The teacher who goes the extra (s)mile: A study among primary school teachers in Namibia

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Abstract

This study focused on job factors (work engagement, organisational commitment) and psychological states (psychological availability, meaningfulness, autonomy, psychological safety) that teachers (N = 628) in Namibian primary schools need for increased organisational citizenship behaviour (OCB). OCB indicates a teacher's spontaneous willingness to perform work that is over and above the work description. A quantitative research design with a field survey has been used with a non-random convenience sample of teachers in all regions of Namibia. Measuring instruments used, were: Work Engagement Scale, Organisational Commitment Scale, Psychological Conditions Scale, Organisational Citizenship Behaviour Scale and a biographical questionnaire. Initial statistical analysis included exploratory factor analysis and confirming the reliability of the scales. In addition, descriptive statistics, Pearson correlations and multiple hierarchical regression analyses were conducted. Mean scores indicated lower levels of cognitive engagement, autonomy, psychological safety and OCB. Medium correlations were found between job factors and OCB as well as between organisational commitment and OCB and psychological conditions and OCB. Other main findings indicated that work engagement (especially physical engagement), organisational commitment as well as the psychological states autonomy and psychological availability were the more significant predictors of OCB. Contrary to expectations, the psychological states of meaningfulness and safety did not significantly predict OCB. Relevant recommendations were formulated based on the results of this study.

Introduction

Teachers are faced with ever growing demands at their schools, such as increasing diversity in the classroom, pressure for better academic achievement of learners (Runhaar, Konermann, & Sanders, 2013), application of modern technology in learning, and helping children to cope with the social ills of society. For example, teachers in Namibia often indicate that they feel so sorry for hungry learners that they buy food for them out of their own pockets (Grobler, 2006). Tertiary training alone cannot prepare teachers to cope with all of these demands. Thus, for teachers to adequately meet the high demands in the teaching profession and still be productive, motivated educators, they need to be intrinsically willing to go above and beyond the call of duty (Somech & Ron, 2007). How to motivate teachers "to walk the extra mile" remains a challenge. Existing research findings emphasise that, to attempt to "buy" pro-social organisational behaviour with incentives or to make such behaviour mandatory, does not increase its prevalence (Fabes, Fultz, Eisenberg, May-Plumlee, & Christopher, 1989). Thus, in this study, certain positive job factors and beneficial psychological states were examined in order to establish their effect on Namibian primary school teachers' OCB levels.

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Organisational citizenship behaviour (OCB)

According to Organ (1990), the employee who shows OCB chooses to engage in extra-role tasks without consideration of formal incentives. Extra-role tasks are those tasks that are not stipulated in job descriptions. Organ, Podsakoff, and MacKenzie (2006) define OCB as discretionary behaviour that is not recognised by the formal reward system of the organisation, but that promotes efficiency and effective functioning of the organisation. OCB encompasses altruism, civic virtue, sportsmanship, conscientiousness, courtesy, obedience, loyalty, participation and helping, promoting the organisation's name to the outside, cooperating with co-workers and protecting the company from danger, amongst others (Stamper & Van Dyne, 2001). OCB in the educational setting refers to teacher pro-social behaviour directed towards learners, teacher colleagues and the whole school (Bogler & Somech, 2004). The positive effect of OCB on the effectiveness of the overall school organisation has been found to be dramatic (Bogler & Somech, 2004).

According to Roethlisberger and Dickson (1964), citizenship behaviour has an organisational (OCBO) and individual (OCBI) component. The positive pro-social acts that are targeted at co-workers individually (OCBI) could be in the form of teachers who help their co-workers, offer preventive advice regarding work problems, assist with interpersonal conflict situations that co-workers experience at work and encourage work achievements (Ozer, 2011). Staw (1983) indicates that positive pro-social behaviour that is targeted to the whole school (OCBO) can be in the form of extra voluntary service, donation of time, energy and other personal resources to the organisation, helping with the good functioning of the organisation and spontaneous toleration of less than ideal work circumstances.

To affect OCB in teachers should be the aim of every school in Namibia, as it has been indicated by research that it is useful to the success of the school and to society if teachers develop goodwill and loyalty towards the school at which they are working (Elstad, Christophersen, & Turmo, 2011). Work engagement has been found to elevate OCB levels of employees (Babcock-Roberson & Strickland, 2010).

