

Job demands, job resources and work engagement of employees in a manufacturing organisation

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ABSTRACT

The objectives of this study were to identify the levels of work engagement in a manufacturing organisation and to investigate the relationships between job demands, job resources and work engagement. A cross-sectional survey design was used. The total available population of employees ($N = 83$) in the organisation participated in this study. The Job Demands-Resources Scale and the Utrecht Work Engagement Scale were used as measuring instruments. The results showed that the average work engagement level of employees was above the South African norm. Job resources, such as organisational support, growth opportunities, social support and advancement opportunities, were related to work engagement of individuals. Job demands did not play a significant role in the work engagement of employees. Organisational support and growth opportunities were the best predictors of work engagement.

INTRODUCTION

Manufacturing organisations face the challenge of becoming more competitive in local and international markets. The manufacturing industry has experienced a significant change in moving from traditional work organisation principles to team-based work and multi-skill principles (Bolden, Waterson, Warr, Clegg & Wall 1997). Production lines are replaced with more flexible systems, such as manufacturing cells. Quality testing departments are replaced by total quality management systems. Stock levels and work-in-progress are made lean through just-in-time systems. These factors have contributed to an overload of demands and an under-supply of response capabilities in manufacturing organisations, which might affect individuals' psychological experiences of their work, for example, their work engagement (Nelson & Simmons 2003). Engaged workers are enthusiastically involved in, and

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pleasurably occupied by, the demands of the work at hand. Disengagement from work may result in employee turnover, absenteeism and poor performance (Caldwell, Chatman & O'Reilly 1990).

Managers in organisations have to unleash the human potential in organisations to improve the overall performance of employees. According to May, Gilson & Harter (2004), employees seek fulfilment through self-expression at work. These authors believe that for employees to thrive, they should engage themselves cognitively, physically and emotionally in their work. Kahn (1990) points out that self and role exist in some dynamic, negotiable relationship in which a person both drives personal energies into role behaviours and displays the self within the role. It is therefore important to study work engagement and the predictors thereof.

The concept of work engagement is relevant for organisations for various reasons. Firstly, work engagement is related to job satisfaction, organisational commitment and low turnover intention (May et al. 2004; Schaufeli & Bakker 2004). Secondly, work engagement is related to personal initiative and learning (Sonnentag 2003). Research regarding the psychological foundations of work engagement will enable researchers and practitioners to understand and predict why some employees psychologically identify with their jobs.

According to Schnorpfeil, Noll, Wirtz, Schulze, Ehlert, Frey & Fischer (2004), disengagement is caused by job characteristics (including job demands and a lack of resources), such as excessive workload, physical work conditions, adverse co-worker behaviour, lack of social support, low pay, poor communication, poor training and boring jobs (see also Bent, Seaman & Ingram 1999).

The aims of this study were to investigate the work engagement of employees in a manufacturing organisation, as well as to investigate the relationship between job demands, job resources and work engagement.

Work engagement

The concept of work engagement is a relatively new addition to the field of occupational health psychology and could be viewed as part of a more general emerging trend towards a positive psychology that focuses on human strengths and optimal functioning rather than on weaknesses and malfunctioning (Seligman & Csikszentmihalyi 2000).

According to Maslach & Leiter (1997), engagement is characterised by energy, involvement and efficacy. Engaged individuals are assumed to have a sense of energetic and effective connection with their work activities, and they see themselves as able to deal completely with the demands of work. Work engagement is not a momentary specific state, but a more persistent and pervasive affective-cognitive state that is not focused on a particular object, event, individual or behaviour (Schaufeli, Salanova, Gonzáles-Romá & Bakker 2002).

