Employee Wellness amongst Middle Managers in a South African Public Sector Organisation

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Abstract

At the heart of the public service sector within a developing country such as South Africa, is the contentious issue of good service delivery. However, numerous budget cuts, high vacancy rates and service delivery demands have an impact on the wellbeing of middle managers. This study investigates: 1) the relationship between sense of coherence, work engagement and burnout; and 2) whether there is a difference in socio-demographic variables. The study employed a quantitative research method, using primary data from a convenience sample (N = 172) of middle managers within a public service organisation. The correlational and inferential statistical analysis revealed a significant statistical relationship between the variables, namely sense of coherence, work engagement, and burnout. Significant differences were also found between respondents in terms of marital status and depersonalisation or cynicism. Overall, the results showed that the respondents experienced high levels of sense of coherence, work engagement and professional efficacy. This study has highlighted the wellbeing of employees within the public sector in a developing country.

Keywords: employee wellness; middle managers; public sector; sense of coherence; work engagement; burnout

Introduction

In South Africa, the public sector is important to reconstruct the past by practising a more democratic public administration, in order to transform the economy (Rajin 2012). Due to the historical reconstruction, this government sector is under severe pressure to improve service delivery. The role of the middle manager is to ensure that government’s policies and programmes are implemented and, in this context, the behaviour and work performance of public officials are, therefore, extremely important (Rajin 2012). For
employees to render efficient and effective service to the public, it is vital that the functioning and wellbeing of these officials are not ignored (Issa 2011). Personal attributes such as sense of coherence, work engagement and burnout are important considerations when investigating the wellbeing of officials in the public service sector (Burke 2001; Horn 2014; Hornbaek 2006; Luddy 2005; Patrick 2011; Van der Colff and Rothmann 2009).

**Review of Related Literature**

**Employee Wellbeing**

Employee wellbeing is contextualised in this study as employees who are functioning optimally, experience positive affect, are engaged, and experience job satisfaction as opposed to those who do not (Diedericks and Rothmann 2013). The concept of wellbeing or flourishing is used to describe mental health and includes both hedonic wellbeing (feeling well) and eudemonic wellbeing (functioning well) (Keyes and Annas 2009). Keyes’s (1998) model of wellbeing is characterised by patterns of positive feelings and positive functioning within the context of subjective wellbeing. The model includes three dimensions, namely, emotional wellbeing (positive affect), psychological wellbeing (engaged and purposeful) and social wellbeing (socially accepting and positive relations with others). In other words, wellbeing means that individuals are experiencing positive feelings and are functioning effectively, with this leading to life satisfaction (Huppert and So 2013).

**Sense of Coherence**

The study of wellbeing and the orientation to flourishing includes investigating psychological properties such as sense of coherence, which may have benefits for the public service. It is noted that the literature reports limited research on the concept sense of coherence in a public service sector organisation in a developing country (Louw, Mayer and Baxter 2012; Park and Perry 2012). The conceptualisation by Antonovsky (1979;1987) regarding the salutogenic paradigm, which focuses on understanding how people remain healthy while being exposed to stressors in the environment, is adopted. Antonovsky (1987) refined the definition of sense of coherence as a global orientation that reflects an individual’s pervasive, enduring and dynamic feelings of: a) confidence that the internal and external stimuli in the environment are structured, predictable and explicable (comprehensibility); b) that the individual possesses the resources required to meet the demands posed by these stimuli (manageability); and c) that these demands are challenges which are worthy of both investment and engagement (meaningfulness) (Antonovsky 1987; Coetzee and Harry 2013; Louw et al. 2012).

Vogt, Jenny and Bauer (2013) argue that the development of comprehensibility, manageability and meaningfulness is affected by individual characteristics, namely personality and experiences, as well as characteristics in the working environment such as the work-related structures and processes that impact on the level of sense of coherence.
**Work Engagement**

The first scholars to explore work engagement have highlighted it as a relativist notion that focuses on the fulfilling, work-related state of mind that is characterised by vigour, dedication, and absorption (Bakker, Schaufeli Leiter and Taris 2008; Roothman 2010; Schaufeli and Bakker 2003; Schaufeli and Salanova 2014).

