Meaningful work and secondary school teachers’ intention to leave

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The study investigates the relations between secondary school teachers’ work-role fit, job enrichment, supervisor relationships, co-worker relationships, psychological meaningfulness of work and intention to leave. A cross-sectional survey was used. The participants were 502 secondary school teachers in Namibia. The following measuring instruments were used: Work-role Fit Scale, Job Enrichment Scale, Co-worker and Supervisor Relationships Scales, Psychological Meaningfulness Scale and Turnover Intention Scale. Work-role fit and job enrichment both had direct positive effect on experiences of psychological meaningfulness at work, while poor work-role fit and low psychological meaningfulness both had a direct effect on teachers’ intentions to leave. An analysis of the indirect effects showed that poor work-role fit and poor job enrichment affected intention to leave due to the concomitant experience of low psychological meaningfulness. These findings have implications for the retention of teachers in secondary schools.

Keywords: co-worker relationships; intention to leave; job crafting; job enrichment; Namibia; psychological meaningfulness; secondary schools; supervisor relationships; turnover; work-role fit

Introduction

Quality education is regarded as a powerful tool in ensuring the economic, democratic and social development of nations (Kubberud, Helland & Smith, 1999). To deliver quality education, well-functioning teachers are needed (Kubberud et al., 1999). Substantial evidence exists showing that a significant number of teachers worldwide struggle with high levels of distress and burnout (Chaplain, 2008; Jackson, Rothmann & Van de Vijver, 2006; Johnson, Cooper, Cartwright, Donald, Taylor & Millet, 2005; Kyriacou, 2001; Pisanti, Gagliardi, Razzino & Bertini, 2003; Rasku & Kinnunen, 2003). Rieg, Paquette and Chen (2007) found that in the United States of America, 25% to 50% of new teachers resign during the first three years of teaching, owing to their inability to handle the high levels of distress associated with the profession.

According to the National Association of Namibian Teachers Union (NANTU), many of Namibia’s estimated 23,000 teachers intend to leave the profession owing to high job demands, negative job conditions and the few incentives on offer designed to retain qualified teachers (Mseyamwa, 2007). According to NANTU, approximately 2,000 teachers in Namibia leave the profession annually, whilst local colleges and universities can produce only 1,200 replacements per year (Mseyamwa, 2007). Kandetu (1998) asserts that Namibian secondary school teachers are resigning at such an alarming rate that this threatens to paralyse secondary schools in the country, especially in the rural areas. Concerns of the Namibian government with regard to escalating teacher turnover rates, high stress levels and limited teacher resources to curb the high demands of the profession, are shared worldwide (Hancock & Scherff, 2010).

The history of the education system in Namibia indicates additional stressful and challenging conditions for teachers (George, Louw & Badenhorst, 2008). Since independence in 1990, the Namibian government has faced the difficult task of transforming the national education system into an inclusive system (Ministry of Basic Education, Namibia, 2008) in order to rectify the previously unequal system of segregation that resulted in the so-called Bantu Education engineered by the South African Apartheid regime. The transformed education system gives formal education opportunities to all Namibians up to the age of 16 years (Education Act No. 16 of 2008). Teacher turnover is of particular concern among Namibian teachers, due to its implications for future hiring practices, and concern for the retention of good teachers (Mseyamwa, 2007). Although the Job Demands-Resources (JD-R) Model (Bakker, Demerouti, De Boer & Schaufeli, 2003; Demerouti, Bakker, Nachreiner & Schaufeli, 2001) proposes that job demands can be curbed with adequate job resources and national budgetary constraints, making it nearly impossible for the Namibian Ministry of Education to offer Namibian secondary school teachers more physical resources (better teaching facilities) and extrinsic rewards (adequate remuneration). Teachers in Sub-Saharan Africa are poorly paid (Bennell & Akyeampong, 2007), which is regarded as a key factor in low teacher morale and motivation.

If incentives in the form of external resources are not generous and readily available to teachers, it is crucial to focus on intrinsic resources to motivate and retain them. Meaningfulness of work was identified as a protective psychological condition (Matuska & Christiansen, 2008; Seligman, 2002; Swart & Rothmann,
Meaningfulness of work involves a fit between the work-role and the employee’s values, beliefs and behaviours (Brief & Nord, 1990). Work-role fit is the match an employee experiences between his/her self-concept and the work-role (May et al., 2004; Olivier & Rothmann, 2007; Schreuder & Theron, 2010). Such a match gives the individual a sense of meaningfulness, because he or she can express his/her values and beliefs through their work (Shamir, 1991; Van Zyl, Deacon & Rothmann, 2010). Iplik, Kilic and Yalcin (2011) regard work-role fit as that between the characteristics of the person and the characteristics of the work-role and related tasks. Research by May et al. (2004) supports the notion that a high level of work-role fit leads to an augmented experience of psychological meaningfulness in the workplace. Olivier and Rothmann (2007) indicate that the roles people perform at work contribute significantly towards their experience of meaningfulness at work. Individuals that experience high levels of work-role fit perceive their jobs as a calling, and are willing to work far more than is expected of them (Dik & Duffy, 2008).

