



Original Research Article

Predicting work engagement of employees at Dundee Precious Metals Mine in Tsumeb, Namibia

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ABSTRACT

The profit margins of organisations are noticeably influenced by their competitive advantage inclusive of engaged employees. The aim of this study was to investigate the impact of job demands-resources on job satisfaction and work engagement of employees at Dundee Precious Metals Mine in Tsumeb. Job resources play a critical role in the job attitudes employees experience/develop (job satisfaction). Job satisfaction is regarded as the key motivating factor that enhances work engagement of employees. A quantitative, cross-sectional research design was employed, and data was collected through a questionnaire. A sample of n=150 participants was selected using random sampling. Making use of SPSS, correlation and regression analyses were conducted. This study found a positive relationship between job resources (growth opportunities and advancement opportunities), job satisfaction and work engagement. Growth opportunities and advancement opportunities predicted job satisfaction. Job resources (growth and advancement opportunities) and job satisfaction predicted work engagement of employees. This study recommends interventions such as job rotation and internal training to enhance growth opportunities. It is also recommended to involve employees in the decision-making process, establish/implement recognition and rewards policies, educate staff on financial planning and ensure that fair payment and benefits are provided throughout the organisation. The organisation may also consider investing in interpersonal training and conflict resolution skills. The study adds to the knowledge within Industrial Psychology and the Namibian work setting.

1. Background of the study

The business world is becoming increasingly more competitive and challenging. The prosperity of organisations is affected by how resources, including human resources, are managed (Bellet & Ward, 2019). Dundee Precious Metals Tsumeb (Pty) Limited (DPMT), is situated in Tsumeb in the Oshikoto Region of Namibia, and it is 430 km north of the capital city, Windhoek. Working conditions influence the interaction between employer and employees.

Demerouti et al. (2001) reported that the features of work conditions can be divided into job demands and job resources. Job demands are the physical, psychological and the social requirements of the working environment (Bakker & Demerouti, 2007). The general well-being of employees can be affected negatively if there are high job demands and low resources. When the job demands correspond with job resources, it leads to improved engagement of workers, increased productivity and job satisfaction (Bakker & Demerouti, 2007). Burnout, fatigue and

lack of resources were linked to disengagement and poor performance from employees (Schaufeli & Taris, 2014). This study specifically focused on growth opportunities and advancement opportunities as part of the job demands-resources model. Collectively, growth opportunities and advancement opportunities will be referred to as job resources.

Spector (1997) defines job satisfaction as the degree to which people like/hate their work. Job satisfaction is a powerful predictor of how employees feel about their careers and working climate (Nielsen et al., 2011). Job satisfaction is regarded as the key motivating factor for employees because it impacts on work culture and customers satisfaction (Garg et al., 2018). Customer satisfaction can be linked to customer loyalty and, ultimately, income for the organisation.

According to Karanika-Murray et al. (2015), employees that are deeply and positively involved in their jobs portray commitment and devotion to their job. Schaufeli et al. (2002) defined work engagement as having a positive and a more fulfilling mindset that is characterised by vigour, dedication and absorption.

This study aims to investigate the relationship between job demands-resources (growth and advancement opportunities), job satisfaction and work engagement of mining employees at Dundee Precious Metals. The study also aims to assess if growth and advancement opportunities and job satisfaction predict work engagement of these employees.

2. Literature review

2.1 Work engagement

Kahn (1990) was the pioneer of work engagement, and he explained that work engagement is employees' physical, cognitive and emotional expression when identifying and investing themselves in their work. Research by Schaufeli and Bakker (2004) goes into depth to explain what characterises work engagement. Firstly, vigour is a positive aspect of feeling and physical liveliness. Secondly, dedication is described as a feeling of importance from one's work, pleased, aroused and tested. Lastly, absorption is described as experiencing joy in one's work and overlooking everything else that is near (Schaufeli & Bakker, 2004).

Similarly, work engagement is defined by Schaufeli and Bakker (2010) as a positive work-related state. Mauno and Ruokolainen (2007) found that job demands and job resources are antecedents of work

engagement although job resources is a better indicator of work engagement compared to job demands.