Work engagement is distinguished by elevated levels of energy and involvement that includes an enduring, affective and cognitive state in which individuals experience their work as inspiring, interesting, significant and meaningful (Bakker et al. 2008; Bezuidenhout and Cilliers 2010; Schaufeli and Bakker 2003).

According to various scholars, it has been found that a relationship between wellbeing and work engagement involves individuals acknowledging and using their strengths in the workplace (Park, Peterson and Seligman 2005; Rothmann 2013). Research from some scholars has suggested the three dimensions of work engagement, namely: 1) **vitality**, which is the readiness to dedicate effort and energy or also referred to as vigour; 2) **dedication**, which refers to a strong identification with and feelings towards the job; and finally 3) **absorption**, which is a cognitive component and is characterised by individuals being completely engrossed in their work, fully focused in their work and experiencing satisfaction and total involvement in their work performance. These all contribute to the debate of wellbeing or flourishing, although studies have shown that vigour and dedication are greater predictors of positive work outcomes compared to absorption, which is unstable and is prone to fluctuate (Park et al. 2005; Rothmann 2013). Research in Ghana amongst public sector employees revealed that employees have a high employee engagement and commitment in private sectors rather than the public sector; this is due to a lack of resources in the public sector in Ghana (Agyemang and Ofei 2013).

**Burnout**

Burnout seems to be arguably the most popular research topic in occupational health psychology (Bakker, Demerouti, and Sanz-Vergel 2014). There is a good reason for this, as research has shown that individuals who are at risk of burnout and show impaired job performance may face serious health problems (Oerlemans and Bakker 2014).

Burnout is defined as a prolonged, ineffective response to chronic, interpersonal stressors in the work environment and is considered a multidimensional construct that is a reaction to continuing stressors caused by exhaustion, mental withdrawal or depersonalisation, and a negative belief or lack of accomplishment or efficacy (Schaufeli and Salanova 2014). Research has found that there are structural causes in the work environment, in particular high job demands and low job resources (Oerlemans and Bakker 2014). Despite this knowledge, there is little known on the role that middle managers play in their daily process that may lead to burnout (Bakker et al. 2014; Oerlemons and Bakker 2014). Ongoing ineffective coping skills in the face of job
demands and inadequate resources may give rise to burnout, which includes symptoms of not functioning optimally, being emotionally disconnected as work may have lost its meaning, and experiencing reduced levels of confidence in work performance (Maslach, Schaufeli and Leiter 2001). There is no research on burnout in a public sector organisation in a developing country, which therefore warrants a need for empirical evidence on the effect of burnout on middle managers.

**Proposed Relationships and Hypothesis Formulation for the Study**

**Sense of Coherence, Work Engagement and Burnout**

Research studies on the relationship between sense of coherence, work engagement and burnout within the public service, have been mainly in the health and education sectors (Bezuidenhout and Cilliers 2010; Harry 2011; Jacobs and Roodt 2010; Wajid et al. 2011). Accordingly, the purpose of this study was to highlight this limitation in the existing literature and in the formulation of the research hypotheses that reinforce a theoretical foundation for this study.

Studies show that there is a strong relationship between sense of coherence, work engagement and burnout (Fourie, Rothmann and Van de Vijver 2007; Patrick 2011). Primary researchers who have explored the relationship between the constructs revealed that sense of coherence and work engagement have a negative significance on burnout. Burnout is one aspect that influences a person’s wellbeing negatively, and sense of coherence forms an important component of one’s health (Patrick 2011; Rothmann, Steyn and Mostert 2005; Williams, Wissing, Rothmann and Temane 2009; Strümpfer 1995; Van der Colff and Rothmann 2009). A study on local government employees established that sense of coherence has a moderating effect on the experience of job stress and burnout (Roothman, Kirsten and Wissing 2003). Patrick (2011) reported that officials functioned positively despite the challenges they faced in the public service sector. Employees who experience happiness and are satisfied with their job are more likely to engage and function well in their work, which is characteristic of flourishing (Keyes 2005).