Hackman and Oldham (1980) emphasise that tasks that facilitate personal growth contribute to experiences of meaningfulness at work. Chen, Zhang and Vogel (2011) found that employees will experience meaningfulness when they feel in control of their work tasks, or when their personal growth increases through the work they are doing. Tasks that are repetitive and allow little or no autonomy lead to boredom, lack of flexibility and job dissatisfaction (Hackman & Oldham, 1980). Job enrichment entails a redesign of such jobs, so that they become challenging. Job enrichment theory emphasises the importance of meaningfulness of work – amongst other work-related factors – on employee behaviour as a significant contributor to job satisfaction, on quality of work and on motivation (Hackman & Oldham, 1980). Hackman, Oldham, Janson and Purdy (1995) propose that an employee will feel good and thrive at work if the psychological work state of
meaningfulness is met during work, which in turn will lead to the enhancement of internal motivation. However, if an employee does not experience meaningfulness of work, internal motivation will drop significantly (Whittington & Galpin, 2010). Research indicates that job enrichment can significantly influence people’s experience of meaningfulness of their work (May et al., 2004; Oldham, Hackman & Pearce, 1976).

Frost, Dutton, Worline and Wilson (2000) maintain that an emotional ecology that encompasses personal connectivity through high levels of caring leads to increased meaningfulness in people’s lives. Kahn (1990) found that when people do not care for each other, that as a result a general feeling of disrespect may be generated, which impacts negatively on a sense of meaningfulness. May et al. (2004) indicate that well-established and satisfying co-worker relationships lead to a higher sense of meaningfulness in one’s job, while Kahn (1990) emphasised that good interpersonal interaction at work fosters a strong sense of belonging, which increases the experience of meaningfulness at work. Frost et al. (2000) show how meaningfulness can be stimulated through care. If an employee feels cared for by co-workers and the supervisor, such a worker will feel valued, respected, useful and worthy, and not taken for granted. Consequently a deep sense of meaningfulness develops.

Supervisor-employee relationships can offer a sense of connectedness and attachment to purpose, which affect employees’ sense of meaningfulness of work (Grant, 2012; Kahn & Heaphy, 2014; Podolny, Khurana & Hill-Popper, 2005; Pratt & Ashforth, 2003; Thompson & Bunderson, 2003). If a supervisor’s focus is not only instrumental (in terms of motivating employees to work well), but expressive (focused on the individuality of employees and what they need in their endeavour to fulfill themselves), relationships will be facilitative. Facilitative leaders create relationships in which followers feel connected to leaders. Such relationships heighten the sense of belongingness and felt meaningfulness at work (Kahn & Heaphy, 2014). The supportive supervisor will show concern for the needs and feelings of employees, encourage them from voicing their concerns, assist them in developing new skills, help them to solve work-related problems, and provide them with positive feedback (Deci & Ryan, 2011). This kind of support will encourage the employee to remain interested in his/her work and to enhance their autonomy. Such employees will feel safe to try new, creative ways of doing their work, will discuss mistakes, and will be more open when they are in a supportive environment of such a kind, which will in turn ensure a sense of meaningfulness of work amongst employees.

The above-mentioned literature confirms that work-role fit, job enrichment, supportive co-worker relationships and facilitative supervisor relationships result in experiences of psychological meaningfulness at work. However, research shows that work-role fit (Swart, 2012), job enrichment (Daniels, 2000) and relationship with co-workers and supervisors (Eisenberger, Stinglhamber, Vandenbergh, Sucharski & Rhode, 2002; Rothmann, Diedericks & Swart, 2013) all affect employees’ intention to leave organisations. Therefore it is expected that work-role fit, an enriched job, as well as supportive and facilitative co-worker and supervisor relationships will indirectly discourage the intention to leave, by encouraging and sustaining a sense of meaningfulness at work.

Aim and Hypotheses

Based on the review of available literature, it is postulated that specific factors contribute to the experience of meaningfulness at work for secondary school teachers. At the same time, this study foresaw that the meaningfulness of work leads to the retention of secondary school teachers. The following hypotheses were set for this study:

H1: Work-role fit, job enrichment, co-worker relationships and supervisor relationships are positively related to psychological meaningfulness of a teachers’ work.

H2: Work-role fit, job enrichment, co-worker relationships and, supervisor relationships are negatively related to teachers’ intention to leave.

H3: Meaningfulness of work is negatively related to teachers’ intention to leave.

H4: Work-role fit, job enrichment, co-worker relationships and supervisor relationships indirectly affect teachers’ intention to leave, by means of psychological meaningfulness.

Research Methodology

Research Design

A quantitative and descriptive research approach was followed. More specifically, a cross-sectional survey was used to gather data and analyse relations between variables (Creswell, 2009).