A study conducted by Brunetto et al. (2012) found that job satisfaction is a facet of job engagement. Pieters (2018) found that procedural and interpersonal justice is linked to employee engagement. Intrinsic and extrinsic job satisfaction were found to be major indicators of employee engagement. According to Harter et al. (2002), to enhance businesses success and competitiveness, organisations need to concentrate on individual components such as jobs engagement and employee satisfaction. Zavina (2019) found that mindfulness and work engagement amongst teachers had a positive relationship.

Torp et al. (2012) state that when work engagement is well-promoted in the workplace, it tends to have a positive effect. Work engagement is contagious and is carefully linked to good work performance and motivation.

2.2 Job Demands-Resources

The Job Demands-Resources (JD-R) model developed by Demerouti et al. (2001) categorises job characteristics into job demands and job resources. The model uses these two job characteristics to predict employee well-being/burnout and work engagement (Schaufeli & Bakker, 2004). Job demands are related to health issues and exhaustion, while the job resources are related to work engagement (Demerouti et al., 2001).

Job demands are classified as difficulties such as time pressure, workload and obstacles such as red tape or role conflict. Both categories can be challenging on their own (Hakanen et al., 2006). Schaufeli and Taris (2014) found that job resources are positively viewed, while job demands are negatively viewed.

Schaufeli and Bakker (2004) defined job resources as parts (social, psychological and physical) of the work that elevate growth, accomplishment of goals and decreases job demands. Job demands (negative) and job resources (positive) are predictors of work engagement (Bakker, 2011).

The Conservation of Resources Theory stipulated that individuals seek to obtain, retain, foster and protect those things they centrally value (Hobfoll et al., 2018). The theory is regarded as a motivational theory that helps to describe much of human behaviour that is based on the evolutionary need to gain and preserve resources that are for survival and

are fundamental to human behavioural genetics (Hobfoll et al., 2018). This theory helps to buffer against the negative impacts that stress might have on individuals (Folkman & Moskowitz, 2004). The theory stresses that stress is a result of individual subjective perception and environmental circumstances that can put a strain on a person's resources (Alvaro et al., 2010).

Demerouti et al. (2001) define job demands as aspects of the job (psychological, social and physical) that necessitate sustained psychological/physical effort and are therefore linked to certain psychological/physical output. Demerouti et al. (2001) found that stress is an outcome of job demands. When job demands are too many within an organisation and the resources are limited, the well-being of employees significantly decreases (Narainsamy & Van der Westhuizen, 2013).

2.3 Job satisfaction

Job satisfaction is considered one of the most studied variables (Lu et al., 2012). According to Spector (1997), it is regarded as the degree to which people like their work and are satisfied or hate the parts which deals with dissatisfaction.

In a study by Diedericks and Rothmann (2013), it was discovered that employees who lack resources, do not fit in their work role and have poor relations with supervisors were less engaged and less satisfied at work. Garg et al. (2018) found that intrinsically motivated employees experienced higher levels of job satisfaction than employees being extrinsically motivated. Organisational changes aimed at improving performance positively influence employees' job satisfaction (Judge & Kammeyer-Muller, 2012).

According to Javed et al. (2014), if there is a lack of job satisfaction in a workplace, it may interfere with the efficiency of work.

Flourishing (emotional, psychological and social well-being) has a positive relationship with job satisfaction and job engagement (Diederick & Rothmann, 2013). It was found that work engagement is a vital indicator of flourishing.

Cattell et al. (2016) found that there is correlation between job dissatisfaction, job stress and stress-related illness. Narainsamy and Van der Westhuizen (2013) found that job stress and burnout negatively related to well-being. Job satisfaction had a positive relation with well-being and work engagement.

The Job Characteristic Model was developed by Hackman and Oldham (1976). The model is aimed at studying how certain job characteristics affect the job and the level of employees' job satisfaction. According to Lunenberg (2011), the model is created in such a

way that workers get to enjoy their work and at the same time feel valued and attach something meaningful to the work. Hackman and Oldham (1976) created the model such that it consists of five characteristics starting with skill variety; task variety; task significance; autonomy; and feedback. These are concerned with extent to which employees are required to use a variety of their skills (skill variety); do different kinds of jobs (task variety); do work that is important and meaningful (task significance); have a choice in how the work is being executed (autonomy) and receive feedback about performance (feedback) which may influence their motivation and job satisfaction at work.