Research on employee wellbeing has led to arguments that employees, irrespective of their workplace challenges, are able to function well if they possess an effective coping ability as a result of their strong personal resources, for example, sense of coherence and work engagement (Fourie et al. 2007; Patrick 2011).

Employees with a strong sense of coherence may experience lower levels of burnout and may demonstrate greater work engagement, which may be attributed to the individual’s perception and understanding that the stimuli in the environment are comprehensible, manageable and meaningful (Patrick 2011; Rothmann et al. 2005; Van der Colff and Rothmann 2009).
Studies in the public sector found that a strong sense of coherence is positively related to work engagement and negatively related to burnout (Bezuidenhout and Cilliers 2010; Harry 2011; Jacobs and Roodt 2010; Wajid et al. 2011). According to Patrick (2011), the promotion of a strong sense of coherence will bring about higher levels of personal accomplishment and work engagement that are important considerations when addressing the low morale and poor service delivery within the public service (Fourie et al. 2007; Luddy 2005).

Vazi et al. (2011) found that the work stressors of teachers in the educational sector were positively correlated with higher stress levels and negative affective states. In a study among female academics, Bezuidenhout and Cilliers (2010) reported a negative association between burnout and sense of coherence. In addition, the findings in a study conducted within local government found a statistically positive relationship between sense of coherence, job stressors and burnout (Rothmann 2003). Other studies conducted on employee wellbeing have led to findings that public service officials, irrespective of the workplace challenges in the public sector, are able to function positively if they possess the effective coping abilities arising from a strong sense of coherence, which are positively associated with work engagement (Patrick 2011).

**Burnout and Wellbeing**

According to Maslach et al. (2001), burnout is a syndrome which is well documented in the literature as exhaustion, cynicism and a feeling of reduced professional efficacy. It has been proposed that dimensions of burnout, namely exhaustion and cynicism, are conceptual opposites of the dimensions of work engagement (vigour and dedication). Burnout is considered the antipode of work engagement and may lead to lack of motivation, distress, feelings of ineffectiveness and dysfunctional behaviour (Schaufeli and Enzmann 1998).

In relation to burnout and sense of coherence, it was established by researchers that a weak sense of coherence combined with job stress was associated with the three dimensions of burnout because of job demands and lack of resources (Rothmann 2003). A strong sense of coherence relates to job satisfaction and psychological health. Overall, it seems that sense of coherence appears to have a negative relationship with burnout (Feldt 1997).

It is against this background that the following hypotheses are formulated for the study:

- **Hypothesis 1 (H1):** There is a significant relationship between sense of coherence, work engagement and burnout.

With regard to marital status and its influence on sense of coherence, work engagement and burnout, research reveals that widowed or single participants experience lower levels of work engagement and sense of coherence (Harry 2011; Wajid et al. 2011).
However, married couples tend to experience higher levels of burnout (Du Plooy and Roodt 2013).

- **Hypothesis 2 (H2):** Marital status will differ significantly in employees’ levels of sense of coherence, work engagement and burnout.

**Research Design**

**Research Approach**

The study was conducted using the quantitative research design approach. According to Fouche and De Vos (2005), a quantitative study transforms the relevant concepts into operational definitions to make it possible to obtain numerical results and report such results in the form of a statistical representation.

**Research Method**

**Research Participants**

In this study, a cross-sectional study was conducted in order to investigate the relationship between sense of coherence, work engagement and burnout. The total study population ($N = 300$ of which 172 only were viable) consisted of middle managers permanently employed in various divisions in the public sector organisation selected. A response rate of 57 per cent (or 172 useable questionnaires) was received. The sample comprised 54 per cent females and 44 per cent males. The majority of the participants were married (65%).