Participants

Secondary school teachers of all the government and private schools of the Khomas, Oshozone, Omaheke, Erongo, Hardap and Karas educational regions in Namibia were invited to participate in this research study on a voluntary basis, forming the target population. These educational regions are easily accessible, and are arranged around the Khomas region, where the research was conducted. Financial considerations placed pressure on the researcher to include the nearest and most convenient regions in the target population. Other considerations such as summer flooding, which could delay the transport of questionnaires, constituted another reason for excluding the northern.
regions of Namibia. A total of 2,332 secondary school teachers are employed in these regions. At the commencement of the research, 969 teachers were employed at the schools that agreed to participate in the study. Of these teachers, 502 participated in a convenience sample, and participants were selected on the basis of availability and willingness to participate (Gravetter & Forzano, 2006). The sample included teachers as well as members of school management, such as heads of department and principals. Teachers from 35 secondary schools participated from the educational regions mentioned. Approximately 57% of the participants were from the Khomas region. Ten private schools and 25 government schools participated. Nearly 52% of all the teachers of the participating schools volunteered to participate in this study. Many of the non-participating teachers mentioned that they prefer not to participate due to a heavy workload. Table 1 outlines the characteristics of the participants.

Table 1 Characteristics of the Participants ($n = 502$)

<table>
<thead>
<tr>
<th>Item</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Male</td>
<td>177</td>
<td>35.25</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>325</td>
<td>64.75</td>
</tr>
<tr>
<td>Age</td>
<td>20-24</td>
<td>22</td>
<td>3.38</td>
</tr>
<tr>
<td></td>
<td>25-29</td>
<td>86</td>
<td>17.13</td>
</tr>
<tr>
<td></td>
<td>30-34</td>
<td>75</td>
<td>14.93</td>
</tr>
<tr>
<td></td>
<td>35-39</td>
<td>60</td>
<td>11.95</td>
</tr>
<tr>
<td></td>
<td>40-44</td>
<td>66</td>
<td>13.15</td>
</tr>
<tr>
<td></td>
<td>45-49</td>
<td>78</td>
<td>15.54</td>
</tr>
<tr>
<td></td>
<td>50-54</td>
<td>65</td>
<td>12.95</td>
</tr>
<tr>
<td></td>
<td>55-59</td>
<td>32</td>
<td>6.37</td>
</tr>
<tr>
<td></td>
<td>60+</td>
<td>18</td>
<td>3.59</td>
</tr>
<tr>
<td>Qualifications</td>
<td>Grade 12</td>
<td>11</td>
<td>2.20</td>
</tr>
<tr>
<td></td>
<td>Diploma</td>
<td>166</td>
<td>33.10</td>
</tr>
<tr>
<td></td>
<td>Postgraduate Diploma</td>
<td>146</td>
<td>29.10</td>
</tr>
<tr>
<td></td>
<td>Degree</td>
<td>94</td>
<td>18.70</td>
</tr>
<tr>
<td></td>
<td>Honours Degree</td>
<td>64</td>
<td>12.70</td>
</tr>
<tr>
<td></td>
<td>Master’s or Doctoral Degree</td>
<td>21</td>
<td>4.20</td>
</tr>
<tr>
<td>Job Tenure</td>
<td>Up to 1 year</td>
<td>59</td>
<td>11.75</td>
</tr>
<tr>
<td></td>
<td>Up to 2 years</td>
<td>50</td>
<td>9.96</td>
</tr>
<tr>
<td></td>
<td>Up to 3 years</td>
<td>47</td>
<td>9.36</td>
</tr>
<tr>
<td></td>
<td>Up to 4 years</td>
<td>40</td>
<td>7.97</td>
</tr>
<tr>
<td></td>
<td>5 to 6 years</td>
<td>56</td>
<td>11.16</td>
</tr>
<tr>
<td></td>
<td>7 to 8 years</td>
<td>41</td>
<td>8.17</td>
</tr>
<tr>
<td></td>
<td>9 to 10 years</td>
<td>36</td>
<td>7.17</td>
</tr>
<tr>
<td></td>
<td>11 to 15 years</td>
<td>49</td>
<td>9.76</td>
</tr>
<tr>
<td></td>
<td>16 to 20 years</td>
<td>55</td>
<td>10.96</td>
</tr>
<tr>
<td></td>
<td>21+ years</td>
<td>69</td>
<td>13.75</td>
</tr>
<tr>
<td>Job Position</td>
<td>Student Teacher</td>
<td>8</td>
<td>1.59</td>
</tr>
<tr>
<td></td>
<td>Junior Teacher</td>
<td>50</td>
<td>9.96</td>
</tr>
<tr>
<td></td>
<td>Senior Teacher</td>
<td>364</td>
<td>72.51</td>
</tr>
<tr>
<td></td>
<td>Head of Department</td>
<td>62</td>
<td>12.35</td>
</tr>
<tr>
<td></td>
<td>Principal</td>
<td>18</td>
<td>3.59</td>
</tr>
</tbody>
</table>

Table 1 indicates that more female than male teachers participated in the study. The age category of 25-29 had the highest number of participants. Approximately 33% of the participants indicated that they were in possession of a teaching diploma as their highest professional qualification. Of all the participants, about 98% had an academic qualification higher than Grade 12. About 25% of the participants had been in the teaching profession for five years or less, whereas approximately 92% had been teaching for longer than two years. Approximately 47% of the teachers were working for more than five years at their specific school, whilst about 53% of the teachers had been working for up to four years at their current school. Approximately 34% of these had teaching experience of 11 or more years. With regard to home language, 49% of participants indicated that
they were Afrikaans-speaking, whilst 15% were Oshiwambo-speaking. The other language groups were smaller, with Tswana-speaking teachers being the lowest number represented.

