

Employee engagement of special needs teachers in Windhoek, Namibia: The moderating role of job crafting



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Orientation: Learners with disabilities can acquire from special education schools the basic knowledge and skills to enable participation in various economic and social activities. The engagement of special needs teachers is pivotal in this regard.

Research purpose: To identify the work factors that are most salient in accounting for variance in the engagement of special needs teachers in Windhoek, Namibia. To test the effects of job crafting on the relationship between identified work factors and employee engagement.

Motivation for the study: The employee engagement of special needs teachers is necessary for the enhancement of learning for persons with disabilities. If special needs teachers are not engaged, the result is a compromised delivery of quality education, which in turn adversely impacts learners with special needs.

Research approach/design and method: A quantitative research approach utilising a survey data collection technique was utilised. Correlation analysis and partial least squares were used to test the main effects on data collected from 89 special needs teachers in Windhoek, Namibia.

Main findings: Co-worker support significantly and positively impacts employee engagement. More so, job crafting has a significant moderating effect on the relationships between co-worker support and employee engagement, as well as work autonomy and employee engagement.

Practical/managerial implications: Recommendations are made on ways in which co-worker support can be enhanced and how job crafting can be conceptualised in a special education learning environment setting.

Contribution/value-add: The findings highlights co-worker support as a key variable for enhancing the employee engagement of special needs teachers.

Keywords: employee engagement; special education; teachers; work factors; Windhoek; Namibia.

Introduction

The Namibian Ministry of Education introduced the concept of special education in 1992, with the primary aim of helping people with disabilities to acquire skills that can enable them to integrate into an increasingly globalised economy (Namibia Government Gazette, 1998).

The success of special education in Namibia is dependent on special needs teachers. Literature on Namibian teachers reveal that teachers face heavy workloads, limited career development opportunities, limited teaching time, insufficient resources, insufficient autonomy, poor compensation packages, limited promotion opportunities and poor co-worker relations (Janik, 2013; Zimba, Mufune, Likando, & February, 2013). Teacher disengagement was attributed to these factors. However, these studies only examined mainstream school teachers in Namibia, resulting in the engagement of special needs teachers in Namibia being largely unexplored. A special needs teacher's work is different from that of a mainstream school teacher. There are many types of disabilities, such as being deaf, blind, intellectually challenged or having speech or limb impairments (Landolt, 2014). Learning in special schools is hindered by the limitations associated with each impairment. As such, the engagement of special needs teachers in facilitating learning is crucial. As described by Kahn (1990), the term engagement describes the way employees in an organisation exploit and utilise themselves for the sake of their different work roles on a physical, cognitive and emotional level. When employees cognitively, emotionally and physically withdraw

themselves from their work role, Kahn (1990) suggests that they can become disengaged. In such situations, employees demonstrate poor performance in their roles and exert less effort in their work, which can negatively affect the learning process for learners with disabilities.

In contrast, Meere (2005) contends that engaged employees are known to be dedicated to their work roles. Anitha (2014) also argues that engaged employees make their jobs a passion, and they also become innovators and creative leaders in the workplace. Teachers who are engaged in their work will initiate job crafting, innovation and creativity (Anitha, 2014), which are three crucial ingredients used by teachers at special schools to help learners with disabilities achieve academic success. Job crafting, according to Tims and Bakker (2010), refers to the efforts employees make whilst at work to balance the various demands and resources of their job with their personal preferences, needs and capabilities. Hence, job crafting is viewed as a proactive and individualised approach to work (Solberg & Wong, 2016).

Consequently, special needs teachers must continually assess the learning needs of students, along with their progress, to develop strategies to improve learning (Billingsley, 2004). It is important to examine special needs teachers' job crafting behaviours because this can potentially moderate the relationship between the various work factors and their engagement.

The success of Namibia's Special Education mandate is dependent on the quality of special education teachers. Therefore, it is crucial to investigate the work factors that may impact the engagement of special needs teachers.

Research objectives

The study examined the influence of selected work factors on the engagement of special needs teachers in Windhoek, Namibia. Its objectives were as follows:

Objective 1: To identify the most significant work factors that account for variance in the employee engagement amongst special needs teachers and

Objective 2: To investigate the moderating role of job crafting as a critical personal resource on the employee engagement of special needs teachers

Literature review

This study reviewed research conducted on mainstream school teachers to understand the possible work factors that confront teachers, because of a lack of literature pertaining to special needs teachers in Namibia. Moreover, the study included potential work factors that are specific to the special education work environment. Thus, supervisor support, co-worker support, work autonomy, work ambiguity, rewards and recognition and job crafting, as well as their relation to employee engagement, were examined.

Supervisor support

Rhoades and Eisenberger (2002) argue that supervisor support is greatly impacted by the employees' perception of supervisor support, as well as the degree to which the supervisor contributes to their performance. In this study, supervisors refer to school heads of department (HoDs) and principals, whose job is to oversee performance, provide feedback and guide teachers on how to improve their work. Terzi (2016) showed that employees need support from various levels of the organisation for them to be engaged. Terzi (2016) further proffers that supervisors can offer support through wages, opportunities for career development and opportunities for personal advancement, as well as an accurate job description, constructive feedback sessions and participation in decision-making processes. In a number of industries, supervisor support has been shown to have a positive impact on engagement (Ahmed, Majid, Al-Aali, & Mozammel, 2019; Naruse et al., 2013).

Given this discussion, the following hypothesis was formulated:

H1: The supervisor's support has a significant, positive relationship on the engagement of special needs teachers in Windhoek, Namibia.