**Measuring Instruments**

The Orientation to Life Questionnaire (OLQ) (Antonovsky 1987) was used to measure sense of coherence. The OLQ is a self-rating scale and consists of 29 items (Antonovsky 1987) that measure the three **dimensions** of sense of coherence, namely:

- **Comprehensibility** (11 items, e.g. “Does it happen that you have feelings inside you would rather not feel? Very often versus very seldom or never”).
- **Manageability** (10 items, e.g. “When something unpleasant happened in the past your tendency was to eat yourself up about it versus to say ‘OK, that’s that, I have to live with it and go on’ ”).
- **Meaningfulness** (8 items, e.g. “You anticipate that your personal life in the future will be totally without meaning or purpose versus full of meaning and purpose”).

Reliability studies found Cronbach’s alpha ranging from 0.51 to 0.90 (Eriksson and Lindstrom 2005). The Cronbach’s alpha for the total OLQ was 0.90 (Bezuidenhout and Cilliers 2010).
The Utrecht Work Engagement Scale (UWES) (Schaufeli and Bakker 2003) was used to measure work engagement, which consists of 20 items and includes a 7-point frequency rating scale ranging from 0 (never) to 6 (always) and measures the three dimensions of work engagement, namely:

- **Vigour** (7 items, e.g. “At my work, I feel bursting with energy”).
- **Dedication** (8 items, e.g. “I find the work that I do full of meaning and purpose”).
- **Absorption** (5 items, e.g. “Time flies when I’m working”).

Acceptable levels of reliability and internal consistencies have been found (Schaufeli, Salanova, Gonzalez-Roma and Bakker 2002) and validated in several countries (Bakker and Demerouti 2007; Opie and Henn 2013; Storm and Rothmann 2003). Studies conducted in South Africa revealed Cronbach’s alpha coefficients of 0.78 for vigour; 0.89 for dedication; and 0.78 for absorption (Schaufeli and Bakker 2003).

The Maslach Burnout Inventory: General Survey (MBI) (Maslach and Jackson 1981) was used to measure burnout. The MBI scale consists of 16 items and contains a 7-point rating scale ranging from 0 (never) to 6 (always) and measures:

- **Emotional exhaustion** (5 items, e.g. “Working all day is really a strain for me”).
- **Cynicism** (5 items, e.g. “I doubt the significance of my work”).
- **Professional efficacy** (6 items, e.g. “I have accomplished many worthwhile things in my job”).

Rothmann (2003) found the internal consistencies to be satisfactory with 0.72 (cynicism), and 0.91 (exhaustion) and also satisfactory alpha coefficients. Satisfactory alpha coefficients of 0.79 for exhaustion and 0.84 for both cynicism and professional efficacy are reported (Leiter and Schaufeli 1996; Roelofs, Verbraak, Keijser, De Bruin and Schmidt 2005; Rothmann and van Rensburg 2002; Taris, Schreurs and Schaufeli 1999).

**Research Procedure and Ethical Consideration**

The researcher obtained permission to conduct the study from the Head of the Public Service Institution, while ethical clearance was obtained from the University of South Africa. The participants were informed that their participation in the study was voluntary. The purpose of the study was explained to the participants, while confidentiality and anonymity were emphasised in the covering letter. The participants were informed that the questionnaires were to be used for research purposes only.

**Statistical Analysis**

Data analysis was conducted using the Statistical Package for the Social Sciences (SPSS version 2010). Both descriptive statistics, as well as inferential statistics, were used in the analysis of the data. In order to establish the internal consistency or reliability,
Cronbach’s alpha coefficients of the instruments were calculated with a cut-off set at 0.70.

The Pearson product-moment correlation (Pearson r) determined the strength of the relationships between sense of coherence and work engagement and the burnout sub-dimensions exhaustion and cynicism. For the purpose of the study, the level of significance was set at 0.05 while r-values larger than 0.30 (medium effect) were considered to be practically significant (Cohen 1992).

Standard multiple regression analysis was conducted to identify whether sense of coherence and work engagement variables significantly predict the portion of the total variance of scores of the dependent variable (burnout). The multivariate analysis of variance (MANOVA) was used to determine whether there were statistically significant differences between the socio-demographic groups (gender, age, race, marital status, number of years in current position and number of years in public service) and sense of coherence, work engagement and burnout (exhaustion, cynicism and professional efficacy). A 95 per cent confidence interval level was set and (p ≤ 0.05) deemed to be statistically significant. It was, therefore, decided to use the effect sizes as denoting the practical significance of the findings (Steyn 1999).

