

The effects of work resources and career adaptability on employee health: A case of sample of teachers in South Africa



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Orientation: There is a rise in health-related challenges within the confines of the organisation. Strategies are needed not just from a human resources practitioner but also a theoretical basis in finding solutions to such challenges.

Research purpose: Firstly, to determine the effects that work resources have on employee health and its two facets of physical and mental health. Secondly, to determine if career adaptability moderates the relationship between work resources and employee health.

Motivation for the study: Studies exist in the literature that focus on the intersection of individual and organisational factors on health constructs such as mental health. Further, such studies continue to be an issue of inquiry especially within the public service professions such as teaching.

Research approach/design and method: A quantitative research approach utilising a survey data collection technique was utilised. Simple linear regression and a hierarchical regression were performed to analyse the data.

Main findings: Work resources do predict employee mental and physical health. Further, career adaptability does not moderate the relationship between work resources and employee health among teachers.

Practical/managerial implications: Based on the findings, recommendations are made that assist not just teachers but also those engaged in creating a context in which teachers can thrive from a management perspective.

Contribution/value-add: The findings help us focus on the notion that in rural high schools of South Africa, a supportive work environment for assisting teachers to utilise work resources for organisational functioning, in a manner that is friendly to their mental and physical health is needed.

Keywords: work resources; career adaptability; employee health; mental health; physical health; public service.

Introduction

The world of work is changing. Much of this change is attributed to the uncertainty and turbulence happening in the macro-environment and subsequently affecting the experience of work (Cooke, 2018; Psychogios & Prouska, 2019). The situation is exacerbated by the rapid technological advancement that in some cases not only poses a threat but also potentially can be an opportunity for the world of work (Bondarouk, Parry, & Furtmueller, 2017). Within all this, there is evidence showing the value that is being placed on a balancing act between work and home life (Bhave & Lefter, 2017).

A key response to the many changes happening is the need to continuously support and develop employees albeit the uncertainty (Jehanzeb, 2020; Watson, 2009) and this positions the need for human resources (HR) professionals who are able to provide this service to their workforce (Mburu, 2020; Stone & Dulebohn, 2013). A number of interventions have also been proposed in the literature to try and assist workers adjust to the many changes. Some studies call for a re-think about issues of where employees work to start considering a multi-layer of combinations that accommodate the office, home or spaces where people are commuting (Kossek & Lautsch, 2018). Others studies allude to the potential role that technology can have on the experience of work, such as digitalisation and artificial intelligence (Mazmanian, Orlikowski,

& Yates, 2013; Orlikowski & Scott, 2014). This is supported by the use of HR analytics which is potentially assisting in how decisions can be made with regard to the human capability of the organisation (Fieseler, Bucher, & Hoffmann, 2019).

As the experience of work changes, there is the need to be aware that these changes can have a toll not only on the attitudes developed but also affecting aspects such as performance and employee well-being (Cañibano, 2019). The thinking here is that despite the changes which are being introduced that affect employees, these changes induce different types of responses across varying experiences and circumstances (Avgoustaki & Frankort, 2019). Variation potentially exists not only by the type of work but also the type of organisation including the organisational and even national culture (Chung & Tjinders, 2013). This calls for the necessity of leaders within organisations to be responsive to the challenges that can potentially affect both the experience of work and those engaged in work, the employees (Fontaine, McCarthy, & Saleh, 2019). To ensure this type of response requires the development of HR practitioners' competencies to keep them abreast with the need and necessity for change by enabling them to show empathy towards their workforce (Tarafdar, Beath, & Ross, 2019).

The conservation of resources (COR) theory as developed by Hobfoll (1989) and further elaborated in Hobfoll (2002) points out that resources are objects, things and conditions that people value. These may include quests for career development especially in response to a context that is not only uncertain but also undergoing rapid change (Johnston, 2018). Others frame quests for financial gain as very important (Ode-Dusseau et al., 2019). This may be true especially given that financial issues remain one of the leading causes of stress (Meuris & Leana, 2018), resulting in this resource being one that is most sought after in organisations (Guo, Baruch, & Russo, 2017). A plethora of other work resources exist that include (but not limited to): (1) self-esteem, (2) resilience, (3) social support, (4) autonomy, (5) job security and (6) emotional intelligence (Greenhaus & Powell, 2006; Halbesleben et al., 2014; Ten Brummelhuis & Bakker, 2012). In line with the COR, De Vos, Heijden and Akkermans (2018) argued that for careers to be sustained, there is a critical need to preserve and manage the resources required to pursue that career to its end. Generally, quests for attaining work resources have been linked to aspects of well-being (Cummins, 2000) that include mental and physical health (Guo et al., 2017). In line with the COR, this study pays critical attention to the element of conditions focusing on issues such as teacher salary, health insurance, performance bonus, housing and retirement allowances. Guo et al. (2017) and Cummins (2000) suggested that receiving work resources that are financial in nature relatively contribute to improved employee well-being, in the context of this study, that is, mental and physical health.