Measuring Instruments
The Work-role Fit Scale (WRFS) (May et al., 2004) was used to collect data concerning participants’ subjective experience of the fit between their self-concept and their work-roles. The items (e.g., “my job ‘fits’ how I see myself”) used a 7-point agreement-disagreement scale varying from 1 (strongly disagree) to 7 (strongly agree). The reliability of the WRFS was confirmed by Olivier and Rothmann (2007) in a study in a multinational oil company. The reliability of the WRFS was confirmed by Olivier and Rothmann (2007) in a study in a multinational oil company (α = 0.90). May et al. (2004) found internal consistency with the WRFS when conducting research in a large insurance company (α = 0.92).

The Job Diagnostic Survey (JDS) (Hackman & Oldham, 1975) was used to collect data concerning secondary school teachers’ subjective experience of the degree of personal enrichment they experience because of their work (Fried & Ferris, 1987). The items (e.g. “to what extent do managers and co-workers let you know how well you are doing on your job?”) used a 7-point scale varying from 1 (very little) to 7 (a great deal). Hackman and Oldham (1975) conducted studies with the JDS with 658 employees working in 62 different jobs at seven different organisations. The results of this study showed that the JDS has internal consistency reliability as well as discriminant validity. Internal consistency and reliability ranged from a high of 0.88 to a low of 0.56.

Co-worker relationships were measured by means of ten items (e.g. “my co-workers value my input”) from May et al. (2004). Supervisor relationships were measured by five items for supervisor support (e.g. “my supervisor helps me solve work-related problems”) and five items for supervisor trust (e.g. “I trust my supervisor”). Each item required the respondent to answer on a scale that varied from 1 (strongly disagree) to 7 (strongly agree). May et al. (2004) confirmed Cronbach alpha coefficients of 0.93 for co-worker relationships and 0.95 for supervisor relationships in their study on the determining factors and mediating effects of three psychological conditions in an insurance firm in the USA.

The Psychological Meaningfulness Scale (PMS) (Spreitzer, 1995) was used to measure psychological meaningfulness. Six items of the PMS were used (e.g. “the work I do is very important to me”). A Likert scale varying from 1 (never) to 5 (always) was used. May et al. (2004) found a Cronbach alpha coefficient of 0.90 for the PMS.

The Turnover Intention Scale (TIS) (Saks, 2006) has been utilised in this study to collect data on teachers’ intention to leave their job. The items (e.g. “I am planning to search for a new job during the next 12 months”) are anchored from strongly disagree (1) to strongly agree (7). Saks (2006) reported an internal consistency of 0.82 for the TIS. Using Cronbach’s alpha coefficient, the internal consistency of the TIS was 0.91 in a study conducted by Weaver and Yancey (2010).

Statistical Analysis
The data analysis was carried out by means of Mplus version 7.3 (Muthén & Muthén, 1998-2012). A robust maximum likelihood (MLR) estimator was used to compute the Akaike Information Criterion (AIC) and the Bayes Information Criterion (BIC). These fit statistics are relevant for comparing non-nested measurement models. The AIC, which is a comparative measure of fit, is meaningful when different models are estimated. The lowest AIC is the best-fitting model. The BIC provides an indication of model parsimony (Kline, 2010). The weighted least-squares with mean and variance adjustment (WLSMV) estimator was used to test the structural models. This estimator is robust; it does not assume normally distributed variables and it provides the best option for modelling categorical data (Brown, 2006).

The following Mplus fit indices were used in this study: absolute fit indices, which included the Chi-square statistic (the test of absolute fit of the model), the weighted root mean square residual (WRMR), and the root mean square error of approximation (RMSEA); incremental fit indices, which included the Tucker-Lewis Index (TLI); and the Comparative Fit Index (CFI) (Hair, Black, Babin & Anderson, 2010). The CFI also compares the hypothesised and independent models, but also takes sample size into account. The TLI is a relative measure of covariation explained by the hypothesised model, which has been specifically designed for the assessment of factor models. Critical values for good model fit have been recommended for the CFI and TLI to be acceptable above the 0.90 level (Wang & Wang, 2012), although Hu and Bentler (1999) recommended a cut-off value of 0.95. The RMSEA provides an indication of the overall amount of error in the hypothesised model-data fit, relative to the number of estimated parameters (complexity) in the model. The recommended acceptable levels of the RMSEA should be 0.05 or less, and should not exceed 0.08. Hu and Bentler (1999) suggest a value of 0.06 to indicate acceptable fit. Chi-square difference tests were conducted to compare alternative nested structural models (Muthén & Muthén, 1998-2012).