Results

Descriptive Statistics

The descriptive statistics for the three measuring instruments were reported upon with the means, standard deviations and Cronbach’s alpha coefficient for the scales being computed, and are presented in Table 1.

Table 1: Descriptive statistics: mean, standard deviation and Cronbach’s alpha coefficients

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total OLQ (20 items)</td>
<td>5.20</td>
<td>0.84</td>
<td>-0.56</td>
<td>0.42</td>
<td>0.86</td>
</tr>
<tr>
<td>Total UWES (20 items)</td>
<td>5.72</td>
<td>1.07</td>
<td>-0.79</td>
<td>0.51</td>
<td>0.93</td>
</tr>
<tr>
<td>Exhaustion (5 items)</td>
<td>3.23</td>
<td>1.49</td>
<td>0.58</td>
<td>-0.27</td>
<td>0.88</td>
</tr>
<tr>
<td>Cynicism (5 items)</td>
<td>3.02</td>
<td>1.37</td>
<td>0.62</td>
<td>-0.05</td>
<td>0.77</td>
</tr>
<tr>
<td>Professional Efficacy (6 items)</td>
<td>5.90</td>
<td>0.99</td>
<td>-1.26</td>
<td>1.78</td>
<td>0.77</td>
</tr>
</tbody>
</table>
Orientation to Life Questionnaire (OLQ)

It is clear from the results in Table 1 that in terms of reliability, the Cronbach’s alpha coefficient of the overall OLQ was 0.86, which was deemed acceptable as it was above the criterion of $\alpha > 0.70$ (Nunnally and Bernstein 1994). These findings are in line with previous research conducted by Rothmann et al. (2005) who also reported a Cronbach’s alpha coefficient of 0.86 for the OLQ.

The scores demonstrated a relatively acceptable level of sense of coherence on the overall Orientation to Life scale ($M = 5.20; SD = 0.84$). Barnard (2013) also reported an acceptable score of 4.7 ($SD = 1.45$) in her study on sense of coherence, which means that participants possess a high level of sense-making in respect of both their internal and their external environments.

The Cronbach’s alpha coefficient of the overall UWES was acceptable at 0.93 (Nunnally and Bernstein 1994).

The participants also achieved a high work engagement score ($M = 5.72; SD = 1.07$). According to Viljoen (2012), a mean score of the total UWES of 3 is considered average. This indicated that the mean score of the finding in this study was relatively high and implies that participants were engaged in their work.

The alpha coefficients of the sub-dimension of the MBI were exhaustion = 0.88; cynicism = 0.77; and professional efficacy = 0.77. These were regarded as acceptable as all three were above the guideline of 0.70 (Nunnally and Bernstein 1994). The sub-dimension of professional efficacy was not normally distributed, and the skewness and kurtosis scores were relatively high. The skewness and kurtosis showed a normal distribution for all the scales except for professional efficacy, as the scores were ($< 1$) for skewness and ($> 1$) for kurtosis. The highest score was on the sub-dimension of professional efficacy ($M = 5.90; SD = 0.99$), thus indicating that participants felt good and were confident in their ability to do their work. The participants achieved the lowest scores for the sub-dimensions exhaustion ($M = 3.23; SD = 1.49$) and cynicism ($M = 3.02; SD = 1.37$).

**Correlation analysis between sense of coherence, work engagement and burnout**

**Hypothesis 1 (H1):** There is a significant relationship between sense of coherence, work engagement and burnout.

A correlation analysis between the one-factor sense of coherence, one-factor work engagement and the three burnout sub-dimensions (exhaustion, cynicism and professional efficacy) was conducted and the results are presented in Table 2.
Table 2: Correlation Coefficients between sense of coherence, work engagement and burnout (n = 172)

<table>
<thead>
<tr>
<th>Item</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SOC</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. WE</td>
<td>0.34*</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. Exhaustion</td>
<td>-0.25</td>
<td>-0.34*</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. Cynicism</td>
<td>-0.44*</td>
<td>-0.49</td>
<td>-0.53**</td>
<td>-0.31*</td>
<td>-</td>
</tr>
<tr>
<td>5. Professional efficacy</td>
<td>0.44**</td>
<td>0.60***</td>
<td>-0.22</td>
<td>-0.31*</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: + Statistically significant (p ≤ 0.01); * Correlation is practically significant r ≤ 0.30 (medium effect); **Correlation is practically significant r ≤ 0.50 (large effect).