2.4 Job demands-resources and job satisfaction

When employers assign proper working hours (job demands), productivity increases (Narainsamy & Van der Westhuizen, 2013). Ali et al. (2013) found that good working conditions tend to maximize productivity. The working condition within an organisation is essential for any organisation to function optimally. When employees work under difficult conditions, studies have shown higher levels of absenteeism, lower levels of work engagement, and stress has significantly been higher, which further lowers productivity (Ali et al., 2013). When job demands (workload) is high, employee productivity decreases. Productivity is influenced by job satisfaction (Utami et al., 2020).

2.5 Job demands-resources and work engagement

Schaufeli et al. (2009) found that job resources, job demand and work engagement are dependent on each other. When job demands increase and job resources decrease in the workplace, burnout is likely to occur. When employers increase the social support, promotion and feedback in the workplace, employees' work engagement increases significantly (Schaufeli et al., 2009).

The researchers further found that burnout (positively) and work engagement (negatively) impact the (sick) absence of employees. Employee work engagement promotes job resources, and this further elevates work engagement of employees (Schaufeli et al., 2009). This is in line with the principles of the broaden-and-build theory where positive emotions build further resources that further enhance more positive emotions.

2.6 Job satisfaction and work engagement

According to Bakker (2011), work engagement differs from job satisfaction in that it links high work pleasure (dedication) with high activation (vigour), while job satisfaction is typically a more passive form of employee well-being. The researchers further found a relationship between job satisfaction and

work engagement (Schaufeli et al., 2009). It was found that work engagement increased significantly amongst employees in management. Pieters (2017) found a significant relationship between job satisfaction and work engagement.

Research by Tims et al. (2013) found that an increase in job crafting, which is when employees adjust the fit of their jobs to their preference, has been shown to increase job satisfaction and work engagement. Tims et al. (2013) reported that an increase in job resources significantly decreases levels of burnout and further elevated job satisfaction.

Based on the literature discussed above, the following hypotheses were developed. *Hypothesis 1:* Growth opportunities and advancement opportunities (job resources) have a positive relationship with job satisfaction. *Hypothesis 2:* Job satisfaction has a positive relationship with work engagement. *Hypothesis 3:* Growth opportunities and advancement opportunities (job resources) have a positive relationship with work engagement. *Hypothesis 4:* Growth opportunities and advancement opportunities predict job satisfaction. *Hypothesis 5:* Job satisfaction and job resources predict work engagement.

3. Methodology

3.1. Research design

The quantitative research approach was used for this study to collect numerical and other statistical data, which makes it easy for generalisations of data findings to the area of research. The researchers used a cross-sectional research design.

3.2 Population and sample

The study population are the employees of Dundee Precious Metals Mine in the Oshikoto Region (N=2030). The employees of Dundee Precious Metals Mine who completed the questionnaire in this research constitute the sample of the study.

This research uses a quantitative research method, it consisted of n=150 participants who were randomly selected (availability sampling). The biographical information is presented in Table 1 below.

Table 1:

Descriptive Statistics for Participant Demographics (n=150)

Category:	Item:	Frequency:	Percentage:
SEX:	Male:	77	51.3
	Female:	73	48.7
AGE:	Below 24:	35	23.3
	24-28	38	25.3
	29-31	19	12.7
	32-35	18	12.0
	36-40	19	12.7
	41-45	10	6.7
	46-50	7	4.7
	51 and older	4	2.7
TENURE:	Less than 1 year	23	15.3
	1-2	37	24.7
	3-4	42	28.0
	5-6	17	11.3
	7-8	11	7.3
	9-10	10	6.7
	11-15	6	4.0
	16 and more	4	2.7
	QUALIFICATIONS:	Grade 12	44
Certificate		15	10.0
Diploma		19	12.7
Degree		28	18.7
Honours Degree		34	22.7
Master's Degree		10	6.7
NUMBER OF DEPENDENTS (children):	None	55	36.7
	1-2	55	36.7
	3-4	19	12.7
	5-6	16	10.7
	7-9	5	3.3
	MARTIAL STATUS:	Single	100
Married		39	26.0
Divorced		7	4.7
Widowed		4	2.7
MANAGEMENT LEVEL:		Non-management	83
	Mid-level management	53	35.3
	Senior-level management	14	9.3
	TOTAL:	150	100.0