Gaps in the literature

We focus on understanding the challenge of employee health particularly on three fronts where this problem is magnified. Firstly, we note a global challenge of health-related issues affecting the contemporary world of work (Chinyamurindi, 2019). This includes aspects of physical health and especially mental health. Given the rise in health-related challenges within the confines of the organisation (Cooper, 2013), strategies are needed not just from a practitioner point of view but also by building from existing theories, viable solutions to such challenges may be found.

Secondly, we note that the challenges to be heightened especially within the public service in an organisational setting. Our research was located within the context of a South African public service, noted to be in a state of flux (Fihla & Chinyamurindi, 2018) with employees being most affected. Ultimately, challenges faced by public service employees affect how they deliver service to the public (Mafini & Dlodlo, 2014). Our focus for this study was on the teaching profession, classified as being part of the public service (Barling, Dupré, & Kelloway, 2009). The need to understand and address those factors that affect public employees such as teachers within the public service will influence the delivery of service to the public. (Kanyane, 2010; Thornhill & Van Dijk, 2018). Further, empirical efforts are encouraged within the public service to ascertain those factors which are favourable or unfavourable that influence how public employees work (Ijeoma, Nzewi, & Sibanda, 2013). We note the absence of work exploring organisational issues such as work resources linking this with employee health outcomes.

Thirdly, we note the need to be expansive in the way studies around employee health are conducted (Guo et al., 2017), especially bearing in mind issues of context, organisational culture, organisational setup and also national culture. We pay attention to understanding the role that work resources may have on aspects of employee health notably mental and physical health. We also extend from previous studies (Guo et al., 2017) by adding a moderator in career adaptability and ascertaining its influence not just on work resources but also employee health. The thinking here bears in mind the uncertain and changing world of work (Psychogios & Prouska, 2019) in which employees can use career adaptability as a responsive activity for their career advancement (Savickas et al., 2009).

Maree (2017) added that career adaptability may be an important competence especially within the contemporary world of work. This can be in the form of re-planning, re-constructing and re-designing career plans in view of the changing environmental context (Rossier et al., 2017). Career adaptability is viewed as a critical factor for a person's career success, satisfaction and well-being, and career adaptability can also shield employees from work-related stress, thereby promoting employee health (Savickas & Porfeli, 2012). We sought to ascertain within the South African public service if

this is so. From these, implications for practice can also be made. The context of study we focus our attention on next is the teaching profession.

The teaching profession in South Africa

The teaching profession is deemed important especially within a South African context. Teachers form an important part in the process of nation-building especially considering the history of South Africa (Strydom et al., 2012). Yet it is also important to note that for some, especially in South Africa, entrance into the teaching profession may not have been because of the exercise of choice (Macupe, 2018). Career paths such as teaching were mostly the domain of the black populations, who could not exercise their career choice under the apartheid regime (Stead & Watson, 2017). Yet teachers emerged as an important nation-building tool.

Despite this noted importance, Okeke and Dlamini (2013) assert that teachers face stresses emanating from individual, organizational and societal conditions. Examples include: (1) unfavourable teacher–learner ratios, (2) student–teacher bullying, (3) fellow teacher absenteeism, (4) constantly increasing administrative burdens, (5) diminished autonomy and finally (6) under-resourced classroom facilities (Ballet, Kelchtermans, & Loughran, 2006; Pyhältö, Pietarinen, & Salmela-Aro, 2011; Skaalvik & Skaalvik, 2010; West & Meier, 2020). These challenges ultimately impact service delivery outcomes (Mafini & Dlodlo, 2014) potentially affecting the teachers and their contribution to service delivery (Shibiti, 2019; Redelinghuys & Rothmann, 2020; Zondo, 2018).