Co-worker support

In the workplace, co-workers are individuals who are in the same or similar positions (Yoon & Thye, 2000). Rothmann and Welsch (2013) found that co-worker relations, along with other antecedents, were moderately related to employee engagement. According to May, Gilson and Harter (2004), employees who have positive relationships with other co-workers and supervisors are more likely to experience meaningfulness, and they are more engaged at work. Korunka, Kubicek, Schaufeli and Hoonakker (2009) showed that engagement is strongly related to co-worker support. Given this discussion, the study hypothesised that:

H2: There is a significant, positive relationship between co-worker support and engagement amongst special needs teachers in Windhoek, Namibia.

Work autonomy

Parker (2015) argues that work autonomy pertains to being able to control actions under one's control. Furthermore, it entails the freedom with which employees can initiate creative efforts within their work roles. According to Parker (2015), an individual's level of independence at work is significantly correlated with the level of empowerment, flourishing and professionalism of the individual. Joo, Lim and Kim (2016) claim that, empowerment in the workplace is a form of autonomy that employees experience, and this is significantly related to employee engagement. Given this discussion, the study hypothesised that:

H3: There is a significant, positive relationship between autonomy at work and employee engagement amongst special school teachers in Windhoek, Namibia.

Rewards and recognition

There are monetary rewards and non-monetary rewards. Employees can be directly satisfied by monetary rewards as they are financially able to meet their immediate basic needs along with their other personal needs and wants (Burgess & Ratto, 2003; Nujjoo & Meyer, 2012). In order for employees to feel appreciated and recognised, non-monetary rewards are particularly important (Burgess & Ratto, 2003). Saks (2006) and Simpson (2009) found a positive correlation between work engagement and pay in sampled populations of nurses and hotel workers, respectively. Results from Memon, Salleh and Baharom (2017) indicate that satisfaction with pay is significantly related to work engagement. Several studies confirm the relationship between rewards and engagement (Koskey & Sakataka, 2015; Victor & Hoole, 2017). According to Baakile (2011), teachers who perceive inadequacies in their pay levels compared with other jobs will eventually leave teaching in search of better opportunities. Their study revealed that compensation plays a large role in attracting and retaining employees. Given this discussion, the study hypothesised that:

H4: Perceived competitive rewards and recognition have a significant, positive relationship on employee engagement amongst special school teachers.

Work ambiguity

Ambiguity in the workplace refers to double meaning or a lack of clarity in terms of roles (Lee, Rainey, & Chun, 2009). As Wright (2009) states, an employee experiences role ambiguity when it is not clear what actions and strategies the employee should take in order to ensure that the task at hand is accomplished effectively. A special needs teacher's work entails a number of changes to that of mainstream teaching environments. Special needs teachers must provide individualised attention (Billingsley, 2004), and in order to meet the educational needs of students, it is necessary to constantly revise class arrangements and management (Boujut, Popa-Roch, Palomares, Dean, & Cappe, 2017).

According to Rothmann and Rothmann (2010), the less clearly defined the work environment is, the more unpredictable the events are, and the more prone employees are to disengage. A similar negative relationship was found between role ambiguity and employee engagement by Kunte and Rungruang (2019). This is supported by Moura, Orgambidez-Ramos and Goncalves (2014), who report that role ambiguity negatively affects employee engagement.

Given this discussion, the study hypothesised that:

H5: There is a significant, negative relationship between ambiguity of work and employee engagement amongst special needs teachers in Windhoek, Namibia.

Employee engagement

An employee's engagement is defined as 'the act of harnessing organisational members to their work roles, where they

employ their physical, cognitive and emotional energies during performance of their tasks' (Kahn, 1990, p. 644). The physical component refers to the efforts employees make to accomplish their tasks, whereas the emotional component includes their feelings about their jobs. Finally, the cognitive component involves employees' awareness, vigilance and focus whilst doing their job (Kahn, 1990; Kular, Gatenby, Rees, Saone, & Truss, 2008; May et al., 2004).

A commonly utilised definition by Schaufeli, Salanova, Gonzalez-Roma and Bakker (2002) refers to work engagement as a positive and fulfilling work-related state of mind that is characterised by vigour, dedication and absorption. In their conceptualisation of employee engagement, Schaufeli et al. (2002) focus more on an employee's mental state at work, whereas Kahn (1990) maintains that the more the employee is absorbed in their work (physically, emotionally and cognitively), the more engaged they will be. In this study, Kahn's conceptualisation of engagement was used as a theoretical framework.

Job crafting as a critical personal resource

Berg, Dutton and Wrzesniewski (2013) explain that the process of job crafting:

[I]nvolves employees altering the set of responsibilities prescribed by a formal job description, by adding or dropping tasks, altering the nature of tasks or changing how much time and energy the tasks require. (p. 2)

Moreover, according to Tims and Bakker (2010), job crafting is when employees consider their personal needs, preferences and abilities whilst at work and also balance the demands and resources of their jobs. Consequently, employees are able to tailor the nature of their work to suit their passion, abilities and preferences. According to Tims and Bakker (2010), there are four different types of job crafting. The purpose of job crafting is to increase structural resources, increase social resources, increase challenging job demands and decrease hindering job demands. In order to increase structural job resources, employees must exhibit innovative behaviour in requesting to have a variety of resources at their disposal. More resources allow employees to strategise innovative work ideas to address different job demands. Decreasing hindering job demands involves employees reducing certain aspects of their work that they feel could physically and emotionally drain them. Additionally, increasing social job resources includes the guidance, advice, feedback and encouragement that employees may seek from supervisors and co-workers in the workplace. Finally, increasing challenging job demands leads to employees taking on extra responsibilities and assignments in an effort to improve their skills and expanding their scope of work. A special needs teacher could involve himself or herself in extracurricular activities such as coaching to increase challenging job demands.

Given the nature of special needs education work and the purpose of this study, job crafting was conceptualised as a

personal resource. As such, only 'the increasing structural job resources and increasing social job resources' as subscales of the job crafting measure were used (Tims, Bakker, & Derks, 2012).