3.3 Research instruments

The first part of the questionnaire consisted of the demographic items about participants' sex, age, total years in the mining industry, marital status, number of children, highest qualification obtained and management level. The questionnaires were distributed in person (hard copy) and via good forms

(online link). The questionnaire was divided into three sections. The first section focused on the *Job Demands-Resources Scale* (JD-RS) which was created by Jackson and Rothmann (2005). It was aimed at measuring the job demands and job resources in the workplace or organisations. The job demands-resources scale consisted of 14 items which focused on growth opportunities, “Do you have enough variety in your work” and advancement opportunities “Can you live comfortably on your pay?”. The items were rated on a four-point scale ranging from 1 (never), 2 (sometimes), 3 (most of the time) and 4 (always).

The second section was the *Job Satisfaction Scale* (JSS) that was designed by Spector (1997) to assess job satisfaction. The JSS assessed nine categories of job satisfaction which are as follows: pay, promotion, supervision, fringe benefits, contingent rewards, operating conditions, co-workers, nature of work and communications (Spector, 1997). The JSS consisted of 20 comprehensive questions that helped the researchers to assess the five respective components which are promotion, co-workers, pay, supervision and nature of work. The promotion dimension is assessed by asking questions like “There is really too little chance for promotion on my work” and the co-worker dimension is assessed by asking questions like: “I enjoy my co-workers”. The third dimension is the pay, and it was assessed by asking questions like: “I feel satisfied with my chances for salary increases”. The fourth dimension that was assessed is the supervisor; it was assessed by asking questions such as: “My supervisor is unfair to me”. The last dimension that was assessed is nature of work, and this was done by asking questions such as: “There is too much bickering and fighting at work”. The Job satisfaction scale uses a six (6) point Likert type scale where the scales are: 1=Disagree very much; 2=Disagree moderately; 3=Disagree slightly; 4=Agree Slightly; 5= Agree moderately and lastly, 6= Agree very much.

The third section of the questionnaire assessed work engagement which was measured using the *Utrecht Work Engagement Scale* (UWES-9) by Schaufeli and Bakker (2004). The scale has three (3) items that measure a participant’s level of vigour- “At my work, I feel strong and vigorous”.

Three (3) items measure a participant’s level of dedication- “My work inspires me”, and three (3) items measure a participant’s level of absorption at work- “I am immersed in my work”. The researchers collected all the responses by making use of a seven-point (7) Likert scale questions/statements ranging from 0-6, where 0 (never), 1 (few times a year or less), 2 (once a month), 3 (a few times a month), 4

(once a week), 5 (a few times a week) and 6 (every day).

3.4 Data analysis

The researchers used Microsoft Excel to record the relevant information that was obtained from the questionnaires. Quantitative data was analysed using SPSS Version 26 for interpretation including descriptive statistics that were used to describe the data and assess the reliability of the instruments (Cronbach alpha). Pearson’s correlations were used to determine the relationship between variables. Multiple regression was used to assess which dimensions are significant predictors of job satisfaction and work engagement.

3.5. Research ethics

The researchers obtained ethical clearance from the Head of Department: Human Sciences, Faculty of Humanities and Social Sciences, University of Namibia before conducting the research. No information will be discussed with unauthorised individuals (confidentiality); to protect participant’s identity (anonymity), no names will be used, and the right to withdraw from the study at any time was respected without any negative consequences. No participant was forced to participate in the study, and permission were requested from the organisation and consent from the participants. Research data will be kept in a locked safe for safe keeping for a period of five years and destroyed (shredded) afterwards.

4. Results

Table 2 below present the descriptive results related to the mean, standard deviation, Cronbach alpha and correlation. All variables reported a positive relationship with each other.

Table 2:

Descriptive Statistics and Pearson Correlation Coefficient.