Further, these identified stressors and challenges may also influence the teachers' professional identity (Schoeman & Mabunda, 2012). The identified stressors also have a bearing not just on how teachers practise their profession but they also affect aspects of their own professional development (Esau, 2013). This places importance within the teaching profession in South Africa on not only monitoring but addressing those issues that affect the teacher's level of functioning and flourishing (Redelinghuys & Rothmann, 2020). These could range from issues regarding teacher engagement (Hakanen, Bakker, & Schaufeli, 2006) to issues that develop a teacher's experience of enthusiasm and satisfaction within their jobs (Roth et al., 2007).

Literature review

Work resources and employee health

Work resources are amongst key aspects that have an impact on employee health (Ilies et al., 2020). The empirical literature defined work resources as objects, things and conditions that individuals consider to be of material value (Hobfoll, 1989, 2002). According to Guo et al. (2017), work resources are critical to the daily upkeep of employees. Adopting the self-determination theory, we agree with the view that individuals have a set of basic

psychological needs, for example autonomy, belonging and competence (Deci & Ryan, 1985). Once the mentioned needs are fulfilled, they lead to a satisfying life thereby enabling employees to live healthily (Reis et al., 2000; Sheldon, Ryan, & Reis, 1996). Schachtel (1954) also provided evidence that employee health tends to improve when they are in an environment that provides resources that fit their individual needs.

Research further provides evidence indicating that work support and other workplace activities are associated with employee happiness, well-being and positive work attitudes (Becchetti, Bruni, & Zamagni, 2015; Boyd & Nowell, 2020; Fisher, 2010). With regard to this, acquiring valuable resources at work can have positive implications for both personal and professional outcomes, for instance, employee health (Cummins, 2000; Hakanen, Peeters, & Perhoniemi, 2011; McNall, Nicklin, & Masuda, 2010; Ten Brummelhuis & Baker, 2012). Existing literature describes the just-mentioned resources as extrinsic rewards which consist of pay, job security, benefits, promotions, raise in salary and bonuses (Jacobs, Renard, & Snelgar, 2014). Hoole and Hotz (2016) concurred and pointed out that salary and bonuses fall under extrinsic rewards.

The worrying situation is that governments and many private entities are equally challenged to offer attractive compensation packages owing to poor economic growth, a trend in many African countries (Oginni & Omoyele, 2018). Such work resources are critical in the sense that they help to satisfy an employee's primary physiological and psychological needs. Chege (2016) pointed out that regardless of the organisation type, once they take the responsibility to contribute health insurance for their employees, the satisfaction they derive from the organisation increases. Other factors such as enhanced employee health provide the impetus for employees to feel committed, engaged and valued (Lee, Rocco, & Shuck, 2020). Additionally, retirement benefits enable employees to stay longer with the organisation (Otieno, 2010). Based on this discussion, Haider et al. (2015) argued that organisational leaders must do all within their power to ensure that they provide adequate work resources as it has many benefits, key amongst them being employee health. A healthy workforce leads to long-term profitability of the organisation. Given this discussion, the study hypothesises that:

H1: Work resources predict employee mental health.

H2: Work resources predict employee physical health.

Career adaptability, work resources and employee health

By definition, career adaptability is the (Savickas, 1997):

[R]eadiness to cope with the predictable tasks of preparing for and participating in the work role and with the unpredictable adjustments prompted by the changes in work and work conditions. (p. 254)

Career adaptability comprises four psychosocial resources or transactional competencies, namely career concern, career

control, career curiosity and career confidence (Koen, Klehe, & Van Vianen, 2012; Savickas & Porfeli, 2012).

Career adaptability and its four dimensions are anchored in the career construction theory (CCT) that seeks to explain the flexibility of individuals when it comes to dealing with changes and shifts at the workplace or in the career journey (Savickas, 2013). The CCT presents career adaptability as the overall individual preparedness to navigate career challenges and flourish on the same career path as aided by adaptability resources and competences.

As highlighted earlier, the four dimensions of career adaptability and related adaptive responses are proposed by the CCT and these are critical for career building. An absence of the four dimensions presents a myriad of challenges that result in career construction problems (Savickas, 2005, 2013). Firstly, people need to show concern about where they will end up being in the future as far as their career is concerned. This is vital to initiate the career planning process and ensuring individual relevance given the dynamic changes of the working environment, and work itself.