Work engagement

Engaged employees are energetic, dedicated and enthusiastically involved in their work (Bakker & Demerouti, 2008). According to Leiter and Bakker (2012), engaged individuals are oriented towards a challenging work goal, thus transcending the now and going beyond the immediate situation. Kahn (1990) described work engagement as that phenomenon where people find that they can express themselves emotionally (in their relations to co-workers), physically (through their physical tasks), and cognitively (mental alertness) in and through their work-roles. Engaged teachers are essential to the successful school. Growing evidence suggests a positive relationship between the engagement level of the employee and positive organisational outcomes such as OCB (Babcock-Roberson & Strickland, 2010).

According to May, Gilson and Harter (2004), certain positive psychological states mediate the relationship between job factors (engagement) and job outcomes (OCB).

Positive psychological states of teachers

Based on the research of May, et al. (2004) and Spreitzer (1995) four psychological states, namely, being psychologically available at work (availability), meaningfulness of work (psychological meaningfulness), a subjective sense of autonomy (autonomy) and a feeling of psychological safety (safety) at work could impact positive job performance outcomes. Bogler and Somech (2005) reiterate that these psychological states mediate between work elements and work outcomes. Thus, in order to achieve highly relevant work outcomes, like OCB, these positive psychological states of teachers should be intact.

Psychological availability

According to Kahn (1990), psychological availability is the teacher's ability to engage the self emotionally, physically and cognitively in the work situation. May et al. (2004) maintain that when individuals are ready and confident to engage in their work, they are psychologically available. Kahn (1990) also indicates that employees (teachers) who believe that they have the necessary emotional, physical and cognitive resources and energy to engage the self at work, are psychologically available at their workplace. From the above definitions of psychological availability, one can draw that individuals who are psychologically available at work are prepared to put their total energy into role performance, which would most possibly include extra-role tasks (OCB's) (Rich & LePine, 2010).

Psychological meaningfulness

Meaningfulness of work is regarded as a psychological state that is essential for personal growth (May, et al., 2004), work motivation (Pratt & Ashforth, 2003) and work engagement (Nelson & Simmons, 2003). When work is perceived as meaningful it spontaneously creates eustress that provides energy to the teacher to work harder as to achieve work goals (Rothmann, Steyn, & Mostert, 2005). Experience of a sense of meaningfulness at the workplace has been recognised as an important prerequisite for being fully engaged in work, otherwise apathy, detachment and disengagement from work is possible (Rothmann & Rothmann, 2010). According to Wat and Shaffer (2005), the employee who finds work tasks meaningful will intrinsically care about these tasks and will invest more than what is externally expected into these tasks (Thomas & Velthouse, 1990). Kirkman and Rosen (1999) also found that teachers who regard their job as meaningful show higher levels of OCB.

Autonomy

Autonomy encompasses individual discretionary powers, the freedom in choosing work goals, the permission to set priorities, the shaping of task elements, and the own chosen timeframe for execution of work tasks (Runhaar, et al., 2013). Spreitzer (1995) depicts autonomy as the employee's choice to initiate and regulate actions in the workplace. Autonomy is regarded as a psychological state of the employee that exerts a major influence on the employee to feel individually responsible for work outcomes (Hackman & Oldham, 1980). Thus, with high levels of autonomy, it is expected that teachers will put more effort in their work and show OCB (Chen & Chiu, 2009).

Psychological safety

An organisational climate of safety leads to employees feeling positively appreciated and confirmed at the workplace. According to Kahn (1990), people experience psychological safety, and thus feel appreciated at the workplace, when they can truly be themselves without having a fear that their self-image, status or career might get hurt. When feeling psychologically safe, employees know that the surrounding interpersonal context is safe (Zhang, Fang, Wei, & Chen, 2010). Psychological safety includes interpersonal trust so that employees feel encouraged to be themselves (Edmondson, 1999). Psychological safety allows employees to fully engage in their work as they can employ themselves without fear of negative consequences, thus fully focussing on their work (Rothmann & Rothmann, 2010). Before employees decide to invest personal resources in their organisation, thus showing OCB, they will evaluate the demands and risks involved. If risks are low and employees feel safe, they will be more willing to apply personal resources to benefit the organisation (Kirk-Brown & Van Dijk, 2011).

Besides engagement levels and positive psychological states of teachers, how committed teachers are to the profession, their school and the Ministry of Education, might also play a role in their levels of OCB.