	M	SD	A	1.	2.	3.	4.	5.	6.	7.
1. Growth	19.97	4.52	.82	-						
2. Advancement	13.31	3.65	.78	.46*+	-					
3. JD-R_resources	33.28	6.99	.84	.89*+	.82*+	-				
4. Job satisfaction	68.29	10.19	.71	.40*+	.45*+	.49*+	-			
5. Vigour	15.49	4.35	.73	.48*+	.38*+	.51*+	.32*+	-		
6. Absorption	15.82	4.31	.69	.38*+	.36*+	.43*+	.31*+	.67*+	-	
7. Work engagement	37.24	8.91	.84	.50*+	.43*+	.55*+	.38*+	.89*+	.92*+	-

* Statistically significant: $p \leq 0,05$

* Practically significant correlation (medium effect): $0,30 \leq r \leq 0,49$

** Practically significant correlation (large effect): $r \geq 0,50$

- 1. Growth opportunities (JD-R)
- 2. Advancement opportunities (JD-R)
- 3. D-R_resources (JD-R resources)
- 4. Job satisfaction
- 5. Vigour (Work engagement)
- 6. Absorption (Work engagement)
- 7. Work engagement

The mean (19.97) and standard deviation (4.52) for growth opportunities was recorded and for advancement opportunities the mean score is 13.31 and SD of 3.65. JD-R_resources reported a mean score of 33.28 and SD of 6.99. A mean of 68.29 was recorded for job satisfaction (JS), 15.49 for vigour; 15.82 for absorption and 37.24 for work engagement (WE). SD scores were recorded for job satisfaction (10.19), vigour (4.35), absorption (4.31) and work engagement (8.91).

Cronbach's Alpha is 0.82 which reported for the growth opportunities; 0.78 for advancement opportunities and 0.84 for JD-R_resources. Cronbach's Alpha for job satisfaction is 0.71, 0.73 for vigour, 0.69 for absorption and 0.84 for work engagement.

Growth opportunities (JD-R) reported a relationship with advancement opportunities (JD-R) ($r = 0.46, p < 0.05$; medium effect), with JD-R_resources ($r = 0.89, p < 0.05$; large effect); with job satisfaction ($r = 0.40, p < 0.05$; medium effect); with vigour (work engagement) ($r = 0.48, p < 0.05$; medium effect); with absorption (work engagement) ($r = 0.38, p < 0.05$; medium effect); and with work engagement ($r = 0.50, p < 0.05$; large effect).

Advancement opportunities (JD-R) reported a relationship with JD-R_resources ($r = 0.82, p < 0.05$; large effect); with job satisfaction ($r = 0.45, p < 0.05$; medium effect); with vigour (work engagement) ($r = 0.38, p < 0.05$; medium effect); with absorption (work engagement) ($r = 0.36, p < 0.05$; medium effect); and with work engagement ($r = 0.43, p < 0.05$; medium effect).

JD-R_resources reported a relationship with job satisfaction ($r = 0.49, p < 0.05$; medium effect); with vigour (work engagement) ($r = 0.51, p < 0.05$; large effect); with absorption (work engagement) ($r = 0.43, p < 0.05$; medium effect); and with work engagement ($r = 0.55, p < 0.05$; large effect).

Job satisfaction reported a relationship with vigour (work engagement) ($r = 0.32, p < 0.05$; medium effect); with absorption (work engagement) ($r = 0.31, p < 0.05$; medium effect); and with work engagement ($r = 0.38, p < 0.05$; medium effect).

Vigour (work engagement) reported a relationship with absorption (work engagement) ($r = 0.67, p < 0.05$; large effect); and with work engagement ($r = 0.89, p < 0.05$; large effect).

Absorption (work engagement) reported a relationship with work engagement ($r = 0.50, p < 0.05$; large effect).

Multiple regression

Multiple regression was used to identify which dimensions of the JD-R model will best predict the variance in job satisfaction. The first model analysed growth opportunities (JD-R) as the independent variable and job satisfaction as the dependent variable (Model 1). Advancement opportunities (JD-R) was added in Model 2 as an independent variable. The results are reported in Table 3.

Table 3: Multiple Regression with Job satisfaction being the dependent variable and growth opportunities (JD-R) and advancement opportunities (JD-R) the dependent variables

odel	Unstandardized Coefficients Beta	SE	Standardized Coefficients (β)	T	P	F	R ²	ΔR ²
onstant	50.29	3.47		14.49	0.00**	28.24	.161	.155
rowth	0.90	0.17	0.40	5.31	0.00**			
onstant	44.71	3.56		12.55	0.00**	24.20	.249	.239
rowth	0.55	0.18	0.25	3.04	0.00**			
DV	0.94	0.23	0.34	4.13	0.00**			

t, test; p, probability value; F, overall significance; R², percentage variance explained; ΔR², change in percentage variance explained; B, regression coefficient; SE, standard error.
*p ≤ 0.05; **p ≤ 0.01.

