology at the workplace, and to discover the role of job satisfaction in explaining this relationship. The result found empirical support for the significant influence of HR practices on cyberdeviance, suggesting that favorable work environment is imperative in reducing negative work responses such as

cyberdeviance. The findings of the present study offer some practical insight into the need for organizations to re-visit their HR practices.

The advent of the Internet at the workplace has created possibilities for employees to engage in behaviors never imagined before. Because cyberdeviance is a new phenomenon at work, it offers exciting and new opportunities for scholars and researchers to engage in scientific inquiries to understand this phenomenon better. Although the present study has modestly added to the growing body of cyberdeviance literature, many questions on what, why, how, and why still remain unanswered.

References

- Absar, M. M., Azim, M. T., Balasundaram, N., & Akhter, S. (2010). Impact of human resources practices on job satisfaction: Evidence from manufacturing firms in Bangladesh. *Petroleum-Gas University of Ploiesti Bulletin*, 62(2), 31-42.
- Adams, A., & Bond, S. (2000). Hospital nurses' job satisfaction, individual and organizational characteristics. *Journal of Advanced Nursing*, 32(3), 536-543.
- Ahmad, S., & Schroeder, R. G. (2003). The impact of human resource management practices on operational performance: Recognizing country and industry differences. *Journal of Operations Management*, 21(1), 19-43.
- Ahmed, S. (1999). The emerging measure of effectiveness for human resource management. *Journal of Management Development*, 18(5/6), 543-556.
- Allen, D. G., Shore, L. M., & Griffeth, R. W. (2003). The role of perceived organizational support and supportive human resource practices in the turnover process. *Journal of Management*, 29(1), 99-118.
- Alnaqbi, W. (2011). *The relationship between human resource practices and employee retention in public organisations: An exploratory study conducted in the United Arab Emirates*. Unpublished doctoral dissertation, Edith Cowan University, Australia.
- Arthur, J. B. (2011). Do HR system characteristics affect the frequency of interpersonal deviance in organizations? The role of team autonomy and internal labor market practices. *Industrial Relations*, 50(1), 30-56.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Barrett, L., & Yates, P. (2002). Oncology/haematology nurses: A study of job satisfaction, burnout, and intention to leave the specialty. *Australian Health Review*, 25(3), 109-121.
- Bushra, F., Usman, A., & Naveed, A. (2011). Effect of transformational leadership on employees' job satisfaction and organizational commitment in banking sector of Lahore (Pakistan). *International Journal of Business and Social Science*, 2(18), 261-267.
- Chen, J. V., Chen, C. C., & Yang, H-H. (2008). An empirical evaluation of key factors contributing to internet abuse in the workplace. *Industrial Management & Data Systems*, 108(1), 87-106.
- Cheung, M. F. Y., & Cheung, W-P.W., Chan, A. K. K., & Wong, M. M. L. (2009). Supervisor-subordinate guanxi and employee work outcomes: The mediating role of job satisfaction. *Journal of Business Ethics*, 88, 77-89.
- Chi, N.-W., Huang, Y., & Lin, S. (2009). A double-edged sword? Exploring the curvilinear relationship between organizational tenure diversity and team innovation: The moderating role of team-oriented HR practices. *Group & Organization Management*, 34, 698-726.
- Darratt, M., Amyx, D., & Bennett, R. (2010). An investigation into the effects of work-family conflict and job satisfaction on sales person deviance. *Journal of Personal Selling & Sales Management*, 30(3), 239-251.