Reliabilities (ρ) of scales measured by items rated on a continuous scale were computed by means of a formula based on the sum of squares of standardised loadings and the sum of standardised variance of error terms (Wang & Wang, 2012).
Results

The results of the study are reported below. First, the results of tests of competing measurement models are reported. Second, the results of tests of alternative structural models are reported.

Testing the Measurement Model

Using confirmatory factor analysis (CFA), a six-factor measurement model and alternative models were tested to assess whether items would load significantly onto the scales with which they were associated. Four measurement models were tested. Model 1 consisted of six latent variables, namely a) work-role fit (measured by three observed variables); b) job enrichment (measured by six observed variables); c) co-worker relationships (measured by 10 observed variables); d) supervisor relationships, which consisted of two latent variables, namely supervisor support (measured by five observed variables) and supervisor trust (measured by five observed variables); e) psychological meaningfulness (measured by six observed variables); and f) turnover intention (measured by two observed variables). All the latent variables in Model 1 were allowed to correlate.

Models 2, 3, and 4 followed the same template: However, Model 2 was specified with 10 observed variables measuring supervisor relationships (without the two first-order latent variables, namely supervisor support and supervisor trust); Model 3 was specified with 20 observed variables measuring work relationships (without the one first-order latent variable, namely co-worker relationships and the second-order latent variable, known as supervisor relationships), and Model 4 was specified with all items loading on a single factor (measured by 37 observed variables). Table 2 presents the fit statistics of the various measurement models.

Table 2 Fit Statistics for the Competing Measurement Models

<table>
<thead>
<tr>
<th>Model</th>
<th>(\chi^2)</th>
<th>df</th>
<th>AIC</th>
<th>BIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>1319.07*</td>
<td>577</td>
<td>53929.87</td>
<td>54457.19</td>
</tr>
<tr>
<td>Model 2</td>
<td>1624.27*</td>
<td>579</td>
<td>54346.76</td>
<td>54865.65</td>
</tr>
<tr>
<td>Model 3</td>
<td>3065.91*</td>
<td>584</td>
<td>56302.81</td>
<td>56800.60</td>
</tr>
<tr>
<td>Model 4</td>
<td>5345.64*</td>
<td>594</td>
<td>59669.77</td>
<td>60125.38</td>
</tr>
</tbody>
</table>

Note: \(df = \) degrees of freedom; * \(p < 0.001\)

An \(\chi^2\) value of 1539.22 (\(df = 577\)) was obtained for the hypothesised measurement model. The fit statistics on the four fit indices were acceptable: TLI = 0.97, CFI = 0.98, RMSEA = 0.06, 90% confidence intervals (CIs) of RMSEA [0.05, 0.06], WRMR = 1.25. The AIC and BIC values of Model 1 were the lowest of the four models. Standardised co-efficients from items to factors ranged from 0.54 to 0.94. The relation between each observed variable and its respective construct was statistically significant (\(p < 0.01\)). This established the posited relations between indicators and constructs (see Hair et al., 2010).

Testing the Structural Model

Reliabilities and correlations among work-role fit, job enrichment, supervisor relationships, co-worker relationships, psychological meaningfulness and intention to leave are reported in Table 3.

Table 3 Reliabilities and Correlations of the Scales

<table>
<thead>
<tr>
<th>Variable</th>
<th>(\rho)</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Work-role fit</td>
<td>0.90</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2 Job enrichment</td>
<td>0.74</td>
<td>0.67**</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3 Supervisor relationships</td>
<td>0.95</td>
<td>0.44**</td>
<td>0.62**</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4 Co-worker relationships</td>
<td>0.95</td>
<td>0.42**</td>
<td>0.50**</td>
<td>0.65**</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5 Psychological meaningfulness</td>
<td>0.94</td>
<td>0.68**</td>
<td>0.65**</td>
<td>0.42**</td>
<td>0.41**</td>
<td>-</td>
</tr>
<tr>
<td>6 Intention to leave</td>
<td>0.76</td>
<td>-0.51**</td>
<td>-0.42**</td>
<td>-0.37**</td>
<td>-0.36**</td>
<td>-0.46**</td>
</tr>
</tbody>
</table>

Note: ** \(p < 0.01\)

Table 3 shows that the reliabilities of the constructs were acceptable when compared to the guideline of 0.70 (Wang & Wang, 2012). Statistically significant (\(p < 0.01\)) relations exist between all the variables.

The measurement model formed the basis of the structural model. The hypothesised relations shown in the model were tested, using latent variable modelling as implemented by Mplus (Muthén & Muthén, 1998-2012). An acceptable fit of the model to the data was found: \(\chi^2 = 1539.21, df = 577, TLI = 0.97, CFI = 0.98, RMSEA = 0.06, 90\% CI of RMSEA [0.05, 0.06], WRMR = 1.25\). Table 4 portrays the standardised regression coefficients estimated by Mplus for the structural model.