The variable sense of coherence was statistically positively correlated with the work engagement variable (r = 0.34; p ≤ 0.01; medium practical effect) as well as with professional efficacy (r = 0.44; p ≤ 0.01; medium practical effect) and negatively correlated with cynicism (r = -0.44; p ≤ 0.01; medium practical effect).

The variable work engagement was statistically positively correlated with professional efficacy (r = 0.67; p ≤ 0.01; large practical effect) and negatively correlated with both exhaustion (r = -0.34; p ≤ 0.01; medium practical effect) as well as cynicism (r = -0.44; p ≤ 0.01; medium practical effect). The results suggest that H1 is supported and is, therefore, accepted in this study.

Multiple Regression

In order to establish whether there is a significant relationship between sense of coherence and work engagement in relation to burnout (exhaustion, cynicism and professional efficacy) a standard multiple regression analysis was conducted.
Table 3: Multiple Regression Analysis with sense of coherence and work engagement as Predictors of Exhaustion

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardised coefficients</th>
<th>Standardised coefficients</th>
<th>t</th>
<th>p</th>
<th>F</th>
<th>R</th>
<th>R²</th>
<th>( \Delta \frac{R^2}{R^2} )</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>BETA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>5.72</td>
<td>0.77</td>
<td>7.35</td>
<td>0.00</td>
<td>10.62</td>
<td>0.26</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td>SOC</td>
<td>-0.48</td>
<td>0.14</td>
<td>-0.26</td>
<td>-3.25</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>(Constant)</td>
<td>7.04</td>
<td>0.85</td>
<td>8.25</td>
<td>0.00</td>
<td>10.74</td>
<td>0.36</td>
<td>0.13</td>
</tr>
<tr>
<td></td>
<td>SOC</td>
<td>-0.30</td>
<td>0.15</td>
<td>-0.16</td>
<td>-1.97</td>
<td>0.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Work engagement</td>
<td>-0.39</td>
<td>0.12</td>
<td>-0.27</td>
<td>-3.27</td>
<td>0.01</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: a: Predictors (constant), sense of coherence, work engagement; b: Dependent Variable

Exhaustion

The regression analysis reveals that sense of coherence together with work engagement had a variance of \( R^2 = 0.13 \). This meant that 13 per cent of exhaustion could be attributed to low levels of sense of coherence and work engagement. The finding also showed that sense of coherence and work engagement negatively predicted exhaustion (\( \beta = -0.16 \) & \( \beta = -0.27 \); \( t = -1.97 \) and \( t = -3.27 \)), with this indicating that low levels of sense of coherence and low levels of work engagement were significant predictors of exhaustion.
Table 4: Regression Analysis of sense of coherence together with work engagement as Predictors of Professional Efficacy

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardised coefficients</th>
<th>Standardised coefficients</th>
<th>t</th>
<th>p</th>
<th>F</th>
<th>R</th>
<th>R²</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>BETA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>3.35</td>
<td>0.47</td>
<td>7.05</td>
<td>0.00</td>
<td>30.34</td>
<td>0.42</td>
<td>0.17</td>
</tr>
<tr>
<td></td>
<td>SOC</td>
<td>0.49</td>
<td>0.08</td>
<td>0.42</td>
<td>5.50</td>
<td>0.00</td>
<td>3.47</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>(Constant)</td>
<td>1.51</td>
<td>0.42</td>
<td>3.60</td>
<td>0.00</td>
<td>68.94</td>
<td>0.70</td>
<td>0.50</td>
</tr>
<tr>
<td></td>
<td>SOC</td>
<td>0.25</td>
<td>0.07</td>
<td>0.22</td>
<td>3.47</td>
<td>0.00</td>
<td>9.40</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Work engagement</td>
<td>0.53</td>
<td>0.05</td>
<td>0.60</td>
<td>9.40</td>
<td>0.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: a: Predictors (constant), sense of coherence, work engagement; b: Dependent variable