Firstly, this study proposed that the positive effect of co-worker support on employee engagement will be enhanced if special needs teachers are afforded with crafting opportunities. It is expected that special needs teachers who consult with their co-workers, as well as making use of co-worker relations space to create more meaningful connections to themselves and their work, will be more engaged.

Secondly, this study suggested that special needs teachers with more autonomy can craft their work more effectively and become more engaged in their work.

Thirdly, this study proposed that job crafting negatively moderates the relationship between work ambiguity and the engagement of special needs teachers. The work of the special needs teacher is based on individualised attention, which requires the teacher to continuously strategise according to the learners' needs. In turn, this could negatively impact the special needs teachers' ability to engage in their work effectively.

In view of the above, the following three hypothesis were proposed:

H6: Job crafting has a significant, positive, moderating effect on the relationship between co-worker support and employee engagement.

H7: Job crafting has a significant, positive, moderating effect on the relationship between work autonomy and employee engagement.

H8: Job crafting has a significant, negative, moderating effect on the relationship between work ambiguity and employee engagement.

Research method

Participants and setting

The study employed a quantitative approach with an ex post facto correlation research design. Based on the literature review, research hypotheses were formulated. Using a self-administered questionnaire, quantitative data were gathered from special needs teachers in Windhoek, Namibia. From a population of 160 special needs teachers, 94 questionnaires were returned. Only 89 of these were used for analysis.

Measuring instruments

The employee engagement scale developed by May et al. (2004) was utilised to measure work engagement. Three subscales (physical, emotional and cognitive) comprised 13 items. Each item was rated on a five-point Likert scale, with one representing *strongly disagree* and five representing *strongly agree*. May et al. (2004) found Cronbach's alpha of 0.77, indicating acceptable reliability. Additionally, May et al.

(2004) used Kahn's concept of engagement as the basis for the development of the employee engagement measure.

Supervisor support

The supervisor relations subscale from the antecedents scale developed by May et al. (2004) was utilised to measure supervisor support. Five items were used to measure supervisor support. The items were measured on a Likert scale type ranging from one to five, with one representing *strongly disagree* and five representing *strongly agree*. The supervisor support scale was validated by May et al. (2004) who found Cronbach's alpha of 0.95, indicating acceptable reliability.

Co-worker support

The co-worker relations subscale from May et al.'s (2004) antecedents scale was employed to measure co-worker support. A total of 10 items were used to measure co-worker support. Based on a Likert scale type, the items were rated from one to five, with one representing *strongly disagree* and five representing *strongly agree*. Cronbach's alpha of 0.93 was found for co-worker support, indicating high reliability (May et al., 2004).

Work ambiguity

This study used the ambiguity at work subscale of the Job demands-resources (JD-R) scale developed by Jackson and Rothmann (2005). Work ambiguity was measured using two items. Items were rated on a five-point Likert scale with one representing *strongly disagree* and five representing *strongly agree*. Jackson and Rothmann (2005) grouped the items of the JD-R scale into seven reliable factors. The work ambiguity items were grouped under the organisational support factor scale, which obtained Cronbach's alpha of 0.88.

Rewards and recognition

The subscale 'rewards and recognition' from the antecedents scale developed by Saks (2006) was used for this study. The scale consists of 10 items that measure forms of rewards and recognition employees receive in the workplace on a five-point Likert scale, with one representing 'to a small extent' and five representing 'to a large extent'. The scale was validated by Saks (2006) and yielded Cronbach's alpha of 0.80, indicating acceptable reliability.

Work autonomy

The subscale work autonomy from the work design questionnaire developed by Morgeson and Humphrey (2006) was utilised. With three items per dimension, the scale has three dimensions: work scheduling autonomy, decision making autonomy and work methods autonomy. Items were assessed on a five-point Likert scale, with one representing 'strongly disagree' and five representing 'strongly agree'. The scale was validated by Morgeson and Humphrey (2006) who found Cronbach's alpha of 0.87.

Job crafting

A job crafting scale developed by Tims et al. (2012) was used in this study. There are four dimensions of the scale: increasing social job resources, increasing structural job resources, increasing challenging job demands and decreasing hindering job demands. However, for the purpose of this study, only the subscales of increasing social job resources and increasing structural job resources were used. The job crafting scale yielded an acceptable Cronbach's alpha ranging from 0.75 to 0.82 in all of its dimensions (Tims et al., 2012).

Research procedure

Based on teacher preferences and subsequent requests, hard-copy questionnaires were administered. A questionnaire was picked up from the school secretary and returned to an enclosed box. In order to ensure data confidentiality and anonymity, participant names and other identifying information were not collected. During the study, participants were informed that participation was voluntary, and that they were free to withdraw from the study at any time without any negative consequences. Data from participants was encoded and stored on a password-protected computer. Only the researcher had access to the hard copy questionnaires, which were kept under lock and key.

Ethical considerations

Ethical clearance (reference number: IPSY-2018-7722) was obtained from the Stellenbosch University Ethics Committee, after which permission was requested from the Ministry of Education, Arts and Culture in Windhoek, Namibia. In addition, the principals of each special school granted institutional permission before the data collection phase could commence.

Results

Descriptive results

Table 1 shows that the item analysis performed on all research instruments utilised for the present study yielded satisfactory results, except for the employee engagement and work ambiguity scales that yielded Cronbach's alpha of 0.68. The Cronbach's alpha obtained for both scales does not deviate extremely from the benchmark of 0.70 (Nunnally & Bernstein, 1994). For purposes of this study, the Cronbach's alpha of 0.68 was considered acceptable,

TABLE 1: Means, standard deviations and internal consistency reliabilities of subscales.