Given the cross-sectional nature of the data, three other competing models were also tested: Model 2 included paths from work-role fit, job enrichment, supervisor relationships and co-worker relationships to psychological meaningfulness and turnover intention; but the path from psychological meaningfulness to intention to leave was constrained to zero. Model 3 included paths from work-role fit, job enrichment, supervisor relationships and co-worker relationships to psychological meaningfulness, and from psychological meaningfulness to intention to leave; but the paths from
work-role fit, job enrichment, supervisor relationships and co-worker relationships to intention to leave were constrained to zero. Model 4 included paths from work-role fit, job enrichment, supervisor relationships and co-worker relationships and psychological meaningfulness to intention to leave, but the paths from work-role fit, job enrichment, supervisor relationships and co-worker relationships to psychological meaningfulness were constrained to zero. The following changes in chi-square ($\Delta \chi^2$) were found: Models 1 and 2 - $\Delta \chi^2 = 4.99$, $\Delta df = 1$, $p < 0.0255$; models 1 and 3 - $\Delta \chi^2 = 48.54$, $\Delta df = 4$, $p < 0.0001$, and models 1 and 4 - $\Delta \chi^2 = 695.15$, $\Delta df = 4$, $p < 0.0001$. Therefore Model 1 was superior to Models 2, 3 and 4.

Figure 1 and Table 4 depict the standardised path coefficients, which Mplus estimated for the hypothesised model. The authors allowed correlations between work-role fit, job enrichment, supervisor relationships and co-worker relationships.

<table>
<thead>
<tr>
<th>Variables on Intention to Leave</th>
<th>Estimate</th>
<th>SE</th>
<th>Est/SE</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work-role fit</td>
<td>0.43</td>
<td>0.05</td>
<td>8.78</td>
<td>0.000**</td>
</tr>
<tr>
<td>Job enrichment</td>
<td>0.35</td>
<td>0.07</td>
<td>5.32</td>
<td>0.000**</td>
</tr>
<tr>
<td>Supervisor relationships</td>
<td>-0.03</td>
<td>0.06</td>
<td>-0.53</td>
<td>0.090</td>
</tr>
<tr>
<td>Co-worker relationships</td>
<td>0.07</td>
<td>0.04</td>
<td>1.70</td>
<td>0.599</td>
</tr>
<tr>
<td>Intention to leave on</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work-role fit</td>
<td>-0.32</td>
<td>0.07</td>
<td>-2.28</td>
<td>0.001**</td>
</tr>
<tr>
<td>Job enrichment</td>
<td>0.03</td>
<td>0.10</td>
<td>0.29</td>
<td>0.771</td>
</tr>
<tr>
<td>Supervisor relationships</td>
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<td>0.08</td>
<td>-1.57</td>
<td>0.166</td>
</tr>
<tr>
<td>Co-worker relationships</td>
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<td>0.06</td>
<td>-1.55</td>
<td>0.122</td>
</tr>
<tr>
<td>Psychological meaningfulness</td>
<td>-0.17</td>
<td>0.08</td>
<td>-2.28</td>
<td>0.022*</td>
</tr>
</tbody>
</table>

Note: ** $p < 0.01$; * $p < 0.05$

For the portion of the model predicting psychological meaningfulness, Table 4 indicates that the path coefficients of work-role fit ($\beta = 0.43$, $p < 0.001$) and job enrichment ($\beta = 0.35$, $p < 0.001$) were statistically significant, and had the expected signs. Work-role fit and job enrichment were positively associated with psychological meaningfulness. The WLSMV-estimated equation accounted for a large proportion of the variance in psychological meaningfulness ($R^2 = 0.44$). Similar results have been obtained in Model 2 and Model 3. However, Table 3 shows that psychological meaningfulness is significantly related, statistically, to work-role fit ($r = 0.68$), job enrichment ($r = 0.65$), supervisor relations ($r = 0.42$), and co-worker relations ($r = 0.41$). Hypothesis 1 is thereby supported.

For the portion of the model predicting intention to leave, Table 4 indicates that the path coefficients of work-role fit ($\beta = -0.32$, $p < 0.001$) and psychological meaningfulness ($\beta = -0.17$, $p < 0.022$) were statistically significant and had the expected signs. Work-role fit and psychological meaningfulness were negatively associated with intention to leave. The WLSMV-estimated equation accounted for a large proportion of the variance in intention to leave ($R^2 = 0.28$). Hypothesis 2 is partially supported. In Model 2, work-role fit ($\beta = 0.44$, SE = 0.05, $p < 0.001$) and job enrichment ($\beta = -0.40$, SE = 0.07, $p < 0.001$) were statistically significant predictors, when the effect of psychological meaningfulness on intention to leave was constrained to zero. Furthermore, in Model 3 (in which the effects of work-role fit, job enrichment, supervisor and co-worker relations on intention to leave were constrained to zero), psychological meaningfulness was strongly associated with intention to leave ($\beta = -0.61$, SE = 0.04, $p < 0.001$). Table 3 shows that work-role fit ($r = -0.51$), job enrichment ($r = -0.42$), supervisor relations ($r = -0.37$), and co-worker relations ($r = -0.46$) were statistically significantly and negatively related to intention to leave. Hypotheses 2 and 3 are supported.