Organisational commitment

Cohen (2003) depicts organisational commitment as a multidimensional construct with affective, continuance and normative commitment as its dimensions. Meyer, Stanley, Herscovitch, and Topolnytsky (2002) found that individuals who feel emotionally attached to their organisations show higher levels of OCB. These authors showed that affective commitment is the best predictor for OCB in comparison to continuance and normative commitment. Therefore, in this study with Namibian primary school teachers, only effective commitment is used to indicate organisational commitment. Affective commitment encompasses the employee's identification with, involvement in and attachment to the organisation (Organ & Ryan, 1995).

Within the field of education, committed teachers are crucial as teacher commitment has a direct influence on the quality of teaching, learning, school success and the subsequent teacher/learner well-being (Day, 2008). Day mentions that the teacher who is committed towards his/her school and education in general will play a crucial role in the cognitive, social, behavioural and effective behaviour and development of learners. Park (2005) identified teacher organisational commitment to be a critical factor in education success. Katz and Kahn (1978) indicate that committed employees engage in extra-role behaviour (OCB), thus spontaneously doing more than is expected of them.

Based on the literature review, the following hypotheses were formulated:

H1: Primary school teachers in Namibia indicate moderate levels of work engagement, positive psychological states, organisational commitment, and OCB.

H2: Work engagement, positive psychological states and organisational commitment positively correlate with OCB of primary school teachers in Namibia.

H3: Work engagement, positive psychological states and organisational commitment contribute to primary school teachers in Namibia's OCB levels.

Research design

Research approach

The researchers used a quantitative research design. According to Maree and Pietersen (2013), quantitative research is a systematic and objective process of utilising numerical data from a selected subgroup of a universe (or population) in order to make generalisations about the findings to the universe that is being studied. Furthermore, this study was cross-sectional and descriptive. A cross-sectional study is a comparative study of several sub-groups captured for measurement at a single time, whereas a descriptive study is the investigation of an area or to record and assess experiences of a particular group or progress in a specific intervention project (Coolican, 2009).

Research method

Participants

Primary school teachers of all the government schools in all the educational regions in Namibia were invited to participate in this research study on a voluntary basis and thus formed the target population. Ninety four primary schools across the educational regions agreed to participate in this study. At commencement of the research, about 1823 teachers were employed at the schools that agreed to participate in the study. Of these teachers, 826 participated in a convenience sample, which means that participants were selected

on the basis of availability and willingness to participate (Gravetter & Forzano, 2006). The sample was regarded as representative of the target population as Jacobs (2012) mentions that, as a rule of thumb, if a population size is around 1500, at least 20% should be sampled. In the case of this study, the sample consisted of 45% of the target population, which can thus be regarded as a representative sample. The sample included teachers as well as members of school management such as heads of departments and principals. Table 1 outlines the characteristics of the participants.

Table 1: Characteristics of the participants (n = 826)

Item	Category	Frequency	Percentage
Gender	Male	173	20.90
	Female	653	79.10
Age	19-24	29	3.51
	25-29	113	13.68
	30-34	137	16.58
	35-39	121	14.66
	40-44	117	14.17
	45-49	109	13.19
	50-54	113	13.68
	55-59	74	8.95
	60 +	13	1.58
Marital Status	Single	308	37.30
	Divorced	49	5.90
	Widowed	29	3.50
	Married	416	50.40
	Living with partner	24	2.90
Qualifications	Grade 12	74	9.00
	Diploma	388	47.00
	Postgraduate Diploma	161	19.50
	Degree	125	15.09
	Honours Degree	69	8.40
	Master's Degree	8	1.00
	Doctoral Degree	1	.10

Job Tenure	Up to 1 year	62	7.50
	Up to 2 years	67	8.11
	Up to 3 years	53	6.41
	Up to 4 years	46	5.57
	5 to 6 years	105	12.70
	7 to 8 years	78	9.40
	9 to 10 years	62	7.50
	11 to 15 years	107	13.00
	16 to 20 years	48	5.83
	21 + years	198	23.98
Job Position	Student Teacher (in full-time training)	52	6.30
	Junior Teacher (two years or less in full-time teaching)	86	10.40
	Senior Teacher (more than two years in full-time teaching)	593	71.80
	Head of Department	76	9.20
	Principal	19	2.30
Type of School	Government	769	93.10
	Private	57	6.90
Years at the School	Up to 2 years	213	25.80
	3 to 4 years	149	18.00
	5 to 9 years	210	25.50
	10 to 15 years	125	15.20
	16 + years	129	15.50
Years in Teaching	Up to 2 years	60	7.30
	3 to 5 years	126	15.20
	6 to 10 years	169	20.50
	11 to 20 years	187	22.60
	21 + years	284	34.40
Nationality	Namibian	818	99.00
	Non-Namibian	8	1.00