Scale	Number of items	Mean	SD	Cronbach	Inter-item
EE	13	49.39	6.50	0.68	0.15
WA	2	8.69	1.33	0.68	0.52
JC	10	38.71	5.71	0.76	0.26
RR	10	33.40	8.35	0.81	0.31
CS	10	34.97	8.65	0.94	0.62
SS	11	39.61	10.97	0.95	0.65
WA	9	35.37	7.68	0.95	0.66

EE, employee engagement; WA, work ambiguity; JC, job crafting; RR, rewards and recognition; CWS, co-worker support; SS, supervisor support; AU, autonomy; SD, standard deviation.

taking into account that the small sample size ($n = 89$) could have potentially contributed to the inconsistencies.

Correlation analysis

Pearson product moment correlations were used to compute the correlations between the work factors and employee engagement. All computations were subjected to a confidence interval of 95%. A statistically significant correlation is where $p < 0.05$. As illustrated in Table 2, a positive, statistically significant relationship between work ambiguity and employee engagement ($r = 0.31, p < 0.05$) is reported. Additionally, a positive, statistically significant relationship between co-worker support and employee engagement ($r = 0.29, p < 0.05$) is reported. The relationship between autonomy and employee engagement is also reported as positive and statistically significant ($r = 0.32, p < 0.05$). The positive correlation coefficients obtained means that work ambiguity, co-worker support and work autonomy are significant in impacting employee engagement on a bivariate level.

Partial least square analysis

The covariance-based - structural equations modeling approach (CB-SEM) and the variance-based partial least squares - structural equations modeling approach (PLS-SEM) are two approaches to structural equation modelling (Haenlein & Kaplan, 2004). PLS focuses more on maximising the variance of the endogenous variable as explained by the exogenous variables. The choice as to when to use the Variance Based or PLS approach relies heavily on certain requirements needed by each approach. Henseler, Ringle and Sinkovics (2009) argue that if the study population will yield a smaller sample and if there is no complex model to be tested (i.e. with more than 200 observations), it is more appropriate to use PLS, such as in this case (i.e. $n = 89$).

PLS was used to evaluate the R -square of employee engagement. An R -square value of 0.47 was obtained, which indicates that the total model accounts for 47% of the variance observed in the engagement of special needs teachers. PLS was used to test the main effects in the model. The path coefficient is used to indicate the extent to which a path is significant within the 95% lower and 95% upper confidence intervals (Table 3). For a path coefficient to be significant,

TABLE 2: Correlation analysis of employee engagement and identified work factors.

Scale	WE	WA	JC	RR	CWS	SS	AU
EE	1.00	-	-	-	-	-	-
WA	0.31*	1.00	-	-	-	-	-
JC	0.05	0.26*	1.00	-	-	-	-
RR	-0.02	0.23*	0.17	1.00	-	-	-
CWS	0.29*	0.24*	0.36*	0.28*	1.00	-	-
SS	0.00	0.13*	0.48*	0.19*	0.42*	1.00	-
AU	0.32*	0.30*	0.37*	0.00	0.42*	0.41*	1.00

EE, employee engagement; WA, work ambiguity; JC, job crafting; RR, rewards and recognition; CWS, co-worker support; SS, supervisor support; AU, autonomy.

*, Statistically significant correlation ($p \leq 0.05$).

TABLE 3: Main effects of the study.

Path	Path coefficient	95% lower	95% upper	Significant from CI	p-value from t-test
SS – EE	-0.13	-0.38	0.26	No	0.41
CW – EE	0.35	0.06	0.55	Yes	0.01
AU – EE	0.15	-0.11	0.36	No	0.18
RR – EE	-0.1	-0.31	0.12	No	0.43
WA – EE	0.06	-0.17	0.39	No	0.65
JC – EE	0.35	-0.37	0.73	No	0.21

EE, employee engagement; WA, work ambiguity; JC, job crafting; RR, rewards and recognition; CWS, co-worker support; SS, supervisor support; AU, autonomy; CI, confidence interval.

TABLE 4: Moderation effects.

Independent	Moderator	Dependent	Interaction coefficient	p	Significant
AU	JC	EE	-0.27	0.01	Yes
CWS	JC	EE	-0.23	0.02	Yes
WA	JC	EE	-0.16	0.13	No

EE, employee engagement; WA, work ambiguity; JC, job crafting; CWS, co-worker support; AU, autonomy.

$p < 0.05$ is considered statistically significant at the 95% confidence interval. If $p > 0.05$, the path coefficient is not considered statistically significant at the 95% confidence interval (Herholdt, 2015).

As indicated in Table 2, only the path from co-worker support to employee engagement was found to be statistically significant ($p = 0.01$) with zero not falling within the 95% confidence interval. As such, this study failed to reject hypothesis two.

Furthermore, PLS was used to test the moderation effects in the study. Job crafting was conceptualised as a moderator variable in the study. Two approaches were utilised to test for moderation. Firstly, the moderation effects were tested by including the interactions (i.e. independent, moderator and dependent variables) in the full PLS-SEM model. Secondly, the moderation effects were tested separately by testing each moderator path at a time. Moderation effects in the full Partial Least Squares- Structural Equation Modelling model all yielded insignificant moderation paths.

Table 4 shows the results from the univariate moderation. The results of the analysis indicate that job crafting has a positive moderating effect ($p = 0.01$) on the relationship between autonomy and employee engagement. The analysis also indicates that job crafting has a significant positive moderating effect ($p = 0.02$) on the relationship between co-worker support and employee engagement.

The results in Table 4 are further explained by Figures 1 and 2 shown below.

Figure 1 suggests that the relationship between work autonomy and employee engagement is strengthened when job crafting is low. This implies that when job crafting behaviours are high, the relationship between work autonomy and work engagement is weakened.

