Perceptions on workplace safety and work engagement of teachers in the public elementary school setting

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ABSTRACT

The study endeavored to recognize which domain in workplace safety perception best influence work engagement of teachers in public elementary schools in Municipality of Sta. Cruz. This study utilized a non-experimental quantitative research design utilizing descriptive-correlational technique. A total of N=295 randomly-selected public school teachers in two school districts in Sta. Cruz were asked to respond on questionnaires on workplace safety perception and work engagement. In analyzing the data, weighted mean, Pearson r and linear regression analysis were used. Results revealed that the measures of workplace safety perception and work engagement have positive, significant relationships. In addition, two of the five measures of workplace safety perceptions (co-teachers' safety and school's commitment to safety) significantly influence overall work engagement of public elementary school teachers. In fact, school's commitment was found to be predict overall work engagement of public elementary school teachers.

Keywords: educational management; workplace safety perception; work engagement; descriptive-correlational design; Philippines.

INTRODUCTION

Safety is a worldwide concern; hence, there is a need for a global platform to discuss ways of providing safety in schools and communities (Bastidas, 2011). However, times have changed inside schools and apparently, there exists constant fear and a growing need to address the issue of safety in depth (Bradshaw, Waasdorp, Debnam & Johnson, 2014). The school administrators and teachers seek new technique to be more competitive in implementing safety measures within the workplace, and to be encouraged determined to hold them up. Yet, although teachers are best placed to lift the alarm over deficient in adhering to basic safety rules, the job is dispersed to workers who are busy with other work engagements.

School safety is a fundamental and essential element of the learning and teaching process. In context, when teachers are intensely occupied in building a safe, encouraging, challenging school environment, their engagement towards their job increases (Xia, Wang, Griffin, Wu & Liu, 2017). A positive school environment is a product of collective effort (Heffernan, 2016). This results to an environment that encourages connectedness that is crucial for a young person's educational experience (Alolah, Stewart, Panuwatwanich & Mohamed, 2014; Cornell & Mayer, 2010). When learners think that grown-up in their school cares, they conceive high expectation assumptions for their academics and will administer the support important to their achievement, hence they succeed.

Under the Philippine Constitution of 1987, occupational safety is a legal objective explained as "just and humane terms and conditions of work". To be safe and healthy at work is a person and employees right; the denial or neglect of occupational safety amounts to a violation of employee's rights to respectable work. Yet, as per observation, several schools in the locality have encountered problems on some issues regarding the safety of their facilities and the conditions of their work due to district budget on repairs and maintenance as well as appropriation of safety precautionary kits at work. Clearly, the mandate of the State to every workplace is for a state of social and economic welfare and conditions where all work is executed in a healthy, safe environment and in conditions of freedom, security, equality and human dignity (Dorado, Martinez, McArthur & Leibovitz, 2016).

Workplace safety perception is also measured by the employee's satisfaction with safety program. Keeping the staffs safe and healthy is also a way to maintain their satisfaction and engagement with their duties (Kompaso & Sridevi, 2010). One characteristic of organizational behavior which is prospected to influence employees' insights of organizational safety atmosphere, and in response affect safe work behaviors, and accident rate is the degree to which employees recognize their organizations as being concerned, supportive and caring regarding there general welfare and fulfillment (Kath, Marks & Ranney, 2010). In a previous study, this has theoretically referred to as job satisfaction (Neal & Griffin, 2004). Moreover, the perceived level of support stipulated by the company will end up being closely correlated with safety environment and other social and organizational features which are vital for well-being (Fogarty & Shaw, 2010). In fact, if employees see that their companies are satisfied and supportive with the organizational arrangements, they are more to acknowledge that the companies appreciate their safety and general welfare (Dawley, Houghton & Bucklew, 2010).

The researchers have not come across of a similar study that dealt on workplace safety and work engagement, especially in the school context. None so far has ventured such research topic in the local context as well as that of elementary schools. It is in the above context that the researcher opts to determine the relationship between these variables because will result to generation of a new knowledge as well as an additional input for educational policies to be reviewed. It is in the above reasons that the researcher tries to bridge this gap.