According to Schaufeli et al. (2002), engagement can be defined as a positive, fulfilling, and work-related state of mind that is characterised by vigour, dedication and absorption. Vigour is characterised by high levels of energy and mental resilience while working, the willingness to invest effort in one's work, and persistence in the face of difficulties. This energy can also relate to the level of mental effort or mental strength that individuals can put into doing something. Dedication is characterised by a sense of significance, enthusiasm, inspiration, pride and challenge. It refers to the emotional side of work engagement and the willingness of people to expend considerable time and effort in doing something meaningful. Absorption is characterised by concentration and being happily engrossed in one's work, so that time seems to pass quickly and one has difficulties in detaching oneself from work. Absorption, the third dimension of work engagement, refers to the cognitive aspect where individuals are fully focused on something and experience a high level of concentration while performing a task.

In the social sciences literature, engagement is most closely associated with the existing constructs of job involvement (Brown 1996) and flow (Csikszentmihalyi 1990). Job involvement is defined as the degree to which the job situation is central to the person and his/her identity (Lawler & Hall 1970). Thus, job involvement results from a cognitive judgement about the need-satisfying abilities of the job. Jobs, in this view, are linked to one's self-image (May et al. 2004). Engagement differs from job involvement in that it is concerned more with the way in which the individual pursues his/her self during the performance of his/her job. Furthermore, engagement entails the active use of emotions and behaviours, in addition to cognitions. Engagement may therefore be thought of as an antecedent to job involvement, as individuals who experience deep engagement in their working roles should come to identify with their jobs.

The second construct related to engagement is the notion of flow (Csikszentmihalyi 1975, 1990). Flow is the holistic sensation that people feel when they act with total involvement. It is the state in which there is little distinction between the self and the environment. When individuals experience a state of flow, little conscious control is necessary for their actions. Individuals narrow their attention to a specific stimulus. They lose a sense of consciousness about their selves as they meld with the activity itself. According to May et al. (2004), flow experiences also provide feedback that is automatically taken into account by the individual. Although both engagement and flow have self-employment underpinnings (Kahn 1990), engagement differs from flow in that the latter has been conceptualised and measured primarily as cognitive involvement with an activity and represents a unique 'ceiling' experience of total cognitive adsorption. However, according to Kahn (1990), individuals vary in the degree to which they immerse themselves in their working roles. He explicitly argues that individuals would use all aspects of themselves – cognitive, emotional and

physical. For example, expression of emotion at work should facilitate engagement in work and make the connections with others at work meaningful (Kahn 1990; Waldron 1994).

Work engagement is also conceptualised as the positive antithesis of burnout (Maslach, Schaufeli & Leiter 2001). Engagement is characterised by vigour, dedication and absorption – the three direct opposite dimensions of burnout, which are exhaustion, cynicism and inefficacy. According to Maslach & Leiter (1997), burnout is an erosion of work engagement by means of which energy turns into exhaustion, involvement into cynicism, and efficacy into ineffectiveness. Engagement and burnout can be regarded as two prototypes of employee well-being as viewed by the two independent dimensions of pleasure and activation (Watson & Tellegen 1985). Low levels of activation and pleasure can identify burnout, whereas high levels of activation and pleasure identify engagement.

Work engagement has been recognised as providing positive outcomes in terms of work wellness for several reasons. Firstly, work engagement is a positive experience in itself (Schaufeli et al. 2002). Secondly, it is related to good health and positive work effect (Demerouti, Bakker, De Jonge, Janssen & Schaufeli 2001; Rothbard 2001). Thirdly, work engagement helps individuals derive benefits from stressful work (Britt, Adler & Bartone 2001). Fourthly, work engagement is positively related to organisational commitment (Demerouti et al. 2001) and is expected to affect employee performance (Kahn 1990). It is thus important for managers to cultivate work engagement, given that disengagement, or alienation, is central to the problem of workers' lack of commitment and motivation (Aktouf 1992). Meaningless work is often associated with apathy and detachment from one's work (Thomas & Velthouse 1990). Under such conditions, individuals are thought to become estranged from their 'selves' (Seeman 1972), and restoration of meaning in work is regarded as a method for fostering an employee's motivation and attachment to work.