GROWTH = Growth opportunities (JD-R);

ADV = Advancement opportunities (JD-R)

As can be seen from Table 3, entry of growth opportunities at the first step of the regression analysis produced a statistically significant model ($F_{(1,147)} = 28.24; p < 0,00$) and accounted for 15.5% of the variance in job satisfaction. In Model 2, advancement opportunities (JD-R) was added and produced a statistically significant model ($F_{(2,146)} = 24.20; p < 0,00$) and accounted for 23.9% of the variance in job satisfaction.

Multiple regression was employed to establish which variable between job satisfaction and job resources (JD-R) would best predict the variance in work engagement. The first model analysed used job satisfaction as the independent variable and work engagement as the dependent variable (Model 1). Job resources (JD-R) was added in Model 2 as the independent variable. The results are reported in Table 4.

Table 4: Regression with work engagement being the dependent variable and job satisfaction and job resources (JD-R) the dependent variables

odel	Unstandardized Coefficients Beta	SE	Standardized Coefficients (β)	T	P	F	R ²	ΔR ²
onstant	14.52	4.60		3.16	0.00	24.92	.145	.139
	0.33	0.07	0.38	4.99	0.00**			
onstant	8.37	4.26		1.97	0.05*	33.53	.315	.305
	0.13	0.07	0.15	1.87	0.06			
R_RES	0.60	0.10	0.48	6.02	0.00**			

t, test; p, probability value; F, overall significance; R², percentage variance explained; ΔR², change in percentage variance explained; B, regression coefficient; SE, standard error.
*p ≤ 0.05; **p ≤ 0.01.

JS = Job satisfaction;

JDR_RES = Job resources (JD-R);

5. Discussion

The aim of the study was to assess the relationship between growth opportunities, advancement opportunities (job demands-resources), job satisfaction and work engagement of mining employees at Dundee Precious Metals Mine, Tsumeb. This study found a positive relationship between growth opportunities, advancement opportunities (job resources) and job satisfaction. This supports *Hypothesis 1* of this study. The findings of this study are in line with Visser et al. (2012) who found that job resources (money) enhance employees' motivation and job satisfaction. This study further explored whether growth opportunities and advancement opportunities predict job satisfaction. The results support *Hypothesis 4* of this study. Growth opportunities and advancement opportunities predict 23.9% of the variance in job satisfaction for this study.

The result of this study supports *Hypothesis 2*. Job satisfaction and work engagement reported a positive relationship. Studies by Pieters (2017); Schaufeli et al. (2009); Yeh (2015) and Zhang et al. (2020) found supporting evidence for this relationship. When employees are experiencing job satisfaction, they are motivated to work towards the goals and objectives of the organisation- for the organisation that supports their needs.

Hypothesis 3 of this study was aimed at assessing the relationship between growth opportunities, advancement opportunities (job resources) and work engagement. The results from this study support Hypothesis 3. Hakanen et al. (2006); Schaufeli et al. (2009) noted that job resources enhance work engagement. On the other hand, Schaufeli et al. (2009) emphasised that job demands lead to burnout and disengagement of employees.

Hypothesis 5 of this study explored the predictability of job satisfaction and job resources on work engagement. The results support Hypothesis 5. Job satisfaction and job resources predicted 30.5% of work engagement for this study. The positive relationship between job resources, job satisfaction and work engagement is supported by Pieters (2017); Schaufeli et al. (2009) and Tims et al. (2013). Job resources enhance job satisfaction and work engagement, while job satisfaction directly improves work engagement of employees.

6. Limitations

This study is limited because of the methodology (cross-sectional design). The variables can only be measured at one point and not over a long period of time. This study focused on mining employees at

Dundee Precious Metals Mine; thus, it cannot be generalised to other employees or the entire mining industry of Namibia.