- de Lara, P. Z. M. (2007). Relationship between organizational justice and cyberdeviance in the workplace: Has “anomia” a say in the matter? *CyberPsychology & Behavior*, 10(3), 464-470.
- de Lara, P. Z. M. (2009). Inequity, conflict, and compliance dilemma as causes of cyberdeviance. *International Journal of Conflict Management*, 20(2), 188-201
- de Lara, P. Z. M., & Verano-Tacoronte, D. (2007). Investigating the effects of procedural justice on workplace deviance: Do employees’ perceptions of conflicting guidance call the tune? *International Journal of Manpower*, 28, 8, 715-729.
- Delery, J. E., & Doty, D. H. (1996). Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance predictions. *Academy of Management Journal*, 39(4), 802-835.
- Edgar, F., & Geare, A. (2005). HRM practice and employee attitudes: Different measures - different results. *Personnel Review*, 34(5), 534 – 549.
- Fitzgerald, L. F., Drasgow, F., Hulin, C. L., Gelfand, M. J., & Magley, V. J. (1997). Antecedents and consequences of sexual harassment in organizations: A test of an integrated model. *Journal of Applied Psychology*, 82(4), 578-589.
- Galetta, D. F., & Polak, P. (2003). Empirical investigation of antecedents of Internet abuse in the workplace. *Proceedings of the Second Annual Workshop on HCI Research in MIS*, Seattle, WA, December 12-13.
- Gouveia, A. (2012). *Wasting time at work 2012*. Retrieved from: <http://www.salary.com/wasting-time-at-work-2012/>
- Goyal, R., & Shrivastava, M. (2012). A study of HR practices and their impact on employees job satisfaction and organizational commitment in pharmaceuticals industries. *International Journal of Business Trends and Technology*, 2(3), 22-28.
- Guest, D. E. (2001). Human resource management: When research confronts theory. *International Journal of Human Resource Management*, 12(7), 1092-1106.
- Hausknecht, J. P., Hiller, N. J., & Vance, R. J. (2008). Work-unit absenteeism: Effects of satisfaction, commitment, labor market conditions, and time. *Academy of Management Journal*, 51(6), 1223–1245.
- Henle, C., & Blanchard, A. (2008). The interaction of work stressors and organizational sanctions on cyberdeviance. *Journal of Managerial Issues*, 20(3), 383–400.
- Hsu, I.-C., Lin, C. Y.-Y., Lawler, J. J., & Se-Hwa, W. (2007). Toward a model of organizational human capital development: Preliminary evidence from Taiwan. *Asia Pacific Business Review*, 13(2), 251-275.
- Hunjra, A. I., Chani, M. I., Aslam, S., Azam, M., & Rehman, K. U. (2010). Factors affecting job satisfaction of employees in Pakistani banking sector. *African Journal of Business Management*, 4(10), 2157-2163.
- Huselid, M. A., & Becker, B. E. (2011). Bridging micro and macro domains: Workforce differentiation and strategic human resource management. *Journal of Management*, 37, 421-428.
- Ilies, R., Smithey, I., Spitzmuller, M., & Johnson, M. D. (2009). Personality and citizenship behavior: The mediating role of job satisfaction. *Journal of Applied Psychology*, 94(4), 945–959.
- James L. R., Hater, J. J., Gent, M. J., & Bruni, J. R. (1978). Psychological climate: Implications from cognitive social learning theory and interactional psychology. *Personnel Psychology*, 31(4), 783-813.
- James, L. A., & James, L. R. (1989). Integrating work environment perceptions: Explorations into the measurement of meaning. *Journal of Applied Psychology*, 74, 739-751.