Professional Efficacy

The regression analysis reveals that sense of coherence and work engagement had a variance of ($R^2 = 0.50$). This meant that 50 per cent of the level of professional efficacy could be explained by sense of coherence and work engagement. According to the results, this shows that sense of coherence and work engagement had been found to be significant predictors of professional efficacy ($\beta = 0.22 \& \beta = 0.60; t = 3.47 \& t = 9.40$).
Table 5: Regression Analysis with sense of coherence and work engagement as the Predictors of Cynicism

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardised coefficients</th>
<th>Standardised coefficients</th>
<th>t</th>
<th>p</th>
<th>F</th>
<th>R</th>
<th>R²</th>
<th>∆R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>6.67</td>
<td>0.66</td>
<td>10.02</td>
<td>0.00</td>
<td>30.50</td>
<td>0.42</td>
<td>0.17</td>
</tr>
<tr>
<td></td>
<td>SOC</td>
<td>-0.69</td>
<td>0.12</td>
<td>-5.52</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>(Constant)</td>
<td>8.26</td>
<td>0.69</td>
<td>11.81</td>
<td>0.00</td>
<td>29.51</td>
<td>0.54</td>
<td>0.29</td>
</tr>
<tr>
<td></td>
<td>SOC</td>
<td>-0.47</td>
<td>0.12</td>
<td>-3.79</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Work engagement</td>
<td>-0.47</td>
<td>0.09</td>
<td>-4.85</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: a: Predictors (constant), sense of coherence, work engagement; b: Dependent variable

Cynicism

The regression analysis reveals that sense of coherence together with work engagement had a variance of (∆R² = 0.28). This meant that 29 per cent of the level of cynicism could be explained by sense of coherence and work engagement. According to the results, model 2 shows that sense of coherence and work engagement negatively predicted cynicism (β = -0.28 & β = -0.37; t = -3.79 and t = -4.85), thus indicating that low levels of sense of coherence and work engagement were significant predictors of cynicism. H1 is supported and is, therefore, accepted in this study.

Table 6: Differences in Burnout (Cynicism) and Marital Status

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
<th>F</th>
<th>df</th>
<th>p</th>
<th>Partial eta squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>0.79</td>
<td>2.47</td>
<td>5</td>
<td>0.03</td>
<td>0.07</td>
</tr>
</tbody>
</table>

*Statistically significant difference: p ≤ 0.05

The results presented in Table 6 illustrate that, in this study, married individuals were the only group that had an effect on the level of cynicism. The Wilk’s lambda for marital status equalled 0.79 (F 2.47, p 0.03), thus highlighting the significant impact of this variable on the sub-dimension of cynicism. On the other hand, the partial eta squared (0.07) indicated a small practical effect for the difference between marital status and cynicism. H2 is supported and is, therefore, accepted in this study.
Discussion

The goal of the study was to assess the wellbeing of middle managers in a public service sector, by taking into consideration sense of coherence, work engagement and burnout. It is required of employees in the 21st century to be focused and committed to both service delivery and policy implementation (Luddy 2005). Employee wellbeing and distress remain a pervasive health problem and the public service, with its demanding working environment, is not immune to such issues. Therefore, middle managers’ wellbeing is of importance in this study (Luddy 2005; Park and Perry 2012).

Relationship between Sense of Coherence, Work Engagement and Burnout

A significant association was found between the participants who experienced sense of coherence and work engagement and the sub-dimension of burnout, namely professional efficacy.

Research by many scholars has revealed that sense of coherence has a positive effect on burnout (Coetzee and Harry 2013; Horn 2014; Johnston, De Bruin, Geldenhuys, Györkös, Massoudi and Rossier 2013; Van der Westhuizen, Horn and Viljoen 2015). It is argued that a strong sense of coherence will most likely provide meaning and strengthen both work engagement and professional efficacy, thus preventing burnout (Redelinghuys and Rothmann 2004; Strümpfer 2002).