Indirect Effects
To determine whether any relations in the model were indirectly affected by work-role fit, job enrichment, supervisor and co-worker relationships, the procedure explained by Hayes (2013) was used. Bootstrapping was used to construct two-sided bias-corrected 95% CIs, so as to evaluate indirect effects. Lower and upper CIs are reported (see Table 5).

Regarding the indirect effects of work-role fit and job enrichment on teachers’ intention to leave, the 95% CIs for psychological meaningfulness did not include zero. Hypothesis 4 is partially supported, namely that work-role fit and job enrichment impact intention to leave via psychological meaningfulness. None of the other indirect effects were significant.

Taken together, the results suggest that the relations posited in the model account for a substantial amount of the covariation in the data. The model accounts for 44% of the variance in psychological meaningfulness, and 28% of the variance in teachers’ intention to leave, lending more empirical support to the model’s fit.

Discussion
Namibian teachers leave the profession at an alarming rate (Mseyamwa, 2007). It is therefore crucial to understand the possible reasons for teachers’ intention to leave. This study showed that poor work-role fit and low psychological
meaningfulness have a direct effect on teachers’ intention to leave. Work-role fit and job enrichment had direct positive effects on experiences of psychological meaningfulness with regards to work. An analysis of the indirect effects showed that poor work-role fit affected intention to leave due to experiences of low psychological meaningfulness.

The results showed that psychological meaningfulness plays an important role in the retention of teachers. Given the challenges that teachers in Namibia face, as well as a lack of resources, experiences of a lack of psychological meaningfulness at work might explain why teachers are found to want to leave (Tang, Kim & Tang, 2000). Prouse (2010) found that increased psychological meaningfulness lowered the incidence of turnover intention with airline pilots and cabin crew at an airline company in New Zealand. Leiter, Harvie and Frizzell (1998) found in their study with nurses in a hospital in central Canada, that a sense of lack of meaningfulness of work contributed towards burnout, which in turn increased the likelihood of quitting. Suadicani, Bonde, Olesen and Gyntelberg (2013) also found in their study on Danish hospital employees that a low sense of meaningfulness of work independently predicted higher intention to quit. A study on a selected group of government workers in the United States indicated these workers to have been absent from work for less days when they experienced a high sense of meaningfulness in their work (Clegg, 1983), which signals that employees prefer their workplace when they experience meaningfulness there.

![Diagram](image-url)

**Figure 1** WLSMV estimates for the hypothesised model of intention to leave (standardised solution)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimate</th>
<th>SE</th>
<th>95% BC CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work-role fit</td>
<td>-0.28*</td>
<td>0.05</td>
<td>-0.38 -0.19</td>
</tr>
<tr>
<td>Job enrichment</td>
<td>-0.22*</td>
<td>0.07</td>
<td>-0.37 -0.08</td>
</tr>
<tr>
<td>Supervisor relationships</td>
<td>0.05</td>
<td>0.06</td>
<td>-0.08 0.17</td>
</tr>
<tr>
<td>Co-worker relationships</td>
<td>-0.05</td>
<td>0.04</td>
<td>-0.12 0.02</td>
</tr>
</tbody>
</table>

Note: SE = standard error; 95% BC CI = 95% bias-corrected confidence intervals

$p < 0.01$

In this study, work-role fit and job enrichment had a direct positive effect on psychological meaningfulness. Co-worker and supervisor relationships did not contribute significantly towards teachers’ experience of meaningfulness in the structural model. This contradicts Locke and Taylor (1990) as well as Kahn’s (1990) findings, that co-worker relationships were positively associated with psychological meaningfulness. One of the reasons for this finding might be that work-role fit and job enrichment are related to the job itself; whereas co-workers and supervisors have to do with relationships at work. Work roles and actual tasks (compared to work relationships) made
stronger contributions to experiences of psychological meaningfulness in this study. May et al. (2004) found, on the other hand, that co-worker and supervisor relationships were stronger, and were related psychologically to a sense of safety.

Although co-worker and supervisor relationships were not significant predictors of psychological meaningfulness and turnover intention in the structural model, this does not mean that these relationships are not important to teachers. In fact, studies have shown that the relational context at work is important, because it fosters a sense of belonging (Kahn & Heaphy, 2014), shows that employees care for each other (Frost et al., 2000), and offers a sense of connectedness and attachment to a purpose and to the leader (Kahn & Heaphy, 2014). The strength and direction of correlations between co-worker and supervisor relationships on the one hand, and psychological meaningfulness and intention to leave on the other, provide support for the importance of the relational context in which teachers find themselves. However, co-worker and supervisor relationships were also associated with work-role fit. Therefore, it is possible that teachers’ perceptions of relational contexts at work may have affected their sense of fit with their jobs, which in turn affected psychological meaningfulness and intentions to leave (Boon, Den Hartog, Boselie & Paauwe, 2011).