Home Language	Afrikaans	205	24.80
	English	18	2.20
	Oshiwambo	177	21.40
	Herero	150	18.20
	Damara	108	13.10
	Nama	54	6.50
	Tswana	11	1.30
	German	8	1.00
	Others	95	11.50
Educational Region	Khomas	491	59.40
	Otjozondjupa	36	4.40
	Omaheke	19	2.30
	Erongo	24	2.90
	Hardap	27	3.30
	Karas	99	12.00
	Kunene	15	1.80
	Omusati	16	1.90
	Oshana	29	3.50
	Oshikoto	27	3.30
	Kavango	5	.60
	Zambezi	38	4.60
	Ohangwena	0	0

Table 1 indicates that more female than male teachers participated in the study, which makes sense, as there are more female teachers (+/- 15 000) than male teachers (+/- 9000) employed in Namibian schools (EMIS, 2012). The age category of 30-34 had the highest number of participants. Most participants were married. Approximately 47% of the participants indicated that they were in possession of a teaching diploma as their highest professional qualification. Of all the participants, about 91% had an academic qualification higher than grade 12. About 28% of the participants have been in the teaching profession for less than five years. Approximately 43% have been teaching for longer than ten years. Most of the participating teachers (83%) were teaching fulltime for more than two years. With regard to home language, 24% of participants indicated that they were Afrikaans-speaking, whilst 21% were Oshiwambo-speaking and 18% were Herero-speaking. The Khomas region had the most participants (59%), whilst no teacher of the Ohangwena region participated.

Measuring instruments
The following measuring instruments were used for the purpose of the empirical study:

The Organizational Citizenship Behaviour Scale (OCBS), as adapted by Lee and Allen (2002), was utilised to measure OCB levels of teachers. OCB was measured with six items (e.g., "Offer ideas to improve the functioning of the organisation"). Participants responded by using a 7-point never – always scale that varies between 1 (*never or almost never*) and 7 (*almost always or always*). Saks (2006) found a Cronbach alpha of .74 for the OCBS.

The Affective Commitment Scale (ACS) as adapted by Rhoades, Eisenberger, and Armeli (2001) with five items, was utilised. The items (e.g., I feel personally attached to my work organisation) use a 7-point agreement/disagreement scale, varying from 1 (*strongly disagree*) to 7 (*strongly agree*). Allen and Meyer (1990) found that reliability and validity scores for the ACS were acceptable (α = .90).

The *Work Engagement Scale* (WES) as developed by May, et al. (2004) has been utilized to collect data about engagement levels (e.g., "I am very absorbed in my work"). The items used a 7-point never-always scale varying from 1 (*never or almost never*) to 7 (*almost always or always*). The Cronbach alpha coefficient for the WES was found to be .82 (Rothmann & Rothmann, 2010).

The *Psychological Conditions Scale* (PCS; May, et al., 2004) was used to measure psychological availability, meaningfulness and psychological safety (e.g., "The work I do is very important to me"). Six items were also extracted from the *Psychological Empowerment Questionnaire* (PEQ; Spreitzer, 1995) to measure autonomy (e.g., "I have significant autonomy in determining how I do my job"). May, et al. (2004) found Cronbach alpha coefficients of .71 for psychological safety, .90 for psychological meaning and .85 for psychological availability. Siegall and Gardner (2000) found a Cronbach alpha coefficient of .72 for autonomy.

Research procedure
Permission to conduct research with teachers in Namibian schools had been obtained by the Permanent Secretary of the Ministry of Education. After this permission was granted, Regional Directors were contacted via fax for permission to contact principals of schools in the regions. Thereafter, all the principals were contacted telephonically in order to get permission to distribute questionnaires to teachers. Questionnaires were counted, bundled and sent via courier to different schools, thus no contact ensued between the researchers and participants prior to the completion of the questionnaire, which is expected to increase external validity (Creswell, 2002). This survey was conducted with structured questionnaires as the primary data collection tool. Arrangements were made with secretaries of schools to distribute the questionnaires between the teachers and to collect completed questionnaires. Completed questionnaires were then couriered to the researchers.