Secondly, people should feel that they are in control of their careers. This can be observed through individual decisions that clearly translate into tangible progress on their career path as a result of an individual's ability to be decisive as opposed to being indecisive. Thirdly, individuals should demonstrate curiosity and be able to explore information so that they can comprehend real events affecting their careers or the career environment. This ensures that they are prepared to handle such challenges when they materialise instead of suffering from unrealism (Flum & Blustein, 2000). The fourth and final career adaptability dimension speaks of confidence. People with confidence are able to manage the career challenges coming their way and actively seek alternative measures to address the challenges instead of suffering from the career problem of inhibition (Savickas, 2013).

Based on the CCT, career adaptability refers to an employee's readiness to confront foreseen work-related challenges and also the preparedness to tackle the unknown work-related challenges that may arise owing to changes in work and working conditions (Lodi et al., 2020; Savickas, 1997). For an employee to be able to do so, the adaptive resources namely, concern, control, curiosity and confidence must be activated (Johnston, 2018; Rossier, 2015; Savickas, 2013). South African rural teachers could be experiencing health-related challenges (mentally and physically), owing to poor work resources such as salary, performance bonus, health insurance, pension-related plans and any other form of allowances.

According to Mashaba and Maile (2018), teachers in South Africa's disadvantaged communities, which include rural areas, are poorly compensated. Empirical literature concurs and points out that South African teachers in disadvantaged communities receive poor work resources compared to

those in South Africa's highly developed communities (Naicker, 2000). Literature that focuses on teacher absenteeism in South Africa points out that South Africa is a dualistic country: some areas of the country are highly developed and hence, the education system is advanced and well resourced (Bennell, 2004; Mashaba, 2014; Reddy, 2010; Reddy et al., 2010). Sadly, the same cannot be said about South Africa's education system in its disadvantaged communities, for example the rural areas. Using Zwane's (2020, p. 79) categorisation of South Africa's rural and urban areas, the author points out that the two are 'structurally very different, with different characteristics'.

The education system in rural areas is poorly maintained and it is characterised by poor working conditions, inadequate infrastructure with rural school teachers, who are predominantly blacks, earning 22.8% of what the white minority population earns (Statistics South Africa, 2011). Studies that also looked at the causes of teacher absenteeism and job dissatisfaction in Africa's low-income countries concurred with the notion that the education system in disadvantaged communities is characterised by low incentives (pay, bonuses amongst others), poor working conditions and limited infrastructure (Abeles, 2009; Ejere, 2010; Yiga & Wandega, 2010). Mashaba and Maile (2018) further highlighted that poor compensation amongst rural teachers in South Africa stems from the country's macroeconomic policies. Although the growth, employment and redistribution (GEAR) macroeconomic policy framework has been side-lined after its adoption in 1996, Turok (2010) pointed out that its economic principles continue to dominate policy foundation in the country. Growth, employment and redistribution advocated for a decrease in public expenditure, which resulted in the government failing to address the education imbalances, including that of teacher compensation.

Zwane (2020) compared earnings between South Africa's urban and rural teachers relying on the National Income Dynamics data for the years 2008–2017. The study by Zwane (2020) revealed that an increase in a person's education qualification levels resulted in a corresponding increase in earnings equal to 37.8%. Sadly, the study further reveals that the education impact on teachers' earnings is higher in absolute values for teachers in urban areas as they bagged 44.4% in total returns to education, compared to 33% for teachers in rural areas. Given that teachers in urban areas are benefiting more from education-related rewards compared to their rural counterparts, teachers in South Africa's rural areas could be experiencing mental and physical health-related challenges. However, this study argues that teachers in rural areas could overcome the mentioned challenges by activating career adaptability resources as proposed by the CCT (Johnston, 2018; Rossier, 2015; Savickas, 2013). Studies exist indicating that career adaptability predicts employee mental health (Xu et al., 2020). Career adaptability further plays the mental health protective role in adolescents

(Ginevra et al., 2018). Given this discussion, the following hypotheses have been formulated:

H3: Career adaptability moderates the relationship between work resources and employee mental health.

H4: Career adaptability moderates the relationship between work resources and employee physical health.

Methods

The study is quantitative in nature and descriptive by design. A positivist research paradigm was adopted. Through a review of the theoretical literature, research hypotheses were formulated. A self-administered questionnaire was designed to gather quantitative data for the purposes of testing research hypotheses through statistical procedures. The study's research hypotheses remained unchanged until the end of this study.