These perspectives demonstrate both the humanistic and practical reasons for providing meaningful work that contributes to personal fulfilment and motivational qualities. According to Spreitzer, Kizilos & Nason (1997), meaningful work facilitates employee motivation and personal growth, which contribute to empowerment and employee involvement. Engagement in meaningful work can lead to perceived benefits from the work (Britt et al. 2001), and has been linked to such variables as employee turnover, customer satisfaction, loyalty, safety, productivity and profitability (Harter, Schmidt & Hayes 2002). Thus, there are practical as well as humanistic reasons why managers and organisations should be concerned with employees' engagement levels regarding their work.

Job demands, job resources and work engagement

Limited information is available regarding the relationship between work engagement and job demands. Jones & Fletcher (1996) define job demands as the

degree to which the environment contains stimuli that peremptorily require attention and response. Schaufeli & Bakker (2004) refer to job demands as those physical, psychological, social or organisational aspects of the job that require sustained physical and psychological effort and that are therefore associated with certain physiological and psychological costs. Quantitative job demands refer to the amount of work required and the available timeframe, while qualitative workload involves employees' affective reactions to their jobs. Although job demands are not necessarily seen as negative, they may turn into job stressors when meeting those demands requires high effort and is therefore associated with high costs that elicit negative responses such as depression, anxiety or burnout. Work overload or high demands may also occur if an individual does not have the necessary skills, abilities and support to meet these demands. According to Maslach (1993), job demands drain the employee's energy and, in an attempt to cope with the resulting exhaustion, the employee withdraws mentally. When the employee withdraws mentally, his/her work engagement levels will decrease. Schaufeli & Bakker (2004) found that job demands lead to burnout, which in turn might impact on the work engagement of employees.

Job resources seem to increase work engagement. According to Schaufeli & Bakker (2004), job resources refer to those physical, psychological, social or organisational aspects of the job that either reduce job demands and the associated physiological costs or that are functional in achieving work goals or stimulating personal growth, learning and development. Job resources are not only necessary for dealing with job demands and getting things done, but are also important in their own right (Hobfoll 2002). In the so-called motivational process (Schaufeli & Bakker 2004), job resources are linked, via work engagement, to organisational outcomes. Job resources can play an intrinsic motivational role in fostering individual growth, learning and development, or through an extrinsic motivational role that helps individuals achieve working goals. Job resources are linked to positive organisational outcomes via work engagement.

The effect of high job demands may be reduced by job resources such as providing feedback, social support and supervisory coaching (Schaufeli & Bakker 2004). If high job demands are coupled with high job resources, this could lead to work engagement. Schaufeli & Bakker (2004) also state that job demands could lead to health problems via burnout, and that job resources could lead to turnover intention via work engagement. In order to improve human performance and mental effort, one must make use of a motivation-driven process that includes job resources. Job resources play an intrinsic motivational role because they may help employees to grow, learn and develop. Job resources may also play an instrumental role in achieving work goals. According to De Charms (1968), White (1959) and Baumeister & Leary (1995), job resources fulfil the basic human needs for autonomy, competence

and relatedness. In giving proper feedback, learning is fostered, increasing job competence, whereas decision latitude and social support satisfy the need for autonomy and the need to belong, respectively.

Providing employees with optimal challenges, feedback and freedom in their work creates intrinsic motivation and increases their work engagement (Ryan & Deci 2000). Positive feedback seems to enhance work engagement levels, whereas negative feedback diminishes it. Employees will be more engaged in their work if they regard their work as challenging and have the freedom to be independent in their work tasks. Roberts & Davenport (2002) found that career development, identification with the organisation and a rewarding work environment also increase the work engagement levels of employees. Employees will be more engaged in their work if the organisation provides them with opportunities to enhance their skills and abilities, and to manage their careers. When individuals identify with the organisation, they share in its success and are proud to deliver quality work.