Statistical analysis
The statistical analysis was carried out with SPSS 22.0 (SPSS, 2013). Descriptive statistics (means, standard deviations, skewness and kurtosis) were computed to describe the data. The construct validity and the reliability of the measurement instruments were assessed by means of exploratory factor analyses and Cronbach alpha coefficients (Everitt & Hay, 1992). Pearson correlation coefficients were used in order to specify relationships between the variables. The cut-off point for statistical significance was set at $p < 0.05$. In order to make decisions regarding practical significance, effect sizes were used (Steyn, 1999). A cut-off point of 0.30 (medium effect) was used to indicate the practical significance of correlation coefficients (Cohen, 1992). Multiple regression analyses were conducted in or-

der to determine the percentage of the variance in the dependent variable (OCB) that is predicted by the independent variables (engagement, psychological states, organisational commitment) (Klem, 2005).

Results

In order to determine the underlying factor structure of the measuring instruments, exploratory factor analyses were conducted. Principal component analyses were used to determine the factorability of the items of the scales used as well as to determine the number of factors in each scale. In order to determine the number of factors in each scale, eigenvalues (> 1) and the scree plot were used. Also, principal factor analysis with a direct oblimin rotation was used in cases where the scale had two or more factors.

A principal component analysis was conducted on the 13 items that measured work engagement. The Kaiser-Meyer-Olkin measure of sampling adequacy revealed a value of 0.87, which indicated that the items were factorable. Bartlett's test of sphericity showed to be highly significant (x^2 (55) = 5767.22; p < 0.05). All the communalities of the scale were higher than the suggested 0.30. A principal component analysis showed that three factors (eigenvalue = 2.96, 2.81, and 2.45) could be extracted. Factor 1 (emotional engagement) explained 26.92% of the total variance of the scale whilst factor 2 (physical engagement) explained 25.59%, and factor 3 (cognitive engagement) explained 22.27% of the variance. Together, these three factors explained 74.79% of the variance of the scale.

A principal component analysis was conducted on the 27 items that measured psychological states. The Kaiser-Meyer-Olkin measure of sampling adequacy revealed a value of 0.92, which indicated that the items were factorable. Bartlett's test of sphericity showed to be highly significant (x^2 (351) = 13021.60; p < 0.05). All the communalities of the scale were higher than the suggested 0.30. A principal component analysis showed that four factors (eigenvalue = 5.44, 4.20, 3.70 and 2.23) could be extracted. Factor 1 (psychological availability) explained 20.95% of the total variance of the scale whilst factor 2 (meaningfulness) explained 16.16%, factor 3 (autonomy) explained 14.23% and factor 4 (psychological safety) explained 8.61% of the variance. Together, these four factors explain 59.96% of the variance of the scale.

A principal component analysis was conducted on the 5 items that measured organisational commitment. The Kaiser-Meyer-Olkin measure of sampling adequacy revealed a value of 0.85, which indicated that the items were factorable. Bartlett's test of sphericity showed to be highly significant (x^2 (10) = 2465.42; p < 0.05). All the communalities of the scale were higher than the suggested 0.30. A principal component analysis showed that one factor (eigenvalue = 3.52) could be extracted. The component loadings ranged from .87 to .78. The factor explained 70.54% of the total variance of the scale.

A principal component analysis was conducted on the six items that measured organisational citizenship behaviour. The Kaiser-Meyer-Olkin measure of sampling adequacy revealed a value of 0.81, which indicated that the items were factorable. Bartlett's test of sphericity showed to be highly significant (x^2 (15) = 1877.30; p < 0.05). All the communalities of the scale were higher than the suggested 0.30. A principal component analysis showed that two factors (eigenvalue = 2.30 and 1.94, respectively) could be extracted. Factor 1 (Organisational citizenship behaviour organisation) explained 39.37% of the total variance of the scale, whilst Factor 2 (organisational citizenship behaviour individual) explained 32.36% of the variance. Together, these two factors explain 70.74% of the variance of the scale.

Descriptive statistics and correlations

The descriptive statistics (means, standard deviations and Cronbach alpha coefficients) and Pearson's correlations are reported in Table 2.

