INVESTIGATING THE REASONS FOR LACK OF SKILLED ARTISANS IN SOUTH AFRICA: THE PERSPECTIVE OF ARTISANS

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ABSTRACT

South Africa is currently experiencing a shortage of skilled artisans. This research is focused on determining the reasons why artisans are leaving the trade and what can be done to assist artisans to stay in the trade. The study utilised a sample survey with 79 respondents from Sasol. The study found that remuneration remains one of the main reasons for artisan dissatisfaction and to solve the current crises, remuneration levels will need to be investigated and adjusted.

OPSOMMING

Suid-Afrika het op die oomblik 'n tekort aan ervare ambagsmanne. Hierdie navorsing het ten doel bepaling van die redes waarom ambagsmanne die ambag verlaat en wat gedoen kan word om hulle aan te moedig om in die ambag te bly. Die studie het 'n vraelys gebruik met 79 respondente van Sasol. Die studie het bevind dat salarisse die hoofrede bly vir die ontevredenheid van ambagsmanne is en om die huidige krisis te oorkom moet salarisvlakke ondersoek en aangepas word.

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1. INTRODUCTION

'South Africa continues to suffer a severe shortage of qualified, competent and experienced artisans' - Landelahni [1]

According to a survey conducted by Landelahni Business Leaders [1] "The number of artisans tested across all trades increased from 15 000 in 1970 to 26 500 in 1986, while those who passed trade tests increased from 6 000 to 13 500, from 1986, however, the numbers tested dropped to 9 041 and those who passed dropped to a low 3 222, or 42 percent".

According to a recent (July 2008) online article, the Joint Initiative for Priority Skills Acquisition (Jipsa) states that 50,000 artisans are needed over the next three years with at least 12,500 to be produced per year to meet the demand [2].

According to Finance and Economic Development MEC Dr Zweli Mkhize the South African government's 2014 vision of halving poverty and unemployment is being severely hampered by not achieving sufficient skills acquisition and development.

Since the 1980's organisations across the globe have been focusing on increasing profitability. This has been accomplished by increasing throughput on existing investments and by decreasing costs. The reduction in costs often focussed on the reduction of fixed costs which led to a decrease in the training and skills development budget of organisations as well as in some cases, the laying off of staff.

Due to the laying off of staff, a surplus of artisans was available in South Africa, which meant that new artisans no longer needed to be trained, which led to the discontinuation of established learnership and skills training programmes for artisans. Due to the oversupply, organisations also did not have to increase artisan salaries to keep up with inflation, in order to retain artisans. In the past two decades a drastic rise in the cost of living, contributed to by the price of motor vehicles, housing and petrol, has forced many skilled artisans to find other employment.

Currently South Africa is experiencing extensive growth in all industrial sectors. This has led to an increased demand of all levels of skilled human resources including engineers, project managers and skilled artisans.

International organisations are also recruiting artisans in South Africa as the past learnership programmes are recognised as world class. Relatively high salaries are offered by these international organisations, and in conjunction with the social issue of high crime rates, more skilled artisans are lost to overseas companies.

2. RESEARCH PROBLEM AND METHODOLOGY

The objective of this study is to determine the basic and growth needs of the artisans of today in South African organizations, in order to better understand the current challenges. This understanding will hopefully contribute to the attraction of skilled resources as well as employee satisfaction and retention.

The research study does not, therefore, focus on the implementation, measurement and sustaining of elements and structures to be developed.

The associated research questions are as follows:

- What are the growth needs of artisans?
- How are artisans currently fulfilling their growth needs?
- How unfulfilled are artisans in their current positions?
- What are the perceptions of artisans in terms of workload?

- Are compensation scales the only/main cause of South Africa's shortage of skilled and experienced artisans?
- Are the current organisational structures supportive of employee (artisan) satisfaction and retention?
- What career development ambitions are evident in the current artisan workforce?
- What factors need to be addressed to drastically improve and sustain employee (artisan) satisfaction and retention?
- Are current career development paths addressing the needs of stakeholders?

The research methodology consisted of a literature survey on the factors that motivate human beings in the work environment. These factors were then incorporated into a sample survey. The sample survey was of artisans at Sasol and the results were analysed. Finally, the results were presented to a group of artisans of Sasol.