According to the self-determination theory of Deci & Ryan (1985), work contexts that support psychological autonomy, competence and relatedness enhance well-being and increase intrinsic motivation (Ryan & Frederick 1997). This intrinsic motivational potential is also supported by the Job Characteristics Theory (JCT) of Hackman & Oldham (1980). According to the JCT, every job has a specific motivational role that depends on the presence of five core job characteristics: skill variety, task identity, task significance, autonomy and feedback. The JCT further hypothesises that these core job characteristics are linked to positive results such as high-quality work performance, job satisfaction, and low absenteeism and turnover.

According to the Effort-Recovery Model of Meijman & Mulder (1998), job resources may also play an extrinsic motivational role through work environments that offer many resources and foster the willingness to dedicate one's efforts and abilities to the work task. It is therefore likely that the work task will be completed successfully and that the work goal will be achieved. Support from colleagues and proper feedback from supervisors will thus increase the individual's likelihood of achieving work goals, and employees will thus be successful in their daily tasks. This will create an energy backflow to the individual. In either case, whether the satisfaction of basic human needs or the achieving of work-related outcomes, the results are positive and the chances for an individual to be engaged will increase. The tendency for employees to leave the organisation will also decrease if organisations provide their employees with valued job resources that enhance learning, growth and development (Houkes, Janssen, De Jonge & Nijhuis 2001).

Schaufeli & Bakker (2004) found that work engagement is strongly predicted by job resources. It can therefore be expected that job resources have a positive relation to work engagement. If the employee is provided with variety in his/her job, learning opportunities and autonomy, he/she will be more likely to engage in his/her work. This will make the employee's work more meaningful. In providing the employee

with safety in terms of social support (in other words, good relationships with supervisor and colleagues), the employee will feel more secure and safe in his/her job. Ultimately, a positive, fulfilling relationship will exist between the employee and the employer, the employee will achieve work goals from which the employer can benefit, and the employer will provide the employee with valued resources in order to satisfy his/her basic work needs.

The following hypotheses are therefore formulated:

Hypothesis 1: Low job resources in a manufacturing organisation lead to low levels of work engagement among employees.

Hypothesis 2: High job demands lead to low levels of work engagement levels among employees.

METHOD

Research design

A survey design was used.

Participants

The total available population of employees in a small manufacturing firm in the North-West Province participated in this study ($N = 83$). Table 1 presents some of the characteristics of the participants.

According to Table 1, the majority of the participants were males (59%), and 22.9% of the group were between the ages of 36 and 40 years. Just over half of the participants (53%) spoke Afrikaans as a first language, and 33.7% were married with children. A total of 49.4% of the participants held a grade 12 qualification, and 56.6% had between one and five years' experience in the organisation.

Measuring instruments

Three measuring instruments were used in this study, namely the Utrecht Work Engagement Scale (Schaufeli et al. 2002), the Job Demands-Resources Scale (Rothmann, Strydom & Mostert 2006) and a demographic questionnaire.

The Utrecht Work Engagement Scale (UWES) was used to measure the engagement level of the participants. The UWES includes three dimensions – vigour, dedication and absorption – which are conceptually regarded as the opposites of burnout and are scored on a seven-point frequency-rating scale, ranging from 0 (never) to 6 (every day). Only two of these dimensions were used in this research study, namely vigour (five items, for example, “I am bursting with energy every day in my work”) and dedication (five items, for example, “My job inspires me”). Problems with the wording of the items of absorption precluded its use in this study. The alpha