Table 2

Descriptive statistics, alpha coefficients and Pearson correlations of work engagement, organisational commitment, psychological states and organisational citizenship behaviour

Item	Mean	SD	α	1	2	3	4	5	6	7	8	9	10	11	12
1. Emotional engagement	5.53	4.92	0.89	-	-	-	-	-	-	-	-	-	-	-	-
2. Physical engagement	5.43	4.93	0.90	0.75**	-	-	-	-	-	-	-	-	-	-	-
3. Cognitive engagement	4.44	6.09	0.76	0.40**	0.23**	-	-	-	-	-	-	-	-	-	-
4. Total work engagement	5.13	12.67	0.88	0.87**	0.79**	0.72**	-	-	-	-	-	-	-	-	-
5. Organisational commitment	5.37	6.50	0.89	0.62**	0.67**	0.23**	0.62**	-	-	-	-	-	-	-	-
6. Psychological availability	5.92	7.98	0.92	0.50**	0.51**	0.18**	0.48**	0.46**	-	-	-	-	-	-	-
7. Psych Meaningfulness	6.01	6.50	0.91	0.55**	0.53**	0.18**	0.51**	0.55**	0.68**	-	-	-	-	-	-
8. Psych Autonomy	5.00	7.84	0.85	0.38**	0.38**	0.20**	0.39**	0.45**	0.47**	0.43**	-	-	-	-	-
9. Psychological safety	4.38	4.49	0.61	0.16**	0.19**	-0.09**	0.09**	0.17**	0.08*	0.11**	-0.01	-	-	-	-
10. Total psych states	5.32	21.43	0.90	0.58**	0.57**	0.24**	0.56**	0.60**	0.84**	0.80**	0.76**	0.21**	-	-	-
11. OCB organisation	5.03	3.96	0.81	0.44**	0.46**	0.22**	0.46**	0.54**	0.42**	0.38**	0.42**	0.02	0.50**	-	-
12. OCB individual	4.58	4.00	0.74	0.22**	0.22**	0.24**	0.28**	0.26**	0.24**	0.18**	0.26**	-0.07*	0.27**	0.56**	-
13. Total OCB	4.80	7.04	0.83	0.37**	0.39**	0.26**	0.42**	0.45**	0.38**	0.32**	0.38**	-0.02	0.43**	0.88**	0.88**

* $r > 0.30$ – practically significant (medium effect); ** $r > 0.50$ – practically significant (large effect)

According to Table 2, all measurement scales are reliable ($\alpha > 0.70$) (Nunnally & Bernstein, 1994) except for the psychological safety scale ($\alpha = 0.61$). However, according to Shoukri and Edge (1996), a reliability coefficient is still considered good between 0.40 and 0.75.

According to the obtained mean scores (Table 2), primary school educators in Namibia indicated to be above average engaged in their work (73.28%; SD = 12.67), but show the lowest engagement levels with cognitive engagement (63.42%; SD = 6.09). Above average levels of organisational commitment were also indicated by teachers (76.71%; SD = 6.50). With regard to psychological states teachers indicated that they are psychologically available for their work as teachers (84.57%; SD = 7.98) and that teaching renders meaningfulness to their lives (85.85%; SD = 6.50). However, lowest means with psychological states were obtained for autonomy (71.42%; SD = 7.84) and psychological safety (62.57%; SD =

4.49) at work, although all these means were still above average. Furthermore, in comparison with all the mean scores obtained, of the lowest scores were obtained for total OCB (68.57%; SD = 7.04). With regard to OCB, it seems that primary school teachers in Namibia are engaging more in OCB for the organisation (71.85%; SD = 3.96) than with individual colleagues (65.42%; *SD* = 4.00). As Namibian primary school teachers indicated, contrary to popular expectations, via mean scores, above average results for work engagement, positive psychological states, organisational commitment and OCB, hypothesis 1 is rejected.

Concerning correlations, Table 2 shows that total work engagement is practically significantly and positively related to total OCB (*r* = .42, *p* < .01, medium effect). Total psychological states were also found to be practically, significantly, and positively related to total OCB (*r* = .43, *p* < .01, medium effect). In addition, organisational commitment was found to be practically, significantly, and positively related to total OCB (*r* = .45, *p* < .01, medium effect). As Pearson correlations indicate positive relationships between work engagement, psychological states, organisational commitment and OCB, hypothesis 2 is accepted.

Next, multiple regression analyses were conducted to test the direct effect of independent variables work engagement (emotional, physical, cognitive), psychological states (psychological availability, meaningfulness, autonomy, psychological safety), organisational commitment as well as total engagement, total psychological states and total organisational commitment on dependent variable OCB. Table 3 shows the results of the regression analyses.