- Javed, M., Rafiq, M., Ahmed, M., & Khan, M. (2012). Impact of HR practices on employee job satisfaction in public sector organizations in Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, 4(1), 348-363.
- Jawahar, I. M., & Hemmasi, P. (2006). Perceived organizational support for women's advancement and turnover intentions: The mediating role of job and employer satisfaction. *Women in Management Review*, 21(8), 643-661.
- Jiang, K., Lepak, D. P., Hu, J., & Baer, J. C. (2012). How does human resource management influence organizational outcomes? A meta-analytic investigation of mediating mechanisms. *Academy of Management Journal*, 55(6), 1264-1294.
- Judge, T. A., Scott, B. A., & Ilies, R. (2006). Hostility, job attitudes, and workplace deviance: Test of a multilevel model. *Journal of Applied Psychology*, 91, 126-138.
- Kaplan, M., Ogut, E., Kaplan, A., & Aksay, K. (2012). The relationship between job satisfaction and organizational commitment: The case of hospital employees. *World Journal of Management*, 4(1), 22-29.
- Kidwell, R. E., & Valentine, R. E. (2009). Positive group context, work attitudes, and organizational misbehavior: The case of withholding job effort. *Journal of Business Ethics*, 86, 15-28.
- Kooij, D. T., Jansen, P. G., Dijkers, J. S., & De Lange, A. H. (2010). The influence of age on the associations between HR practices and both affective commitment and job satisfaction: A meta-analysis. *Journal of Organizational Behavior*, 31(8), 1111-1136.
- Koys, D. J., & DeCotiis, T. A. (1991). Inductive measures of psychological climate. *Human Relations*, 44(3), 49-58.
- Kulas, J. T., McInnerney, J. E., DeMuth, R. F., & Jadwinski, V. (2007). Employee satisfaction and theft: Testing climate perceptions as a mediator. *Journal of Psychology*, 141(4), 389-402.
- Lee, F-H., & Wu, W-Y. (2011). The relationships between person-organization fit, psychological climate adjustment, personality traits, and innovative climate: Evidence from Taiwanese high-tech expatriate managers in Asian countries. *African Journal of Business Management*, 5(15), 6415-6428.
- Lieberman, B., Seidman, G., McKenna, K. Y.A., & Buffardi, L. E. (2011). Employee job attitudes and organizational characteristics as predictors of cyberloafing. *Computers in Human Behavior*, 27, 2192-2199.
- Lim, V. (2002). The IT way of loafing on the job: Cyberdeviance, neutralizing and organizational justice. *Journal of Organizational Behavior*, 23(5), 675-694.
- Lim, V. (2005). The moderating effect of neutralization technique on organizational justice and cyberdeviance. *PACIS 2005 Proceedings*, 18.
- Lim, V., & Teo, T. (2005). Prevalence, perceived seriousness, justification and regulation of cyberdeviance in Singapore: An exploratory study. *Information & Management*, 42(8), 1081-1093.
- Locke, E. (1976). The nature and causes of job satisfaction. In M. D. Dunnette (Ed.). *Handbook of industrial and organizational psychology* (pp. 1297-1349). Chicago: Rand McNally.
- Malachowski, D., & Simonini, J. (2012). *Wasted time at work still costing companies billions in 2006*. Retrieved from: <http://www.salary.com/wasted-time-at-work-still-costing-companies-billions-in-2006/>
- Mount, M., Ilies, R., & Johnson, E. (2006). Relationship of personality traits and counterproductive work behaviors: The mediating effects of job satisfaction. *Personnel Psychology*, 59(3), 591-622.
- Noe, R., Hollenbeck, J., Gerhart, B., & Wright, P. (2009). *Human resource management* (7th ed.). New York: McGraw Hill.
- Nunnally, J. (1978). *Psychometric theory*. New York: McGraw-Hill.