Numerous studies support the positive interaction between work-role fit and the psychological meaningfulness of work. Work-role fit and psychological meaningfulness have since become important research avenues (Dik & Duffy, 2008; May et al., 2004; Olivier & Rothmann, 2007; Schaufeli & Bakker, 2004; Wrzesniewski & Tosti, 2005). Shamir (1991) states that work-role fit assists the human being in transcending his or her personal, limited existence, thus widening the horizon of meaningfulness in his/her life. In the same sense, May et al. (2004) found that work-role and self-concept of the employee were intertwined (work-roles are selected to complement self-concept), which contributed to increased experience of meaningfulness (Olivier & Rothmann, 2007). Rothmann and Rothmann (2010), as well as Van Zyl et al. (2010), found that work-role fit was a strong predictor of psychological meaningfulness, whereas findings from previous studies support the notion that job enrichment and psychological meaningfulness correlate positively (Kahn, 1990; May et al., 2004; Renn & Vandenberg, 1995). Job enrichment can be seen as a tool that assists towards employee empowerment. An employee that perceives his/her work to enrich the self, and to allow for personal growth, will stand a better chance of experiencing meaningfulness in the work and the workplace. In this sense, Spreitzer (1995) found that job enrichment helped employees to experience their jobs as meaningful. Saks (2006), in his study on the antecedents and consequences of work engagement, also indicates that job enrichment leads to the psychological meaningfulness of work. Hackman and Oldham (1976, 1980) have argued that meaningfulness is an important product of job-enriched work circumstances. Hosiea, Jayashree, Tchantchane and Lee (2013), in their study with employees of a Singaporean retail petroleum firm, found that the job enrichment of employees decreased their intention to quit, probably because they experienced their work to be meaningful. It is thus evident that the broader literature includes studies which support the findings that teachers in Namibia that experience work-role fit and job enrichment also stand a better chance of experiencing elevated levels of meaningfulness of work.

In addition, it was also found in this study that poor work-role fit and low psychological meaningfulness had a direct effect on teachers’ intention to leave the teaching profession. Teachers indicated that a poor fit with their work-role and an inability to find meaning in their work would be likely to prompt them to resign and look for other posts. This finding is in agreement with that of Iplik et al. (2011), who confirmed in their study on Turkish hotel managers that good work-role fit leads to a decrease in intention to resign. Also, in his study amongst seven different organisations, Scroggins (2008) found that if the self-concept of the employee was confirmed by the work-role, that the person would find so much meaning in the job that turnover intention would either be very low, or not at all present.

An analysis of the indirect effects showed that poor work-role fit and poor job enrichment affected intention to leave via experiences of low psychological meaningfulness. In this regard, Tummers and Knies (2013) conducted a study in the Netherlands in the sectors of health, education and local government, confirming that meaningfulness played a strong mediating role between leadership and healthy organisational outcomes, especially in the sectors of health and education. Various studies also confirmed psychological meaningfulness to be an important predictor of turnover intention (May et al., 2004; Rothmann & Rothmann, 2010; Woods & Sofat, 2013).

The study was limited to secondary school teachers of only six of the 13 educational regions of Namibia. Future studies might seek to include all the educational regions of Namibia as the country has a vast territory with great differences between regions. Findings might be different if all the regions are included. Another limitation is that a survey design has been used, making it practically impossible to find causes for the obtained relationships. A longitudinal study would thus be more enlightening in this regard.
Conclusion
It is firstly concluded from this study of secondary school teachers in Namibia that psychological meaningfulness of work can be associated with teachers’ intentions to leave their jobs and organisations. Secondly, although work-role fit, job enrichment, and supervisor and co-worker relations are strongly associated with psychological meaningfulness of teachers’ work, two factors, namely work-role fit and job enrichment, were statistically significant predictors. Lastly, work-role fit and job enrichment made significant contributions to teachers’ intention to leave their jobs, as well as to leave the organisation that employs them.

Recommendations
Ways should be found to inform and guide relevant education authorities regarding the effects of psychological meaningfulness of work on retention of teachers. Interventions ought, therefore, to be implemented to improve work-role fit of teachers and to enrich their jobs. To retain teachers, it is thus essential to focus on their subjective experience of work-role fit and job enrichment. Human resource management initiatives (including recruitment, selection, induction, training and development, and performance management) should be implemented so as to promote work-role fit of teachers, which is likely to promote psychological meaningfulness and result in retention of staff (Isaksen, 2000).

Longitudinal research is necessary to clarify the effects of teachers’ relational contexts at work on their experiences of fit in their environment. Whilst this study focused on work-role fit, future studies should also focus on fit in the school in which teachers are appointed. More research is also needed regarding the implementation of meaning-making interventions, as well as programmes to improve work-role fit and job enrichment.

References


Holton BC, Mitchell TR, Lee TW & Eberly MB 2008. Turnover and retention research: A glance at the past, a closer review of the present, and a venture into the future. The Academy of Management Annals, 2:231-274.


Muthén.


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