Table 3

Regression analysis with work engagement, psychological states and organisational commitment as independent variables and OCB as the dependent variable

Model		Unstandardised Coefficients		Standardised Coefficients	*t*	*P*	*F*	*R*	*R²*
		B	SE	Beta					
							63.17*	0.43	0.18
Step 1	(Constant)	13.00	1.18		11.01	0.00*			
	Emotional engagement	0.15	0.07	0.10	2.06	0.03*			
	Physical engagement	0.39	0.69	0.27	5.66	0.00*			
	Cognitive engagement	0.18	0.04	0.15	4.53	0.00*			
							53.08	0.45	0.20
Step 2	(Constant)	11.25	1.49		7.52	0.00*			
	Availability	0.18	0.03	0.21	4.83	0.00*			
	Meaningfulness	0.07	0.04	0.07	1.66	0.09			
	Autonomy	0.23	0.03	0.25	7.13	0.00*			
	Safety	-0.07	0.04	-0.05	-1.61	0.10			
							219.64*	0.45	0.21
Step 3	(Constant)	15.50	0.92		16.73	0.00*			
	Organisational commitment	0.49	0.03	0.45	14.82	0.00*			
							96.04	0.50	0.26
Step 4	Constant	7.31	1.45		5.01	0.00*			
	Total engagement	0.09	0.02	0.17	4.34	0.00*			
	Total organisational commitment	0.26	0.04	0.24	5.96	0.00*			
	Total psychological states	0.06	0.01	0.17	4.41	0.00*			

* *p* < 0.05

No multicollinearity was found with above multiple regressions with all tolerance values > 0.10 and all VIF values< 10 (Pallant, 2011). The results in Table 3 show that work engagement explains 18% ($R^2 = 0.18$) of the variance in OCB of primary school educators in Namibia ($F = 63.17$, $p < 0.05$). The standardised beta value also indicates that physical engagement ($β = 0.27$, $p < 0.05$) contributes the most towards educators' OCB.

The results in Table 3 also show that teachers' psychological states explain 20% ($R^2 = 0.20$) of the variance in OCB ($F = 53.08$, $p < 0.05$). The standardised beta value also indicates that autonomy ($β = 0.25$, $p < 0.05$) contributes the most towards educators' OCB.

Furthermore, teachers' organisational commitment explains 21% ($R^2 = 0.21$) of the variance in OCB ($F = 219.64$, $p < 0.05$).

Finally, the results in Table 3 show that work engagement, organisational commitment and psychological states of teachers explain 26% ($R^2 = 0.26$) of the variance in OCB of primary school educators in Namibia ($F = 96.04$, $p < 0.05$). The standardised beta value indicates that organisational commitment ($β = 0.24$, $p < 0.05$) contributes the most towards Namibian primary school educators' OCB. From the regression analyses it is evident that work engagement, positive psychological states and organisational commitment contribute significantly to Namibian primary school teachers' level of OCB and, therefore, hypothesis 3 is accepted.

Discussion of the results

The aim of this study was to establish whether work engagement, organisational commitment and certain positive psychological states of primary school teachers in Namibia contribute to their level of OCB. Exploratory factor analysis showed a four-factor model for psychological states, which is in agreement with the findings of May et al. (2004), a three-factor model for work engagement, which is in agreement with the findings of Kahn (1990) and a two-factor model for OCB, which is in agreement with the findings of Organ (1997). A one-factor model was found for organisational commitment, which makes sense as this study equalled affective commitment to organisational commitment. The descriptive statistics indicated that the scales of the OCBS, ACS, WES and PCS were sufficiently internally consistent with acceptable alpha values for all the scales. Therefore, it can be concluded that the survey used was reliable with the sample of teachers.

Mean scores show that primary school teachers rate themselves as engaged in their work, although their cognitive engagement is the lowest form of engagement. This may be the case as primary school teachers work with young children, who do not pose a great academic challenge to teachers. Furthermore, teachers are professionally trained people who probably followed the teaching career path due to a sense of calling. Therefore, one can expect rather higher levels of work engagement with teachers. These findings correspond with the findings of Rothmann and Hamukang'andu (2013), who found in a study with teachers in Zambia that calling directly impacts work engagement levels of teachers. Mean scores also show that Namibian primary school teachers are committed to their schools where they are teaching. As this study worked with the affective commitment scale, this means that teachers *feel* they are committed to their schools. With regard to psychological states, teachers indicated lowest levels with autonomy and psychological safety. A host of positive work outcomes are related to high levels of autonomy, like higher work speed (Zijlstra & Sonnentag, 2006), empowerment (Spreitzer, 1995), and authentic work behaviour (Ryan & Deci, 2006). Low autonomy can lead to high costs in terms of work performance (Utman, 1997). Also, a lack of a psychological safety feeling at work can have a host of negative work outcome consequences (May et al., 2004), where-as the experience of psychological safety at work is associated with positive work outcomes (Siemsen,