Measures

The study's independent variable (work resources) was measured by a five-point Likert scale which had seven items. The scale had questions asking respondents whether the employer provided: (1) decent housing allowance, (2) a health insurance cover, (3) a decent life insurance cover, (4) decent retirement fund, (5) decent financial schemes in case of unemployment, (6) a competitive salary and (7) a competitive performance bonus. An example of the scale items reads, 'My employer provides supplementary health coverage for me'. This scale was codified 1–5, signifying 'strongly disagree' to 'strongly agree', respectively. The mentioned scale was developed and validated by Guo et al. (2017) and had a reliability score of 0.89. In this study, the reliability score was observed as 0.844 indicating that the scale was reliable and hence its adoption.

To measure the study's dependent variable (employee health), two dimensions were used, namely mental and physical health. The physical health sub-scale is made up of four items of the short Brief Pain Inventory developed by Cleeland and Ryan (1994). An example of the sample item reads, 'Did health issues interfere with your daily activities (e.g., walking or climbing upstairs)?' The scale has an internal consistence measure of Cronbach alpha equal to 0.89. In this study, the reliability score of 0.80 was observed. A simplified Chinese Mental Health Inventory developed by Wu (1984) with five items was used to measure mental health. An example of a sample item from the stated scale reads, 'Were you bothered by any emotional issues (anxiety, depression or anger), last month?' Wu (1984) reported that the scale had a reliability score of 0.90. In this study, the reliability score was observed as 0.75. Both physical and mental health scale items were measured on a five-point Likert scale codified 0–4, signifying 'none of the time' to 'all the time', respectively. A high the score on employee health indicated that the person had experienced either physical or mental challenges and in the worst scenario, both.

The moderating variable career adaptability had four dimensions and four different sub-scales were used for each dimension, namely concern, control, curiosity and confidence, all with six items each (total of 24 items). The mentioned scales were originally developed and validated by Savickas and Porfeli (2012). They are all measured by a five-point Likert scale codified 1–5, signifying 'strongly disagree' to 'strongly agree', respectively. In this study, the reliability score of the mentioned sub-scales was observed to be 0.64 for concern, control (0.72), curiosity (0.74) and 0.74 for confidence.

Data collection and analysis

Self-administered questionnaires were distributed in rural public schools in the Buffalo City Metropolitan Municipality (BCMM) and a sample of 250 public educators was targeted. Of the questionnaires returned, 214 were deemed usable. The sample consisted of teachers based in schools in the BCMM of which 46% were male and 54% were female. In addition, amongst those who participated in the study, 25% were below the age of 30, 33% were in the 31–40 years' age range, 36% were in the 41–50 years' category and 6% were in the above 51 years' category.

The authors relied heavily on fieldworkers who issued and collected the questionnaires. To simplify the data collection process, with the help of school principals, fieldworkers were chosen amongst villagers who resided in the same area where each school is located. This made it easier for the fieldworkers to make follow-up visits and remind educators to fill in distributed questionnaires within the agreed length of time, which was five working days.

The researchers applied for an ethical clearance certificate from the institution of higher learning where they are attached as this study involved human participants. Ethical clearance certificate with reference number CHI151SHAR01 was granted. On the ground, respondents were informed of their rights, which also were clearly stated on the questionnaire cover page. The rights emphasised and included that of willingness to participate in the study. After explaining the rights of the participants and the goals of the research, consent of the participants was sought and obtained. To analyse data, the Statistical Package for Social Sciences (SPSS) version 25 was used as a statistical analysis tool. Statistical techniques used include the simple linear regression with respect to H1 and H2. Concerning H3 and H4, hierarchical regression analysis was utilised.

Ethical consideration

Ethical clearance was obtained from the University of Fort Hare's Research Committee. Ethical Clearance was received on 28 October 2016 (reference number CHI151SHAR01).

Results

Work resources predict employee mental health

The independent variable data (work resources) and the dependent variable data (mental health) were subjected to a normality test using the Shapiro-Wilk's test and the results reveal a p -value of less than 0.001. This result indicates that the data violated the assumptions of normality, hence to test the stated hypothesis, a simple linear regression analysis with bootstrapped confidence interval (CI) and coefficients was requested, as this type of analysis does not rely on assumptions of normality and homoscedasticity. The results are outlined in Table 1.

Results in Table 1 indicate a weak but positive correlation between work resources and employee mental health, $r = 0.345$. The results also indicate that work resources account for 11.9% of the variation in employee mental health, $R^2 = 0.119$. This result indicates that to better understand the concept of employee mental health, it is worth paying attention to the concept of work resources.