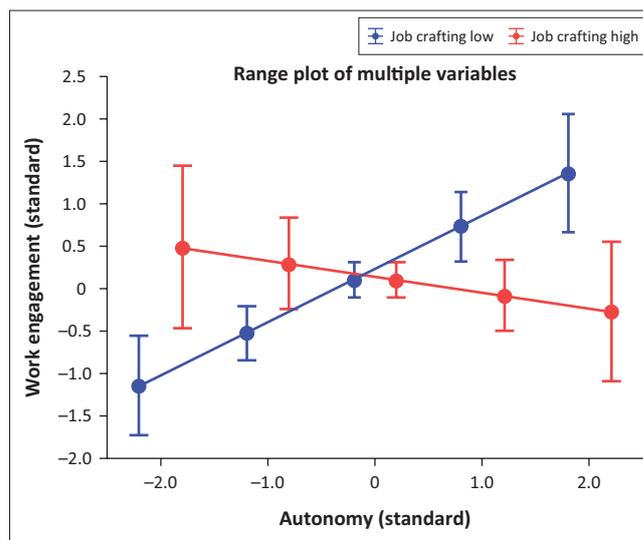
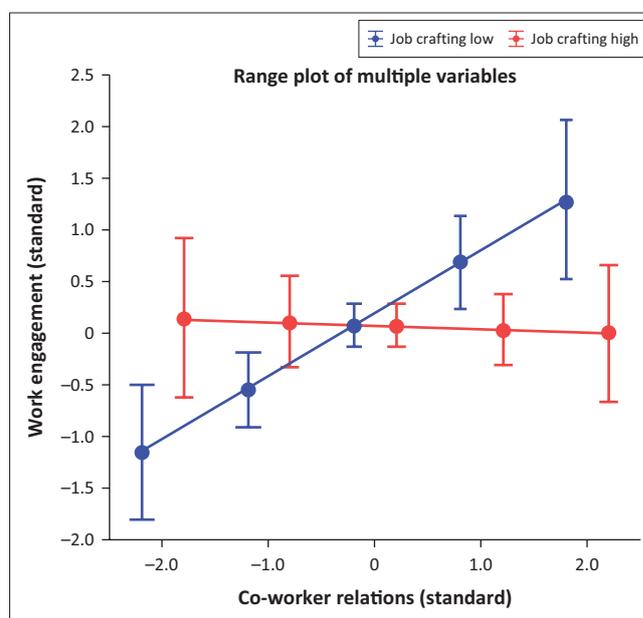
**FIGURE 1:** Interaction effect 1 (Hypothesis 7).**FIGURE 2:** Interaction effect 2 (Hypothesis 8).

Figure 2 suggests that there is a positive relationship between co-worker support and employee engagement when job crafting is low. In other words, co-worker support alone (i.e. emotional and task-related support, encouragements, appreciation gestures, etc.) is sufficient for impacting employee engagement.

Discussion

Findings of the study

The first objective of the study was to investigate the various work factors that are most salient in accounting for the variance in the engagement of special needs teachers. The correlation analysis revealed that a positive, statistically significant relationship between work ambiguity and employee engagement, co-worker support and employee engagement and autonomy and employee engagement was found. The findings support

assertions made by Curran and Prottas (2017), D'Emiljo and Du Preez (2017) and Lee, Shin and Baek (2017), who argue that by reducing ambiguous work, and vesting more autonomy (Freeney & Fellenz, 2013; Kumar & Sia, 2012; Mostert & Rathbone, 2001; Sarinah, Akbar, & Prasadja, 2018; Skaalvik & Skaalvik, 2014; Vera, Martinez, Lorente, & Chambel, 2016) and increasing co-worker support in the workplace (Dehaloo & Schultz, 2013; Vera et al., 2016), engagement is enhanced.

The PLS analysis revealed that only co-worker support has a significant positive relationship with employee engagement, thus supporting the correlation coefficient obtained in the correlation analysis. Dehaloo and Schultz (2013) and Vera et al. (2016) reveal that co-worker support significantly and positively impacts employee engagement.

The results from the PLS analysis, however, indicate that the relationship between autonomy and employee engagement as well as the relationship between ambiguity and employee engagement is not statistically significant. This contradicts the findings obtained in the correlation analysis, and this discounts findings from Freeney and Fellenz (2013) and Sarinah et al. (2018), who also explored the two constructs.

The second objective of the study was to investigate the role of job crafting as a critical personal resource on the engagement of special needs teachers. The results of the analysis indicate that job crafting has a positive moderating effect on the relationship between autonomy and employee engagement. Figure 1 proposes that the activities that characterise employee work autonomy are in essence adequate to positively influence work engagement without a greater use of job crafting. It could be argued that when a special needs teacher is vested with work autonomy, there is freedom and discretion in scheduling and performing tasks at work (Cummings & Worley, 2008). As a result, the special needs teacher with work autonomy has the freedom and control over what needs to be done and will possibly still become engaged in his or her work role, without job crafting.

The analysis also indicates that job crafting has a significant positive moderating effect on the relationship between co-worker support and employee engagement. This implies that when special needs teachers' actions of increasing social job resources and increasing structural job resources are high, co-worker support can significantly and positively influence work engagement. The co-worker relations space offers employees an opportunity to guide one another, to collaborate on work-related activities and to form meaningful connections with each other (May et al., 2004; Rothmann & Rothmann, 2010). In fact, Rothmann and Rothmann (2010) argue that no employee will be able to be productive without the human resources found in any workplace. In essence, special needs teachers can rely on the co-worker space with its resources and still experience engagement when they are not able to engage in job crafting.

Explicit to the univariate moderation results (Figures 1 and 2 above), the question that needs to be investigated, considering what the two subscales from the job crafting scale used in the study assess, is what low job crafting means in the context of special needs schools, and how it could possibly be effectively operationalised to ensure that the special needs teacher still benefits from job crafting. The findings from the univariate moderation analysis could also suggest that perhaps viewing job crafting as characterised merely as a resource (i.e. increasing social resources and increasing structural resources) is not adequate enough to thoroughly measure job crafting. However, job crafting could possibly be viewed as a day-to-day behaviour, which is deliberately initiated and which extends into every sphere of an employee's work life.