Roth, Balasubramanian, & Anand, 2008). Interestingly, Pearson correlations in this study indicate that psychological safety correlates negatively with autonomy. Thus, the more autonomy teachers experience, the more psychological unsafe they feel. This might be a result of too little autonomy for teachers in the education field over many years. It might be that teachers are used to authoritarian management and, therefore, feel uncertain and unsafe when they have to rely on their own initiative and creativity. With regard to psychological states, teachers indicated highest levels with availability and meaningfulness. Thus, Namibian primary school teachers indicated that they are psychologically available at their job and that they find meaning in their work as educators.

Although teachers showed above average OCB levels, OCB had the lowest mean scores of all the variables. Especially OCB aimed towards individuals was found to be lowest. It thus seems that when teachers engage in OCB, it is rather aimed at the whole staff than towards individuals.

The Pearson correlations in this study show that total work engagement, organisational commitment and total psychological states all correlate positively to a medium effect with OCB. This would mean that primary school teachers who are engaged in their work, committed to their school and who nurture positive psychological states will also be teachers who will show OCB. This is in agreement with the literature review of this study.

Regression analyses show that work engagement, organisational commitment and healthy psychological states all contribute to a willingness to involve in OCB. Especially organisational commitment seems to play an important role in teachers' willingness to engage in OCB. Physical engagement, psychological availability and autonomy seem to also contribute the most to OCB. Thus, the primary school teacher in Namibia, who is willing to walk the extra mile in education is the one who likes to be physically involved in the job, attentively available for the children/learners, and who feels a certain sense of freedom at work.

Practical implications of this study

- For maximum positive work outcomes, employees need to be fully cognitively, physical and emotionally engaged in their work. If there are indications that primary school teachers in Namibia are not fully cognitively engaged, ways should be found to challenge teachers on a cognitive level to ensure the positive work outcome benefits of full engagement.
- Staffing structures of Namibian primary schools probably limit autonomous functioning. Strict curriculums, cluster activities, national examinations, senior teachers, subject heads, heads of departments, principals, subject advisors, parents, and the Ministry of Education are just few of the formal and informal structures that teachers have to adhere to. All of these policing factors cannot be eliminated, but if management of schools can be made aware of the impact of teacher autonomy on positive work outcomes (like OCB), management can tread more carefully with regard to its management practices.
- Principals and heads of departments should ensure a safe and non-threatening work environment for teachers in order for teachers to experience psychological safety, for an increase in positive work outcomes.
- Teachers should be made aware of the difference between OCBI and OCBO and should be encouraged to also engage in OCBI.
- Much more should be done on a management level to address work engagement, organisational commitment and positive psychological states in order to ensure more frequent OCB with Namibian primary school teachers.

Limitations of the study

A cross-sectional design was used and the participants were assessed only once. This limits the determination of cause-and-effect relationships. All the questionnaires were in English. This might have been a barrier of other home language speakers. As the questionnaires were distributed via courier, many teachers in schools in remote areas were not personally motivated by the researchers to participate in the study. Therefore, only a few teachers from remote areas participated in the study. The use of self-report measures could be a limitation as it tests the participants' perceptions about the constructs and might not measure the construct itself. Also, the test battery was lengthy, which might have caused that participants rushed through some of the items without giving some thought about their answers.

Recommendations for future research

As OCB has a huge impact on quality of education offered to Namibian learners, it is crucial that more antecedents for OCB are found so that such antecedents can be introduced and implemented via management structures in schools.

It becomes clear that the management of a school has a great responsibility in the management of human resources. How a school management manages teachers will directly affect how teachers manage learners. It is thus crucial to embark on a study to find out how much management cadres of schools know about and are aware of industrial psychological management concepts like OCB.

More research should be conducted in Namibian schools on levels of OCBI and OCBO between teachers and how these types of OCB affect positive job outcomes.

As this study found lower levels of autonomy and psychological safety with Namibian teachers, more research should be conducted on the self-report levels of these two crucial psychological states of teachers. Reasons should be found via sound research for possible low levels of autonomy and psychological safety. Furthermore, the relationship between autonomy and psychological safety of teachers should be researched in Namibia and elsewhere.

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