7. Recommendations

To provide more growth opportunities for employees, the mine could identify employees with potential to act during the absence of senior employees or supervisors. This would allow these employees the opportunity to develop further potential and at the same time, satisfy their need for growth opportunities. Employees can be incentivised and develop their skills and competencies simultaneously.

Employees could also be included in job rotation to expose them to the different aspects of their departments and organisation. Job rotation allows employees to enhance their experience and knowledge related to the different aspects/components of the organisation/processes which could enhance overall effectiveness in their work roles.

The organisation could request experienced senior employees to provide training to less experienced employees. Considering the age and working experience of the sampled employees, the organisation is likely to have challenges when the senior employees retire and/or leave the organisation.

Thus, training workshops could be used to educate and upskill employees through on-the-job training and on-site workshops. If the organisation has the financial capacity, external training may be sourced. Organisations should require employees that attend training, internal or external, to transfer these skills to other employees and share the knowledge gained. This may hold benefits for the employees that provide the training (feeling proud), and it could also enhance the relationship between employees (relatedness).

Employees may also experience growth opportunities when they are consulted about decisions within the organisation, procedures and their views. Allowing employees to become part of the decision-making process enhances their growth opportunities and their levels of perceived importance within the organisation. Through this, autonomy and meaningfulness may enhance job satisfaction and work engagement of employees.

To provide employees with advancement opportunities, the organisation can initiate "employee of the month" recognition. In this way, employees that perform exemplary for a certain

month/time can be recognised and awarded to acknowledge and promote performance. Such awards and recognition could stimulate healthy competition amongst employees and improve overall performance of the department/organisation. This could be extended for annual performance evaluation where employees get performance bonuses or other awards based on employee preferences.

As part of advancement opportunities, employees expect to live off their salaries and benefits but also to advance in terms of their socio-economic status and what the job can provide. To ensure that organisations pay equitable, fair salaries and benefits, it is important to conduct internal and external assessments regularly. This will ensure that employees within the organisation are compensated fairly within the organisation and fairly in comparison to competitors/organisations in the job market.

Organisations may explore promoting employees not only based on tertiary qualifications but by focusing on expertise and years of service. Some employees may not progress academically in terms of further studies but contribute significantly to the organisation. It would be beneficial to have policies in place that promote employees based on these different criteria as well.

Often, employees may be uninformed about the requirements and promotion procedures. This includes vertical and horizontal advancement. When employees know what is expected of them to advance, they may be more focused and directed in how they spend their time at work. Some employees may have worked for the organisation for many years, and a refresher education session could benefit them as well. Education about promotion policy and procedures also enhances the perceived fairness with outcomes of promotion decisions.

Interventions such as being paid fairly and equitably, being promoted for years of service and excellent work may enhance advancement opportunities for mining employees and could also enhance their job satisfaction levels.

Job satisfaction may also be enhanced by healthy relationships between colleagues and with superiors/supervisors. The organisation could ensure that there are different platforms where staff can share their concerns, resolve conflict and address challenges in an open and transparent manner. Making these avenues available and known to staff enhances conflict resolution and stimulates an environment that welcomes the resolution of

challenges.

Employees can also be equipped with conflict resolution and interpersonal relationships skills. This can facilitate enhanced conflict resolution and improved healthy relationships at work and in life.

Job rotation does not only enhance growth opportunities, but it makes work more interesting and enjoyable. Organisations and employees can identify ways such as job crafting to enhance motivation, reduce boredom and create opportunities to utilise different skill sets at work. Allowing diverse and distinct ways of thinking and working in the organisation can facilitate creative and innovative ways of executing work tasks.

Future studies could be longitudinal to test behaviour over a longer period. Future studies could also focus on other variables that predict job satisfaction and work engagement of employees considering that work resources and job satisfaction predicted some of the variance. The studies could also be focused on other mining organisations and other industries in Namibia.

8. Conclusion

This study investigated the relationship between job demands-resources (growth and advancement opportunities), job satisfaction and work engagement of Dundee Precious Metals Mine employees. This study found a positive relationship between growth opportunities, advancement opportunities, job satisfaction and work engagement.

Growth opportunities and advancement opportunities predicted job satisfaction. Job resources (growth and advancement opportunities) and job satisfaction predicted employees' work engagement. This study presented practical recommendations for industry practitioners, the management of the mine and future academics/researchers.

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