This could imply that the participants may have both the personal resources and the ability to work in a complex environment, and that they also possess the confidence and coping ability required to manage their work challenges. Results were found by Fourie et al. (2007) which suggested that employees with a strong sense of coherence perceive their work stimuli as making cognitive sense; are controllable and significant; and feel it is worth their while to invest energy and meaning in their work. Studies in local government indicated that sense of coherence has a moderating effect on job stressors, specifically exhaustion and professional efficacy (Rothmann, Jackson and Kruger 2003).

In terms of burnout, the study suggested that middle managers experienced high levels of sense of coherence and work engagement with professional efficacy, and lower levels of sense of coherence and work engagement with exhaustion and cynicism. Similar results were found in studies conducted by Sahu and Yadav (2013) as well as Viljoen (2012), who found that respondents scored higher on professional efficacy compared to exhaustion and cynicism. Research reveals that professional efficacy includes aspects an individual would consider to be worthwhile, such as abilities and accomplishments, which suggests that middle managers assess their own abilities to cope with their work demands positively to achieve their work goals (Fourie et al. 2007; Harry 2017).

Sense of coherence had a significant relationship with work engagement and professional efficacy, and lower levels with burnout (exhaustion and cynicism). This
indicates that the managers were probably equipped with resilience skills to deal with the demands of their working environment, as sense of coherence is also deemed to be a stress-coping ability (Harry and Coetzee 2011; Johnston et al. 2013; Rothmann et al. 2003; Van der Colff and Rothman 2009).

In line with the wellbeing model (Keyes 2007), this study revealed that individuals who experience the positive attributes of wellbeing or flourishing might experience emotional, psychological and social wellbeing. The results suggest that H1 is supported and is, therefore, accepted in this study.

**Relationship between Marital Status and the Constructs**

The results showed that there was a statistically significant difference between married couples and the sub-dimension cynicism. More than 65 per cent of the respondents in the study were married, and according to the analysis of variance, showed a significant difference with the sub-dimension of cynicism. It may be assumed that people who had indicated that they are married may also have experienced cynicism. In their studies, Du Plooy and Roodt (2013) also found that married or cohabitating people demonstrated higher levels of burnout compared to single participants. According to research, cynical behaviour can also serve as an important coping mechanism and also alleviates frustrations with problem situations (Chiaburu, Peng, Oh, Banks and Lomeli 2013). The results suggest that H2 is supported and is, therefore, accepted in this study.

**Limitations of the Research**

This study involved self-reporting measures that may have led to common method variance and may also have resulted in biased regression coefficients (Antonakis, Bendahan, Jacquart and Lalive 2010). The size of the sample ($N = 172$) was too small to be able to generalise the findings to either the whole population or to other occupational levels in the wider government sector.

**Recommendations**

There are limited studies on wellbeing indicators among middle managers in public service, and thus information on the impact of wellbeing on the sense of coherence, work engagement and burnout, specifically of middle managers, requires further investigation. The study should be extended to the same population (middle managers) in other government organisations in order both to confirm the findings of this study and to generalise the study. The shorter version of the sense of coherence scale should be used as it provides a better statistical fit (Van Schalkwyk and Rothmann 2008).

**Conclusion**

The findings of this study revealed new insights into the way in which public officials, in particular middle managers, cope with their job demands and the impact such coping has on their wellbeing. It is, therefore, imperative to consider the wellbeing and
functioning of managers; how they perceive and respond to their working environment, and their belief in their own abilities toward their work. The study found that middle managers in the sample possessed a strong sense of coherence and work engagement as well as a strong sense of professional efficacy.

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Competing interests

The author declares that she does not have financial or personal relationship(s) which may have inappropriately influenced her in writing this article.

Author contributions

Author 1 was responsible for the literature review, manuscript preparation, supervision, guidance, review and resubmission of the manuscript. Author 2 attended to the literature review, data collection and the statistical analysis and interpretation of the results.

References