To determine whether the study's model is significantly better at predicting employee mental health, the F -ratio was observed, $F = 28.56$ and significant, $p = 0.001$. This result informs us that the study's model is useful when predicting employee mental health. Estimates of the model parameters were observed, $b_0 = 18.40$ and $b_1 = 0.357$. See Table 2 for an outline of the results.

The results found and displayed in Table 2 indicate that with unit change in work resources, a corresponding positive change in employee mental health equal to 0.357 units will follow suit. This change is significant, $p = 0.001$.

Given this result, the study fails to reject the hypothesis stating that work resources predict employee mental health as there is enough evidence to back this claim.

Work resources predict employee physical health

The explanatory variable data (work resources) and the outcome variable data (physical health) were investigated to determine whether they violated the assumptions of normality using the Shapiro-Wilk's test. The results indicate that the data violated the assumptions of normality given $p = 0.001$. With this result, the simple linear regression analysis was performed and bootstrapped. Confidence intervals and coefficients were requested as these do not rely on assumptions of normality and homoscedasticity. The results are outlined in Table 3.

The results reveal a very weak positive correlation between work resources and employee physical health, $r = 0.137$. The results further reveal that work resources only account for 1.9% of the variation in employee physical health, $R^2 = 0.019$, indicating that approximately 98% of the variation in employee physical health is accounted for by other factors not in this model. To determine whether the model is significantly better at predicting employee physical health, the F -ratio was observed, $F = 4.06$ and significant, given $p = 0.045$. Table 4 reveals the estimates of the model parameters. Estimates of the model parameters were observed, $b_0 = 25.91$, $b_1 = 0.127$.

The result in Table 4 indicates that given a unit change in work resources, there is a positive corresponding change in employee physical health equivalent to 0.127 units and

TABLE 1: Simple linear regression model fit and summary for work resources on employee mental health.

Source	df	Sum of squares	Mean square	F	Pr > F	r	R ²	Adjusted R ²	Estimated standard error
Model summary	-	-	-	-	-	0.345	0.119	0.115	4.03
Regression	1	462.716	462.716	28.559	0.000*	-	-	-	-
Residual	212	3434.854	16.202	-	-	-	-	-	-
Total	213	3897.570	-	-	-	-	-	-	-

Note: Predictors: Work resources. Outcome variable: Mental health.

*, Significant fit at $p < 0.05$.

TABLE 2: Parameter estimates for work resources on employee mental health.

Parameter	Unstandardized co-efficient			95.0% CI for B: LB & UB
	B	Standard error	Significance	
Constant	18.40	1.7	0.000*	[15.048–21.75]
Work resources	0.357	0.067	0.000*	[0.225–0.489]

Note: Predictor: Work resources. Outcome variable: Mental health.

*, Significant fit at $p < 0.05$.

LB, lower bound; UB, upper bound.

TABLE 3: Simple linear regression model fit and summary for work resources on employee physical health.

Source	df	Sum of squares	Mean square	F	Pr > F	r	R ²	Adjusted R ²	Estimated standard error
Model summary	-	-	-	-	-	0.137	0.019	0.014	3.81301
Regression	1	59.030	59.030	4.060	0.045*	-	-	-	-
Residual	212	3082.278	14.539	-	-	-	-	-	-
Total	213	3141.308	-	-	-	-	-	-	-

Note: Predictor: Work resources. Outcome variable: physical health.

*, Significant fit at $p < 0.05$.

this change is significant, given $p = 0.045$. Given this outcome, the study fails to reject the hypothesis stating that work resources predict employee physical health as there is enough evidence to back this claim.

Career adaptability, work resources and employee mental health

Hierarchical regression analysis was performed and career adaptability was entered as a moderating variable, work resources as an explanatory variable and employee mental health as an outcome variable. Row 1–8 of Table 5 summarises the results in this regard. The results reveal a negative non-significant relationship between work resources and employee mental health, $b = -0.015$, 95% CI [-0.036, 0.006], $t = -1.393$, $p = 0.165$. This result indicates that career adaptability does not moderate the relationship between work resources and employee mental health. Given this result, the study rejects the hypothesis stating that career adaptability moderates the relationship between work resources and employee mental health.