Limitations of the study

The present study encountered some limitations that are worth mentioning. Firstly, the population of the study was made up of about 160 special needs teachers based in Windhoek, Namibia. However, only 89 of them completed questionnaires that were considered usable in the end. The credibility of the study could have been enhanced if more than 89 special needs teachers had partaken in the study.

Secondly, the study focused only on special schools in Windhoek, Namibia. Therefore, generalising the findings to other special schools outside Windhoek should be done with caution. Moreover, because of the already small population of special needs teachers in the country, future studies, with time and resources permitting, could include the entire country as the total population of special needs teachers is about 300 countrywide.

Thirdly, special needs teachers are expected to be occupied at their work because of the nature of the disabilities that learners under their care have. The nature of the work is demanding and having to set aside time to complete a 30-min questionnaire was a challenging task for some special needs teachers. In addition, the special needs teachers completed the questionnaire at a period where they were busy with submissions of continuous assessment marks to HoDs. As such, future studies should be strategic about the periods of data collection to ensure that data collection is carried out during periods where the teachers are not pressured by many administrative duties and deadlines.

Fourthly, the relationships between supervisor support, rewards and recognition, work ambiguity, work autonomy and job crafting that were, in previous studies, documented to have significant relationships with work engagement, were insignificant in the present study. The findings of the present study are therefore not conclusive and inconsistencies in the findings could be attributed to the small sample size.

Fifthly, the study looked only at supervisor support, co-worker support, work ambiguity, work autonomy, rewards

and recognition and job crafting as work factors that could potentially impact the engagement of special needs teachers in Windhoek, Namibia. However, it is important to note that these are not the only work factors that could potentially affect employee engagement amongst special needs teachers in Windhoek, Namibia. As such, the findings of the study are not conclusive, and they should be viewed as one study amongst many to come. It is therefore recommended that other work factors be investigated as far as the employee engagement of special needs teachers in Windhoek, Namibia, is concerned.

Practical implications

Given that a positive relationship was found between co-worker support and employee engagement in both the correlation and PLS analysis, we advocate certain interventions in that regard. It is key that teachers understand practical ways in which co-worker support may be construed; co-worker support may come in the form of emotional support, instrumental help, informational support and appraisal from others (Jo, 2014; Kopp, 2013). Firstly, individuals can be encouraged to care for each other whilst at work or assist each other in the various work tasks so as to get work done and sharing information on various issues pertaining to professional development or teaching methods as a way to enhance their work tasks. Co-workers can also be encouraged to show appreciation and to praise each other for outstanding work.

Secondly, at organisational level, co-worker support can be enhanced through the use of team-building activities. Team-building interventions have been documented to assist with co-worker relations in numerous ways. According to Cummings and Worley (2008), team building:

[R]efers to a broad range of planned activities that help groups improve the way they accomplish tasks, help members enhance their interpersonal and problem solving skills, and increase team performance. (p. 263)

It provides employees with platforms to ensure that they are aware of each other's strengths, weaknesses and ways of embracing such for the greater functioning of the organisation.

Thirdly, job crafting was found to positively and significantly moderate the relationship between co-worker support and employee engagement. This study only assessed the ways in which employees engage in the job crafting dimensions of increasing structural job resources and increasing social job resources. Employees can increase their structural job resources by requesting more resources (Tims & Bakker, 2010), depending on the different tasks the special needs teachers have planned for their class. The early planning of the different needs of each lesson planned is key for the early identification and requesting of resources needed.

In the same manner, special needs teachers can increase social job resources by seeking guidance, feedback and advice, as

well as encouragement from their supervisors and co-workers (Tims & Bakker, 2010). Guidance, feedback, advice and encouragement will depend on the extent to which there is active behaviour from the special needs teacher to seek for such. It is therefore encouraged that co-workers make use of the co-worker relationship space to share and discuss key issues that need guidance and encouragement.

Individual teachers form part of the work team of special needs teachers at a special school. It is important that individual teachers are made aware of the role they play as co-workers in ensuring that individual and organisational-level interventions are successfully implemented. Job crafting can be carried out either individually or in collaboration, depending on the creativeness of the teachers. As such, the special needs teacher can form working groups with one or more colleagues where they jointly strategise and plan on best possible ways to do their work tasks. This provides an avenue for motivation for the teachers as well as an opportunity for the teachers to learn from each other, which will inevitably also enhance employee engagement.

Conclusion

The scope of the mandate of the special education directorate in Namibia continues to expand every year as more and more learners with disabilities continue to be admitted to special schools for the purposes of integrating them into the wider social and economic community. As established in the study, it is key for co-workers to be given the necessary support in order for them to flourish in efforts to enhance employee engagement. By focusing on promoting healthy and cooperative work relationships in a special school environment, the Ministry of Education, Arts and Culture, in addition to other key stakeholders, directly, to a greater extent, also enhance the learning of persons with disabilities, which is not at all possible without the special needs teacher.

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Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

Authors' contributions

A.M. conceptualised the study and contributed to the design and implementation, analysis of the results and writing of the manuscript. L.B supervised the study from conception to completion.

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Data availability

The data that support the findings of this study are available from the corresponding author, A.M., upon request.