Table 1: Characteristics of the participants

Item	Category	Percentage
Gender	Male	59.00
	Female	41.00
Age	20–25 years	6.00
	26–30 years	14.50
	31–35 years	21.70
	36–40 years	22.90
	41–45 years	9.60
	46–50 years	13.30
	51–55 years	7.20
	55+ years	4.80
Language	English	4.80
	Afrikaans	53.00
	Setswana	27.70
	isiXhosa	7.20
	isiZulu	1.20
	Sesotho	3.60
	Sepedi	1.20
	Xitsonga	1.20
Marital status	Single with children	10.80
	Single without children	27.70
	Married without children	15.70
	Married with children	33.70
	Other	12.00
Qualification	Grade 10	22.90
	Grade 11	6.00
	Grade 12	49.40
	Grade 12+ 1-year diploma	1.20
	Grade 12+ College diploma	7.20
	Grade 12+ University degree	7.20
	Grade 12+ Postgraduate degree	6.00
Years in organisation	1–5 years	56.60
	6–10 years	26.50
	11–15 years	8.40
	16–20 years	4.80
	20+ years	3.60

coefficients for the two subscales varied between 0.64 and 0.75. Schaufeli & Bakker (2004) determined alpha coefficients between 0.68 and 0.91. Rothmann & Storm (2003) obtained the following alpha coefficients for the UWES: Vigour, 0.78; Dedication: 0.89. An exploratory factor analysis that was conducted for the purposes of this study showed a one-factor solution for Work Engagement (including the items of the Vigour and Dedication subscales).

The Job Demands-Resources Scale (JD-RS) was used to measure the specific job characteristics within the manufacturing industry. This questionnaire was developed

by the authors to measure job demands and job resources for employees in the manufacturing industry. The JDRS comprises 48 items, and the questions are rated on a four-point scale, ranging from 1 (never) to 4 (always). The dimensions of the JDRS include pace and amount of work, mental load, emotional load, variety in work, opportunities to learn, independence in work, relationships with colleagues, relationships with immediate supervisors, ambiguities about work, information, communication, participation, contact possibilities, uncertainty about the future, remuneration and career possibilities. Rothmann et al. (2006) also found reliable alpha coefficients for the JDRS that varied between 0.76 and 0.92 in a South African sample.

A demographic questionnaire was developed in order to obtain information about the characteristics of the participants. The questionnaire included gender, race, age, language, marital status, qualification level and total years in the specific organisation.

Statistical analysis

The SPSS program (SPSS 2005) was used to carry out the statistical analyses. Descriptive statistics, including means, standard deviations, skewness and kurtosis, were used to explore the data (Tabachnick & Fidell 2001). Cronbach alpha coefficients were used to assess the internal consistency of the measuring instruments (Clark & Watson 1995). Effect sizes were used to decide on the significance of the findings. Pearson correlation coefficients were used to specify the relationships between the variables. A cut-off point of 0.30 (medium effect) was set for the practical significance of correlation coefficients, and the level of statistical significance was set at $p \leq 0.05$. Multiple regression analysis was used to investigate whether job demands and job resources would predict work engagement.

Procedure

Permission to conduct the study was sought from the management of the participating organisation. The questionnaires were administered in a controlled environment. Participation was voluntary. The objectives of the study were explained to the participants at their place of work (where the data collection also took place), and their written consent was obtained. Confidentiality and anonymity were assured.

RESULTS

Descriptive statistics and correlations

Table 2 identifies the descriptive statistics, the Cronbach alpha coefficients and the correlations of the measured instruments, namely the UWES and the JDRS.

Table 2: Descriptive statistics, alpha coefficients and correlations of the UWES and JDERS (N = 83)

Item	Mean	Sten	SD	Skewness	Kurtosis	α
UWES						
Engagement	42.06	6.52	3.22	-0.63	-0.73	0.82
JDRS						
Organisational Support	43.53	6.33	3.12	-0.67	-0.33	0.92
Growth Opportunities	23.69	5.24	3.36	-0.34	-1.04	0.88
Social Support	17.95	5.96	2.97	-0.71	0.15	0.79
Advancement	12.63	6.00	3.44	0.46	-0.93	0.89
Insecurity	8.07	5.48	2.95	-0.17	-1.50	0.94
Job Demands	24.61	5.36	2.71	0.19	-0.81	0.63

According to Table 2, the scores of the UWES and the JDERS are normally distributed. The Cronbach alpha coefficients of all the instruments are considered to be acceptable compared with the guidelines of $\alpha > 0.70$ (Nunnally & Bernstein 1994), with the exception of the alpha coefficient for the Job Demands Scale, which is below the accepted 0.70 guideline. The JDERS and UWES have been standardised for South Africa. Norm scores (expressed as sten scores) are thus available. The sten scores of certain job resources such as Organisational Support, Social Support and Advancement seem to be above the average of 5.50. Growth opportunities seem to be below the national norm. The sten scores of Job Demands and Insecurity seem to be below the norm.