Career adaptability, work resources and employee physical health

Hierarchical regression analysis was performed with career adaptability being the moderating variable, work resources as the independent variable and employee physical health as the dependent variable. Row 9–15 of Table 5 provides a summary of the results in this regard. The results reveal a non-significant negative relationship between work resources and employee physical health, $b = -0.017$, 95% CI [-0.037, 0.003], $t = -1.716$, $p = 0.088$. Conditional effects of the focal predictor at the values of the moderator indicate that given the low value of career adaptability equal to -4.622 , a non-significant negative relationship between work resources and employee physical health is observed, $b = -0.077$, 95% CI [-0.259, 0.104], $t = -0.838$, $p = 0.403$. When the score of career adaptability is increased to -1.622 , a negative

non-significant relationship between work resources and employee physical health is observed, $b = -0.128$, 95% CI [-0.281, 0.024], $t = -1.662$, $p = 0.098$.

When the value of career adaptability is further increased to 4.379, a significant negative relationship between work resources and employee physical health is observed, $b = -0.231$, 95% CI [-0.387, -0.074], $t = -2.908$, $p = 0.004$. The conditional effects of the focal predictor at values of the moderator reveal that with a high score of career adaptability, the relationship between work resources and employee physical health is weaker.

Similar results are confirmed by the Johnson-Neyman method which reveals the significance regions at the level of the moderator. The Johnson-Neyman method reveals that the lower significance cut-off boundary is when career adaptability score is -0.571 , where a significant negative relationship between work resources and employee physical health is observed, $b = -0.146$, 95% CI [-0.293, 0.000], $t = -1.971$, $p = 0.05$. A weaker negative significant relationship between work resources and employee physical health, $b = -0.470$, 95% CI [-0.834, 0.102], $t = -2.518$, $p = 0.01$ is further observed at the highest score of career adaptability. Given this result, the study rejects the hypothesis stating that career adaptability moderates the relationship between work resources and employee physical health. A summary of linear model predictors of employee mental and physical health is outlined in Table 5.

Discussion

The study aimed at investigating the influence of career adaptability on the relationship between work resources and employee health facets such as physical and mental health. Based on the findings of this study, work resources are argued to be the key in promoting employee mental health as the results reveal that work resources account for 11.9% ($R^2 = 0.119$) of the variation in employee mental health. In that regard, H1 which pointed out that work resources predict employee mental health was supported, $p = 0.001$. Although work resources accounted for a marginal variation on employee physical health, 1.9%, H2 stating that work resources predict employee physical health was supported, $p = 0.045$. The study's findings support research

TABLE 4: Parameter estimates for work resources on employee physical health.

Parameter	Unstandardized co-efficient			95.0% CI for B: LB & UB
	B	Standard error	Significance	
Constant	25.910	1.610	0.000*	[22.74–29.08]
Work resources	0.127	0.063	0.045*	[0.003–0.252]

Note: predictor: Work resources. Outcome variable: Physical health.

*, Significant fit at $p < 0.05$.

LB, lower bound; UB, upper bound.

TABLE 5: Linear model of predictors of employee mental and physical health.

Linear model predictors	<i>b</i>	LLCI & ULCI	SE B	<i>t</i>	<i>p</i>	<i>R</i> ²
Employee mental health	-	-	-	-	-	0.27
Constant	27.57	[26.99–28.14]	0.29	95.0	0.000	-
Career adaptability	0.42	[0.29–0.55]	0.07	6.39	0.000	-
Work resources	0.07	[-0.08–0.23]	0.08	0.91	0.37	-
Career adaptability * work resources	-0.015	[-0.04–0.01]	0.01	-1.39	0.165	-
Employee physical health	-	-	-	-	-	0.21
Constant	29.34	[28.81–29.88]	0.27	108.20	0.000	-
Career adaptability	0.42	[0.30–0.54]	0.06	6.93	0.000	-
Work resources	-0.156	[-0.30–0.01]	0.07	-2.13	0.034	-
Career adaptability * work resources	-0.017	[-0.040–0.003]	0.01	-1.72	0.088	-

LLCI, lower level of confidence interval; ULCI, upper level of confidence interval; SE, standard error.