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References

- Ahmed, U., Majid, A., Al-Aali, L., & Mozammel, S. (2019). Can meaningful work really moderate the relationship between supervisor support, co-worker support and work engagement? *Management Science Letters*, 9(2), 229–242. <https://doi.org/10.5267/j.msl.2018.11.016>
- Anitha, J. (2014). Determinants of employee engagement and their impact on employee performance. *International Journal of Productivity and Performance Management*, 63(3), 308–323. <https://doi.org/10.1108/IJPPM-01-2013-0008>
- Baakile, M. (2011). Comparative analysis of teacher's perception of equity, pay satisfaction, affective commitment and intention to turnover. *Journal of Management Research*, 3(1), 1–21. <https://doi.org/10.5296/jmr.v3i1.501>
- Berg, J., Dutton, J., & Wrzesniewski, A. (2013). Job crafting and meaningful work. In Z. Dik, M. Byrne, & M. Steger (Eds.), *Purpose and meaning in the workplace* (pp. 81–104). Washington DC: American Psychological Association.
- Billingsley, B. (2004). Special education teacher retention and attrition: A critical analysis of the research literature. *The Journal of Special Education*, 38(1), 39–55. <https://doi.org/10.1177/00224669040380010401>
- Boujut, E., Pupa-Roch, M., Palomares, E.-A., Dean, A., & Cappe, E. (2017). Self-efficacy and burnout in teachers with autism spectrum disorder. *Research in Autism Spectrum Disorders*, 36, 8–20. <https://doi.org/10.1016/j.rasd.2017.01.002>
- Burgess, S., & Ratto, R. (2003). The role of incentives in the public sector: Issue and evidence. *Oxford Review of Economic Policy*, 19, 285–300. <https://doi.org/10.1093/oxrep/19.2.285>
- Cummings, T., & Worley, C. (2008). *Organization development and change*. Boston, MA: South Western Cengage Learning.
- Curran, T., & Prottas, D. (2017). Role stressors, engagement and work behaviours: A study of higher education professional staff. *Journal of Higher Education Policy and Management*, 39(6), 642–657. <https://doi.org/10.1080/1360080X.2017.1377964>
- Dehaloo, G., & Schulze, S. (2013). Influences on the work engagement of secondary school teachers in rural Kwazulu Natal. *The Journal for Transdisciplinary Research in Southern Africa*, 9(2), 225–240. <https://doi.org/10.4102/td.v9i2.205>
- D'Emilio, A., & Du Preez, R. (2017). Job demands and resources as antecedents of work engagement: A diagnostic survey of nursing practitioners. *Africa Journal of Nursing and Midwifery*, 19(1), 69–87. <https://doi.org/10.25159/2520-5293/475>
- Freeny, Y., & Fellenz, M. (2013). Work engagement, job design and the role of the social context at work: Exploring antecedents from a relational perspective. *Human Relations*, 66(11), 1427–1445. <https://doi.org/10.1177/0018726713478245>
- Haenlein, M., & Kaplan, A. (2004). A beginner's guide to partial least squares analysis. *Understanding Statistics*, 3(4), 283–297. https://doi.org/10.1207/s15328031us0304_4
- Henseler, J., Ringle, C., & Sinkovics, R. (2009). The use of partial least squares path modelling in international marketing. *Advance in International Marketing*, 20, 277–319. [https://doi.org/10.1108/S1474-7979\(2009\)0000020014](https://doi.org/10.1108/S1474-7979(2009)0000020014)
- Herholdt, K. (2015). *Determinants of work engagement and organisation citizenship behaviour amongst nurses*. Unpublished master's thesis. Stellenbosch: Stellenbosch University.
- Jackson, L., & Rothmann, S. (2005). Work-related well-being of educators in a district of the North-West Province. *Perspectives in Education*, 23(3), 107–122.
- Janik, M. (2013). *Well-being of educators in selected secondary schools in Namibia*. Unpublished doctoral thesis. Windhoek: University of Namibia.
- Joo, B.-K., Lim, D., & Kim, S. (2016). Enhancing work engagement: The roles of psychological capital, authentic leadership and work empowerment. *Leadership and Organisation Development Journal*, 37(8), 1117–1134. <https://doi.org/10.1108/LODJ-01-2015-0005>
- Jo, S. (2014). Teacher commitment: Exploring associations with relationships and emotions. *Teaching and Teacher Education*, 43, 120–130. <https://doi.org/10.1016/j.tate.2014.07.004>
- Kahn, W. (1990). Psychological conditions of personal engagement and disengagement at work. *The Academy of Management Journal*, 33(4), 692–724. <https://doi.org/10.2307/256287>
- Kopp, L. (2013). *The effects of perceived supervisor work-life support on employee work-life balance, job satisfaction, organisational commitment and organisational citizenship behaviour*. Unpublished masters thesis. Wisconsin: University of Wisconsin-Stout Graduate School.
- Korunka, C., Kubicek, B., Schaufeli, W., & Hoonakker, P. (2009). Work engagement and burnout: Testing the robustness of the job demands-resources model. *Journal of Positive Psychology*, 4(3), 243–255. <https://doi.org/10.1080/17439760902879976>
- Koskey, A., & Sakataka, W. (2015). Effect of reward on employee engagement and commitment at Rift Valley Bottlers Company. *International Academic Journal of Human Resource and Business Administration*, 1(5), 36–54.
- Kular, S., Gatenby, M., Rees, C., Saone, E., & Truss, K. (2008). *Employee engagement: A literature review*. Working paper series. Kingston: Kingston University, Kingston Business School.
- Kumar, R., & Sia, S. (2012). Employee engagement: Explicating the contribution of the work environment. *Management and Labour Studies*, 37(1), 31–43. <https://doi.org/10.1177/0258042X1103700104>
- Kunte, M., & Rungruang, P. (2019). Test of the job demand resources model in Thailand. *International Journal of Organisation Theory and Behaviour*, 22(1), 2–21. <https://doi.org/10.1108/IJOTB-03-2018-0036>
- Landolt, H. (2014). *Situation for children with mental and physical health disabilities in Namibia*. Windhoek: InterTeam.
- Lee, J., Rainey, H., & Chun, Y. (2009). Goal ambiguity, work complexity, and work routines in federal agencies. *The American Review of Public Administration*, 40(3), 284–308. <https://doi.org/10.1177/0275074009337620>
- Lee, S.H., Shin, Y., & Baek, S. (2017). Task characteristics and work engagement: exploring effects of role ambiguity and ICT presenteeism. *Sustainability*, 9, 10. <https://doi.org/10.3390/su9101855>
- May, D., Gilson, R., & Harter, L. (2004). The psychological conditions of meaningfulness, safety, availability and the engagement of the human spirit at work. *Journal of Occupational and Organisational Psychology*, 77(1), 11–37. <https://doi.org/10.1348/096317904322915892>
- Meere, M. (2005). *The high cost of disengaged employees: Employee engagement industry briefing*. Hawthorne, Victoria: Swinburne University of Technology.
- Memon, M., Salleh, R., & Baharom, M. (2017). The mediating role of work engagement between pay satisfaction and turnover intention. *International Journal of Economics, Management and Accounting*, 25(1), 43–69.
- Morgeson, F., & Humphrey, S. (2006). The work design questionnaire: Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology*, 91, 1321–1339. <https://doi.org/10.1037/0021-9010.91.6.1321>
- Mostert, K., & Rathbone, A. (2001). Work characteristics, work-home interaction and engagement of employees in the mining industry. *Management Dynamics*, 16(2), 36–52.
- Moura, D., Orgambidez-Ramos, A., & Goncalves, G. (2014). Role stress and work engagement as antecedents of job satisfaction: Results from Portugal. *Europe's Journal of Psychology*, 10(2), 291–300. <https://doi.org/10.5964/ejop.v10i2.714>
- Namibia Government Gazette. (1998). *Affirmative Action (Employment Act)*. Windhoek: Office of the Prime Minister.
- Naruse, T., Sakai, M., Watai, I., Taguchi, A., Kuwahara, Y., Nagata, S., & Murashima, S. (2013). Individual and organisational factors related to work engagement among home-visiting nurses in Japan. *Japan Journal of Nursing Science*, 10(2), 267–272. <https://doi.org/10.1111/jjns.12003>
- Nuijoo, A., & Meyer, I. (2012). The relative importance of different types of rewards for employee motivation and commitment in South Africa. *SA Journal of Human Resource Management*, 10(2), 1–10. <https://doi.org/10.4102/sajhrm.v10i2.442>
- Nunnally, J.C., & Bernstein, I.H. (1994). *Psychometric theory* (3rd ed.). New York, NY: McGraw-Hill.
- Parker, G. (2015). Teachers' autonomy. *Research in Education*, 93(1), 19–33. <https://doi.org/10.7227/RIE.0008>
- Rhoades, L., & Eisenberger, R. (2002). Perceived organisational support: A review of literature. *Journal of Applied Psychology*, 87(4), 698–714. <https://doi.org/10.1037/0021-9010.87.4.698>
- Rothmann, S., & Rothmann, S. (2010). Factors associated with employee engagement in South Africa. *SA Journal of Industrial Psychology*, 36(2), 1–12. <https://doi.org/10.4102/sajip.v36i2.925>
- Saks, A. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 600–619. <https://doi.org/10.1108/02683940610690169>
- Sarinah, Akbar, M., & Prasadja, R. (2018). The effect of work autonomy, self efficacy and work engagement towards organisational commitment. *International Journal of Economics, Commerce and Management*, 2(2), 31–43.
- Schaufeli, W., Salanova, M., Gonzalez-Roma, V., & Bakker, A. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3, 71–92. <https://doi.org/10.1023/A:1015630930326>
- Skaalvik, E., & Skaalvik, S. (2014). Teacher self-efficacy and perceived autonomy: Relations with teacher engagement, job satisfaction and emotional exhaustion. *Psychological Reports: Employment Psychology and Marketing*, 114(1), 68–77. <https://doi.org/10.2466/14.02.PRO.114k14w0>
- Simpson, M. (2009). Engagement at work: A review of the literature. *International Journal of Nursing Studies*, 46(7), 1012–1024. <https://doi.org/10.1016/j.ijnurstu.2008.05.003>
- Solberg, E., & Wong, S. (2016). Crafting one's job to take change of role overload: When proactivity requires adaptively across levels. *The Leadership Quarterly*, 27, 713–725. <https://doi.org/10.1016/j.leaqua.2016.03.001>
- Terzi, A.R. (2016). Teachers' perception of organizational culture and trust relation. *International Journal of Organizational Leadership*, 5, 338–347. <https://doi.org/10.33844/ijol.2016.60448>