The correlation coefficients between Work Engagement, Job Demands and Job Resources are reported in Table 3.

Table 3 indicates that Work Engagement is positively statistically and practically significantly related to Organisational Support and Growth Opportunities (large effect), and Work Engagement is likewise also related to Social Support and Advancement (medium effect).

A multiple regression analysis was done with Work Engagement (as measured by the UWES) as the dependent variable, and Job Demands and Job Resources (as measured by the JDERS) as independent variables. Firstly, Job Resources were entered into the analysis, and secondly, Job Demands were entered (see Table 4).

According to Table 4, 51% of the variance in Work Engagement (as measured by the UWES) is predicted by job resources. The regression coefficients of only two job resources, Organisational Support and Growth Opportunities, were statistically significant. Table 4 also indicates that the standardised regression coefficients for

Table 3: Correlation coefficients between Work Engagement, Job Demands and Job Resource

Item	1	2	3	4	5	6
1. Work Engagement	-	-	-	-	-	-
2. Organisational Support	0.66**++	-	-	-	-	-
3. Growth Opportunities	0.64**++	0.77**++	-	-	-	-
4. Social Support	0.44**+	0.73**++	0.59**++	-	-	-
5. Advancement	0.45**+	0.67**++	0.61**++	0.52**++	-	-
6. Insecurity	0.21	0.19	0.27*	0.35**+	0.05	-
7. Job Demands	-0.17	-0.26*	-0.10	-0.19	-0.13	-0.15

- * Correlation is statistically significant $p < 0.05$
- ** Correlation is statistically significant $p < 0.01$
- + Correlation is practically significant $r > 0.30$ (medium effect)
- ++ Correlation is practically significant $r > 0.50$ (large effect)

Table 4: Regression analysis with Engagement as dependent variable

Model		Unstandardised coefficients		Standardised coefficients	t	p	F	R	R ²	ΔR ²
		B	SE	Beta						
1							15.81*	0.71	0.51	0.47
	(Constant)	12.29	3.96		3.12	0.03				
	Organisational Support	0.39	0.15	0.41	2.56	0.01*				
-	Growth Opportunities	0.43	0.18	0.33	2.48	0.02*				
	Social Support	0.20	0.31	0.08	0.65	0.52				
	Advancement	-0.13	0.21	-0.07	-0.62	0.54				
	Insecurity	0.08	0.28	0.02	0.28	0.78				
2							13.04*	0.71	0.47	0.00
	(Constant)	14.15	7.09		2.00	0.05				
	Organisational Support	0.38	0.16	0.39	2.38	0.02*				
	Growth Opportunities	0.45	0.18	0.34	2.48	0.02*				
	Social Support	0.21	0.31	0.08	0.66	0.51				
	Advancement	-0.13	0.22	-0.07	-0.62	0.54				
	Insecurity	0.06	0.28	0.02	0.22	0.82				
	Job Demands	-0.06	0.19	-0.03	-0.32	0.75				

* $p < 0.05$

Organisational Support ($\beta = 0.39$) and Growth Opportunities ($\beta = 0.34$) were both moderate. Participants seem to be more engaged in their work when they are provided with organisational support (in the form of the relationship with the supervisor, role clarity, information, communication and participation) and growth opportunities (in the form of variety in the job, opportunities to learn and autonomy). Social Support, Advancement and Job Insecurity did not contribute significantly to

Work Engagement when entered with Organisational Support and Growth Opportunities. Furthermore, Job Demands did not contribute significantly to Work Engagement. There was no statistically significant change in R^2 when the Job Demands factor was entered into the regression analysis.