METHOD

This study employed a non-experimental descriptive correlation design utilizing the descriptive correlation technique of research. Specifically, this study utilized a correlational research approach since the study seeks to establish the relationship between workplace safety perceptions and work engagement of public school teachers. The study was conducted in all public elementary schools involving N=295 teachers in the two school districts of Sta. Cruz, a first-class municipality in the Province of Davao del Sur. Sta. Cruz situated in the Northern part of Davao del Sur. Bounded by Davao City on the north and south by the city of Digos.

The researchers adopted existing scales in making the two-part survey instrument. The first part is the Work Safety Scale from the study of Christian, Bradley, Wallace and Burke (2009), which consists of five indicators: work safety, coworkers' safety, supervisors' safety, management's commitment to safety, and satisfaction with safety program. A pilot test involving 30 teachers was done to contextualize the scales, yielding a Cronbach's alpha value of 0.953, which is excellent. On the other hand, the second part is the Work Engagement Scale developed by Schaufeli, Bakker, and Salanova (2006) to measure the level of work engagement among teachers. The scale consists three indicators: vigor, dedication and absorption. The same pilot test involving 30 teachers was done to contextualize the scales, yielding a Cronbach's alpha value of 0.896, which is a very good reliability.

Contingent with UMERC approval A344-0901-2018, the researcher set schedule with the principals of elementary schools on the conduct of survey involving their teachers. Before the administration of the questionnaires, the study was introduced by the researcher to the respondents and the research tool and its purpose was explained to them. Then, the researcher oriented the respondents about the appropriate manner of accomplishing the questionnaires and explained to them all the items individually and thoroughly to ensure valid and reliable results. The entire survey process took two months – September and October 2018.

In analyzing the data,   mean and standard deviation were used to describe the levels and variability of workplace safety perception and work engagement of teachers. Pearson product moment correlation test was used to determine the significance of the relationship between workplace safety perception and work engagement of teachers, while linear regression analysis was used to determine the coefficient of determination or the magnitude of relationship of workplace safety perception towards work engagement of teachers. All statistical analyses were implemented in IBM-SPSS version 24.

RESULTS

Shown in Table 1 is the level of perception in workplace safety of public elementary schools with an overall mean of 4.49 (*SD*=0.51), described as very high, indicating that all enumerated indicators were observed all the time. The overall mean was the result obtained from the mean of the indicators which includes school head's safety, which obtained the highest mean of 4.60 (*SD*=0.58) among all of the indicators, described as very high, indicative that the workplace safety of public elementary schools is manifested in the manner that school heads are encouraging safe behaviors, keeping workers informed of safety rules, involving workers in setting safety goals, enforcing safety rules, praising and rewarding safe work behavior, discussing safety issues with others, updating safety rules, acting on safety suggestions and training workers to be safe.

Table 1. *Perceived Level of Workplace Safety of Public Elementary Schools*

Indicators	Mean	SD	Descriptive Level
Work Safety	4.40	0.62	Very High
Co-Teachers' Safety	4.52	0.57	Very High
School Head's Safety	4.60	0.58	Very High
School's Commitment to Safety	4.41	0.62	Very High
Satisfaction to Safety Program	4.56	0.58	Very High
Overall	4.49	0.51	Very High

Satisfaction to safety program obtained an overall mean score of 4.56 (*SD*=0.58), which means that the workplace affirms that safety program is important, is effective in reducing injuries, is useful, is good, helps prevent accidents, and that the safety programs in schools are is first-rate. Just trailing behind is co-teachers' safety (4.52, *SD*=0.57) determined to be very high as well. This indicator means that workplace safety perceptions of teachers towards their co-teachers is making them aware and safety-oriented, making them follow safety rules, encouraging others to safe behavior, keeping the school area clean, heeding safety rules and looking out for others' safety. School's commitment to safety was also found to be very high (4.41, *SD*=0.62), which focused on managements of schools investigating safety problems, helping to maintain clean area, providing safety information as one of the school's priorities, among others. Work safety followed was assessed the least among the indicators, with a mean rating of 4.40

(*SD*=0.62), still described very high. It showed that elementary schools are not scary, are safe, free from anything that causes death, are free from risks, and are free from any hazards.