- Tims, M., & Bakker, A. (2010). Job crafting: Towards a new model of individual job redesign. *SA Journal of Industrial Psychology, 36*(2), 1–9. <https://doi.org/10.4102/sajip.v36i2.841>
- Tims, M., Bakker, A., & Derks, D. (2012). Development and validation of the job crafting scale. *Journal of Vocational Behaviour, 80*, 173–186. <https://doi.org/10.1016/j.jvb.2011.05.009>
- Vera, M., Martinez, I., Lorente, L., & Chambel, M. (2016). The role of co-worker and supervisor support in the relationship in the relationship between job autonomy and work engagement among portuguese nurses: A multi-level study. *Social Indicators Research, 126*(3), 1143–1156. <https://doi.org/10.1007/s11205-015-0931-8>
- Victor, J., & Hoole, C. (2017). The influence of organisational rewards on workplace trust and work engagement. *SA Journal of Human Resource Management, 15*(0), 1–14. <https://doi.org/10.4102/sajhrm.v15i0.853>
- Wright, J. (2009). *Role stressors, coworker support, and work engagement: A longitudinal study*. Unpublished masters thesis. San Jose, CA: San Jose State University.
- Yoon, J., & Thye, S. (2000). Supervisor support in the work place: Legitimacy and positive affectivity. *Journal of Social Psychology, 140*, 295–316. <https://doi.org/10.1080/00224540009600472>
- Zimba, R., Mufune, P., Likando, G., & February, P. (2013). Namibian teacher's understanding of education for all issues. *Journal for Studies in Humanities and Social Sciences, 2*(1), 169–186.