DISCUSSION

The aims of this study were to investigate the work engagement of employees, as well as the relationship between job demands, job resources and work engagement. The results showed that participants experience a level of work engagement above the national norm. Work engagement was best predicted by organisational support and growth opportunities in the job. Job demands showed a weak relationship with work engagement.

The results of this study confirmed that job resources, namely organisational support, growth opportunities, social support and advancement, are positively related to work engagement, and that job demands (overload) are negatively related to work engagement. Organisational support (including the relationship with superiors, role clarity, information, communication and participation), and growth opportunities (including variety, opportunities to learn, and autonomy) were strongly related to work engagement. Social support and advancement were moderately related to work engagement.

Fifty-one per cent of the variance in work engagement of participants in this study was predicted by organisational support and growth opportunities. These results also support the first hypothesis of this study, namely that job resources predict the work engagement of employees. However, two job resources, namely growth opportunities and organisational support, appear to play a significant role in terms of the work engagement of employees. Growth opportunities in a job, such as variety, learning opportunities and autonomy, play an intrinsic motivational role by fostering the employees' growth, learning and development. Organisational support, such as the relationship with supervisors, role clarity, information, communication and participation, plays an extrinsic motivational role by being instrumental in achieving work goals (see Schaufeli & Bakker 2004). An increase in job resources (and, more specifically, organisational support and growth opportunities) will increase the overall work engagement level of employees. A work environment that offers resources will foster the willingness of the employee to dedicate his or her efforts and abilities to the work task.

The results of this study further showed that job demands were not significantly related to the engagement of participants. Therefore, the second hypothesis of the study is rejected. Job demands, such as pace of work, quantitative workload and emotional workload, did not play a significant role in terms of the work engagement of participants. It seems that employees will be more engaged in their work if the

necessary job resources, such as organisational support and growth opportunities, are provided, regardless of the level of job demands. Hakanen, Bakker & Demerouti (2005) showed that if job demands increase with a lack of increase in job resources, it will have a negative effect on the work engagement levels of employees. However, the results of this study do not support their finding.

In order for employees to experience high physical and mental energy and high levels of enthusiasm, pride and challenge in their work to attain work goals, the organisation must increase the level of organisational support, growth opportunities, social support and advancement opportunities (Bakker & Schaufeli 2004; Hackman & Oldham 1980). When job resources are lacking, employees might find it difficult to cope with high job demands. This might result in disengagement, as employees will tend to defend themselves against the absence of resources. It is therefore important that the organisation provide employees with the necessary resources and a healthy work environment.

This study had various limitations. Afrikaans and Setswana, two of the languages used in this study, were, in some cases, the second or third language of the participants. This could have influenced the way in which the participants understood the questions in the questionnaires, as well as their responses to these questions. The study population was rather small, with only 83 participants. The results of this study can therefore not be generalised to the manufacturing industry. Lastly, because of the cross-sectional nature of the data, it was not possible to determine the causality of relationships.

RECOMMENDATIONS

It is recommended that the organisation that was the focus of this study should attend to the job resources of employees in order to improve their levels of work engagement. Firstly, it is important to address the level of organisational support that employees receive in terms of the relationships that employees experience with their superiors, the clarity that individuals have with regard to their job descriptions, the information they receive to do their jobs effectively, the level of communication that exists, and the degree of participation experienced by employees in decision-making procedures. Secondly, it is recommended that more growth opportunities be created for employees so as to improve variety in work tasks, create learning opportunities and foster independence.

It is thus important to study the predictors of work engagement in various industries so as to achieve a broader analysis. There is a need for more studies on this topic, as the study sample was rather small. Longitudinal studies should be conducted to investigate the causality of relationships between job demands and job resources on the one hand, and work engagement on the other.

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