that emphasised on the importance of work resources on employee mental and physical health (Guo et al., 2017; Haider et al., 2015). Further, these findings may validate the notion that work resources serve a dual utility role within the organisation, affecting facets of employee health. This becomes important especially within the public service, noted to be in a state of flux (Fihla & Chinyamurindi, 2018) and especially, within the teaching profession in rural South Africa. We can assume that the absence of work resources ultimately affects the quest for service delivery, since it affects those factors in carrying out service to the public. The research results do not dispute existing research regarding the importance of career adaptability in dealing with work and work condition changes. What the results reveal is that work resources, that is adequate salary, performance bonus, medical aid and satisfactory retirement packages amongst others, contribute significantly to rural educators' sound mental and physical health as proposed by H1 and H2. In other words, any negative changes in the mentioned work resources, career adaptability resources, that is concern, control, curiosity and confidence will play very little or no role in helping the rural educator in South Africa regain sound mental and physical health. Thus, this research proffers a contribution through illustrating additional components of public service delivery. This contribution advances work that is already on the ground within the South African public service (Ijeoma et al., 2013; Shibiti, 2019; Zondo, 2018). Whilst this work shows support to previous similar international research (Cummins, 2000; Guo et al., 2017), it becomes the first to proffer these findings from a South African public service context. This gains significance since it concerns the challenges, especially of mental health, within the South Africa context (Chinyamurindi, 2019), and its potential impact on the organisation and its employees (Cooper, 2013).

Despite no support being found for the moderation of career adaptability, we support the framing of this construct as a significant faculty in the contemporary world of work (Maree, 2017). The absence of support for career adaptability as a moderator of the relationship between work resources and employee health could indicate that maybe public service employees may value other career issues outside adaptability, which may warrant further inquiry.

Practical implications

Some practical implications can be drawn from this study. Firstly, given the positive effect that work resources have on employee health, that is mental and physical health, we advocate certain interventions. First, there is a need to buttress and equip the public service with ample work resources as those shown in this work, linking it to employee health. This can be through an audit of the current resources that exist and then improving on the situation. The list of work resources identified in the extant literature can be useful in this audit (Hobfoll, 1989, 2002). In the context of this study, we give precedence to work resources in the form of finance-related gains (salary, bonus, retirement packages

and health insurance, amongst others). Studies such as Cummins (2000), Guo et al. (2017), Odle-Dusseau et al. (2019) and Meuris and Leana (2018) emphasised the importance of finance-related work resources to employee well-being. Secondly, given the findings, there is also a need to have a supportive work environment (Watson, 2009) that assists employees in the way they utilise their resources for organisational functioning and also in a way that is friendly to their health. Despite no support being shown for the moderation of career adaptability, there is a need to safeguard the organisation's policies that assist aspects of career development, such as career well-being and efforts toward promoting employee health aspects, such as physical and mental health. A starting point could be to promote a workplace that promotes elements of well-being (Cañibano, 2019), which our work shows, may be achieved by promoting physical and mental health through work resources. Further, given the sample we utilised, there is a need to re-visit aspects of remuneration and working conditions that can be critical especially for public service employees such as teachers.

Limitations and recommendations

Some limitations can be noted from this study. We acknowledge the challenges of obtaining a reliable sampling frame of rural teachers. Despite our efforts of using fieldworkers, this still proved to be challenge bearing in mind issues of accessibility because of the terrain. As a result of this, we advise caution whilst interpreting the findings. Further, issues of generalisability must be taken into consideration. Future research may overcome this handicap by obtaining a reliable sampling frame not just within the Eastern Cape Province of South Africa but at a national scale. This becomes important given the scale and numerous obstacles in addressing issues of employee health especially in the public service. In our study, we utilised self-report measures, which may potentially result in issues of social desirability bias. Future research could also utilise qualitative research methods to capture the ensuing complexity that can arise out of career adaptability as a processual activity including the role of work resources' spirituality in such processes. Related to this, a need may exist to conduct research with managers in the public service to also get a response from the other side. This can help to ascertain how – from a management perspective – work resources issues are addressed and also assess the response to the challenge of employee health.

Conclusion

Given the challenges faced within the South African public service that ultimately affect service delivery, a need exists to continuously find ways to ensure bottlenecks to these challenges are addressed. One key issue that needs attention concerns aspects related to employee health. We argue that employee health should be an ongoing conversation in the workplace that is not only enduring but the key to ensuring a reliable and efficient workforce. In doing this, organisations

like those in the public service should be constantly encouraging and seeking ways to address the matter – ways that are not only cognisant of health-related issues but those that put employees at the forefront. This becomes important for ensuring both performance and efficient service delivery.

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Competing interests

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

Authors' contributions

H.S. and W.T.C. conceptualised the study, contributed to the design and implementation, analysis of the results and writing of the manuscript.

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Data availability

The data that support the findings of this study are available from the corresponding author, H.S., upon reasonable request.

Disclaimer

The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of any affiliated agency of the authors.

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