On the other hand, shown in Table 2 is the level of work engagement of public elementary school teachers (4.39, *SD*=0.42), described as very high, indicating that all the enumerated indicators were observed all the time. Among the enumerated indicators, dedication obtained the highest mean score of 4.72 (*SD*=0.44), showing that teachers are proud of their work, found it challenging, enthusiastic about it, found their work full of meaning and purpose, enthusiastic about their job and inspires them. Following dedication is vigor, with a mean score of 4.28 (*SD*=0.49) indicating that teachers at schools are very resilient, mentally, they feel like going to work everyday, always persevere even when things do not go well, can continue working for very long periods at a time, feel bursting with energy and that teachers feel strong and vigorous at work. Finally, absorption attained a mean score of 4.16 (*SD*=0.56). This means that teachers feel that time flies when they are working, happy when working intensely, immersed in work, difficult to detach oneself from job, get carried away and forget everything else around when working.

Table 2. *Level of Work Engagement of Public Elementary School Teachers*

Indicators	Mean	SD	Descriptive Level
Vigor	4.28	0.49	Very High
Dedication	4.72	0.44	Very High
Absorption	4.16	0.56	High
Overall	4.39	0.42	Very High

Shown in Table 3 is the results of the pairwise correlation analysis via Pearson product moment correlation test. Based on the analyses, overall workplace safety perceptions of teachers significantly and positively relate with vigor (r=0.440, *p*<0.01), dedication (r=.559, *p*<0.01) and absorption (r=0.482, *p*<0.01), all indicators posted strong correlation.

Table 3. *Significance on the Relationship between Workplace Safety and Work Engagement of Public School Teachers*

Workplace Safety	Work Engagement			Overall
	Vigor	*Dedication*	*Absorption*	
Work Safety	.360**	.474**	.390**	.478**
	(.000)	(.000)	(.000)	(.000)
Co-Teachers' Safety	.346**	.489**	.462**	.510**
	(.000)	(.000)	(.000)	(.000)
School Head's Safety	.356**	.461**	.404**	.478**
	(.000)	(.000)	(.000)	(.000)
School's Commitment to Safety	.445**	.485**	.444**	.539**
	(.000)	(.000)	(.000)	(.000)
Satisfaction to Safety Program	.388**	.504**	.380**	.494**
	(.000)	(.000)	(.000)	(.000)
	.440**	.559**	.482**	.579**
Workplace Safety	(.000)	(.000)	(.000)	(.000)

** *p*<0.01

Individual pairwise correlations revealed work safety to positively relate with vigor (r=0.360, *p*<0.01), dedication (r=0.474, *p*<0.01) and absorption (r=0.390, *p*<0.01). Co-teachers' safety is positively-related with vigor (r=0.346, p<0.01), dedication (r=0.489, p<0.01) and absorption (r=0.462, p<0.01). Likewise, school head safety significantly-relate with vigor (r=0.356, p<0.01), dedication (r=0.461, p<0.01), and

absorption (r=0.404, p<0.01). In the same manner, school's commitment to safety significantly relates with vigor (r=0.445, p<0.05), dedication (r=0.485, p<0.01) and absorption (r=0.444, p<0.01). Lastly, satisfaction to safety program positively and significantly relate with self-awareness (r=0.388, p<0.01), dedication (r=0.504, p<0.01) and absorption (r=0.380, p<0.01). All in all, the positive coefficients indicate a possible increment of dependent variables when independent variables increase, which will be confirmed in a subsequent regression analysis.

Finally, Table 4 exhibits the result of the multiple linear regression analysis showing the predictive ability of the workplace safety perceptions indicators on overall work engagement of teachers in public elementary schools. Among the five indicators of workplace safety perceptions, two were found to be significant predictors of overall work engagement of teachers: school's commitment to safety (β=0.249, t=2.682, p<0.01) and co-teachers' safety (β=0.195, t=2.641, p<0.01). This means that holding other unaccounted variables constant, a one-point increase of school's commitment to safety, and co-teachers' safety may likely provide respective increase on work engagement of teachers by 0.249 and 0.195. Moreover, between the two significant predictors, school's commitment to safety was found to best influence overall work engagement of public elementary school teachers. However, work safety, school head's safety, and satisfaction to safety program posed beta statistics were found to pose non-significant influence on work engagement of teachers, having p-values greater 0.05.