- Petrescu, A. I., & Simmons, R. (2008). Human resource management practices and workers' job satisfaction. *International Journal of Manpower*, 29(7), 651-667.
- Phillips, J. G., & Reddie, L. (2007). Decisional style and self-reported email use in the workplace. *Computers in Human Behavior*, 23, 2414-2428.
- Pizam, A., & Thornburg, S. W. (2000). Absenteeism and voluntary turnover in Central Florida hotels: A pilot study. *Hospitality Management*, 19, 211-217.
- Poon, J. M. L. (2004). Effects of performance appraisal politics on job satisfaction and turnover intention. *Personnel Review*, 33(3), 322 – 334.
- Porter, L. W., & Steers, R. M. (1973). Organization, work and personal factors in employee turnover and absenteeism. *Psychological Bulletin*, 80, 151-176.
- Robbins, S. P. & Judge, T. A. (2010). *Organizational behavior* (14th ed.). New York: Prentice Hall.
- Roman, L. (1996). Survey: Employees traveling in cyberspace while on the clock. *Memphis Business Journal*, 10, 2-3.
- Rousseau, D. (2004). Psychological contracts in the workplace: Understanding the ties that motivate. *The Academy of Management Executive*, 18(1), 120-127.
- Saari, L. M., & Judge, T. A. (2004). Employee attitudes and job satisfaction. *Human Resource Management*, 43(4), 395-407.
- Schnake, M. E., Williams, R. J., & Fredenberger, W. (2007). Relationships between frequency of use of career management practices and employee attitudes, intention to turnover, and job search behavior. *Journal of Organizational Culture, Communication and Conflict*, 11(1), 53-64.
- Schneider, B. (1975). Organizational climate: An essay. *Personnel Psychology*, 28(1), 447-479.
- Shamsudin, F. M. (2004). Are you listening? *Studying and understanding organizational misbehavior in the Malaysian context*. Unpublished doctoral thesis, Lancaster University, UK.
- Shamsudin, F. M., Subramaniam, C., & Ibrahim, H. (2011). HR practices and deviant behavior at work: An exploratory study. *International Proceedings of Economics Development & Research*, 16, 13-17.
- Singh, P., & Loncar, N. (2010). Pay satisfaction, job satisfaction, and turnover intent. *Relations Industrielles*, 65(3), 470-490.
- Širca, N. T., Babnik, K., & Breznik, K. (2012). *The relationship between human resource development system and job satisfaction*. Paper presented at the Management, Knowledge and Learning International Conference, Celje, Slovenia, 20-22 June.
- Skarlicki, D. P., & Folger, R. (1997). Retaliation in the workplace: The rules of distributive, procedural, and interactional justice. *Journal of Applied Psychology*, 82, 416-425.
- Skarlicki, D. P., Folger, R., & Tesluk, P. (1999). Personality as a moderator in the relationship between fairness and retaliation. *Academy of Management Journal*, 42(1), 100-108.
- Snell, S. A., & Dean, J. W. Jr. (1992). Integrated manufacturing and human resource management: A human capital perspective. *Academy of Management Journal*, 35(3), 467-504.
- StaffMonitoring.com (2013). *Office slacker stats*. Available from: <http://www.staffmonitoring.com/P32/stats.htm>
- Tapia, A. H. (2006). Information technology enabled employee deviance. In R. Griffeth, F. Niederman, & T. W. Ferratt (Eds.), *IT workers: Human capital issues in a knowledge-based environment* (pp. 405-439). USA: Information Age Publishing.
- Traynor, M., & Wade, B. (1993). The development of a measure of job satisfaction for use in monitoring the morale of community nurses in four trusts. *Journal of Advanced Nursing*, 18, 127-136.

- Ugrin, J. C., Pearson, J. M., & Odom, M. D. (2007). Profiling cyber-slackers in the workplace: Demographic, cultural, and workplace factors. *Journal of Internet Commerce*, 6(3), 75-89.
- Urbaczewski, A. & Jessup, L. M. (2002). Does electronic monitoring of employee Internet usage work? *Communications of the ACM*, 45(1), 80-83.
- Van Saane, N., Sluiter, J. K., Verbeek, J. H. A. M., & Frings-Dresen, M. H. W. (2003). Reliability and validity of instruments measuring job satisfaction: A systematic review. *Occupational Medicine*, 53, 191-200.
- Wang, S., & Yi, X. (2011). It's happiness that counts: Full mediating effect of job satisfaction on the linkage from LMX to turnover intention in Chinese companies. *International Journal of Leadership Studies*, 6(3), 337-356.
- Weatherbee, T. G. (2010). Counterproductive use of technology at work: Information & communications technologies and cyberdeviancy. *Human Resource Management Review*, 20(1), 35-44.
- Weatherbee, T. G., & Kelloway, E. K. (2006). A case of cyberdeviancy: Cyberaggression in the workplace. In E. K. Kelloway, J. Barling, & J. J. Hurrell (Eds.), *Handbook of workplace violence* (pp. 445-487). Thousand Oaks, CA: Sage Publications, Inc.
- Wright, P. M., & Kehoe, R. R. (2008). Human resource practices and organizational commitment: A deeper examination. *Asia Pacific Journal of Human Resources*, 46(1), 6-20.
- Wright, P. M., Gardner, T. M., & Moynihan, L. M. (2003). The impact of HR practices on the performance of business units. *Human Resource Management Journal*, 13(3), 21-36.
- Zahari, I. B., & Shugari, A. M. A. (2012). The effect of organizational culture and the relationship between transformational leadership and job satisfaction in petroleum sector of Libya. *International Business Research*, 5(9), 89-97.
- Zhao, W., & Zhou, X. (2008). Intraorganizational career advancement and voluntary turnover in a multinational bank in Taiwan. *Career Development International*, 13(5), 402-424.