Also, the computed R^2 value of 0.342 and adjusted R^2 of 0.330 means that 33 to 34.2% of the variance of work engagement of teachers can be attributed to the entry of the five indicators of workplace safety perceptions. This means further that 65.8 to 67% of the remaining variance can be further attributed to other variables not covered in the study. In addition, the F-measure of the regression analysis is 30.015, p<0.01. The result is significant that resulted to the rejection of the null hypothesis of no linear association between workplace safety perceptions and work engagement of teachers in public elementary schools.

Table 4. Significance on the influence of workplace safety on the work engagement of public elementary school teachers

Independent Variable (Indicators)		Dependent Variable			
		B	β	t	p-value
Work Safety		0.086	0.126	1.797	0.073
Co-Teachers' Safety		0.146	0.195	2.641	0.009**
School Head's Safety		0.075	0.104	1.380	0.169
School's Commitment to Safety		0.171	0.249	2.682	0.008**
Satisfaction to Safety Program		-0.002	-0.003	-0.035	0.972
R^2	0.342				** p<0.01
Adjusted R^2	0.330				
F	30.015				
p-value	< 0.01				

DISCUSSION

The significance of the relationship between work safety perception and work engagement of public elementary school teachers indicates that at a certain confidence, the better the perception on how safe a workplace is related to the extent of teachers' engagement in working in that workplace. The extent of

such relationship is considered strong, which portends that safety and engagement are close concepts that can be discussed in solidarity in the context of public elementary schools. These observations seemed to corroborate the postulations of Gorgievski, Bakker and Schaufeli (2010), who pointed out that employees who are conscious of their safety at work tend and feels secured in the process are the ones who feel contentment and joy at work. In fact, the positive attitude and activity level at work is brought about by a lot of factors, workplace safety included, as well as positive feedback from their school administrators in terms of appreciation, recognition, and success. Feeling safe will lead to better performance at work. Kouzes and Posner (2010) spelled out that leadership involves being mindful of the welfare of his/her subordinates, and that they are expected to provide the first line defense in managing safety issues, communicating organizational priorities and values and building relationships with individual team members (Reason, 2016).

Moreover, the positive relationship of work safety and work engagement only means that if school heads put safety as a priority, it will lead to more engaged teachers. The link between co-teachers' safety and work engagement is analogous with the findings of Drebinger (2015), who mentioned that when an employee point out hazards, everyone becomes accountable to acknowledge and do activities in order to ensure safety. They added when safety becomes a collective thought, everyone is praised for it; thus, this becomes a culture of safety. Such culture, according to Dickman (2010), entails that people respond when someone raises safety concerns for the benefit of everyone. Furthermore, the link of school head's safety with work engagement of teachers is parallel to the pronouncements of Kadushin and Harkness (2014), who both espoused that supervisors are responsible for a great deal of what goes on day to day in the workplace – that includes ensuring a safe and healthful workplace for employees. The profound link of school's commitment to safety with work engagement of teachers aligned with the statements of Dollard and Bakker (2010), which averred that safety in the institution starts with the administrators' and leaders' commitment towards it. Finally, the link of satisfaction with safety program and work engagement of teachers is parallel with Kath et al. (2010), who maintained that organizational behavior and commitment towards job is affected by workers' perceptions of organizational safety climate and their satisfaction on it.

Among the dimensions of the workplace safety perceptions, co-teachers' safety and school's commitment to safety. Such influence of co-teachers' safety on work engagement is parallel to the pronouncements of Mintzberg (2002) and Dickman (2010), purporting that people how people respond when someone raises safety concerns is critical and is important in creating a work environment where employees are praised and thanked for identifying such concerns (Dickman, 2010). In addition, employees, according to Gilkey et al. (2011), witness their co-workers working unsafely, it highly affects their engagement at work. Moreover, the influence of teachers' satisfaction on the schools' safety program on their work engagement is corollary to the pronouncements of Sunal, Sunal and Yasin (2011), which portended the importance of a delineated safety program in order to avoid unsafe or unhealthful workplace conditions that threaten the organizational behavior and peace of mind of employees. In addition, Hardison et al. (2014) averred that it is the supervisor's responsibility to and provide the first line of defense in managing safety issues, while Reason (2016) echoed the same sentiment, highlighting the need to communicate organizational priorities and values and building relationships with individual team members to ensure employees' peace of mind at work.

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