3. LITERATURE REVIEW

Several theories exist to explain what motivates human beings in the work environment. According to Wexley and Yukl [4] there are six human needs that are useful to understand human motivation in organisations. These needs are the need for achievement, the need for affiliation, the need for esteem, the need for independence, the need for power and the need for security. In order to understand the motivation of a specific individual it is necessary to understand the person's total pattern of needs in relation to the situation.

According to Maslow's hierarchy of needs individuals have five levels of needs that have to be fulfilled [4]. The order in which the needs must be fulfilled is: physiological needs; safety needs; social needs; esteem needs and lastly self actualisation. As each level of need is fulfilled, the person then strives to fulfil the next level of need.

The practical application of the two theories of needs is that an organisation must determine what the individual's needs are before motivation and job satisfaction can be increased [5]. For this reason a part of this study was aimed at determining the needs of artisans.

Pearlman, et al [6] describe an interactive model of career stages where a person is leaving the exploration stage of his/her life and going into the trial stage achieving a settling down stage and then into the Becoming One's Own Man or B.O.O.M. phase where individuals will increase performance at least up to an age of 45 years. In the South African organizational structure, a large percentage of skilled artisans are promoted to senior artisan at an age of 23 to 25 years. This is the end of the road in terms of development and career advancement possibilities for the majority of skilled artisans.

In a study done by Ramlall [7] of factors that influence job acceptance and resignation, salary or compensation was found to be the greatest reason for a person to accept a new job or to resign, but current and potential employees rate career development, challenges on the job and other factors are also high. This indicates that the satisfaction and retention dilemma is very complex. This is also the case for retention and satisfaction of artisans.

Eskildsen et al (cited Samuel [8]) in a literature review on how to achieve sustained satisfaction and retention, found that both technical and human/mental needs are needed to create an environment that will satisfy and retain individuals.

In a survey done by Jamieson and Richards (cited Samuel [8]), the top six factors that contribute to employee satisfaction were found to be: culture and organisation, relationship with immediate manager, relationship with colleagues, information and communication in the organisation, the job and personnel development. In this study remuneration was found to be the lowest contributor to employee satisfaction.

From the literature it can be deduced that artisan satisfaction is a complex issue with many variables. This study will attempt to further investigate the factors that influence artisan satisfaction.

4. RESEARCH EXECUTION AND RESULTS ANALYSIS

The factors identified in the literature were utilised to set up a questionnaire in five sections. Section 1 dealt with demographic information; Section 2 dealt with artisan perception in terms of satisfaction level, organisation and industry; Section 3 dealt with reasons for current lack of artisans and possible solutions; Section 4 addressed the utilisation of artisans in the industry, personal perceived competence, and possible career path changes.

The original intention of the study was to use a simpler random sample. To obtain this sample a list of 73 organisations that utilise artisans was compiled. The survey was sent to the Human Resource departments of these organisations with the request that they send the surveys to the applicable persons in the organisation. Unfortunately, this method of sampling did not yield any returned questionnaire. For this reason, cluster and snowball sampling was then used in Sasol, where the main researcher had access.

An employee list was drawn up for all artisans and foremen working for the larger organisational units of Sasol. A combination of cluster and snowball sampling was used. Foremen were requested to distribute the questionnaire in hard format to their artisans, due to limited access of artisans to computers and respondents were asked to individually distribute the survey to fellow artisan colleagues and friends. The questionnaires were distributed individually to all the employees on the list who had email addresses, which amounted to approximately 1,500 requests. A response rate of approximately 15 % (225) was expected; comprising of approximately 40% response from foremen, due to the more general access to a computer. In the end, a total of 79 responses was received, representing a response rate of only 5.26%.

The average age of the respondents was 37.6 years, one hundred percent of the respondents were male and the majority of respondents were white with the race distribution shown in

Figure 1.

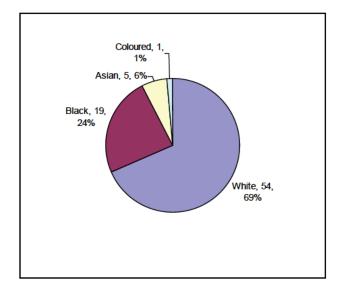


Figure 1: Race distribution of respondents

The majority (56.5%) of the respondents have completed matric or an N3 followed by 37% who have completed their N4. The distribution in terms of discipline is shown in Figure 2 with the majority of respondents being mechanical artisans.

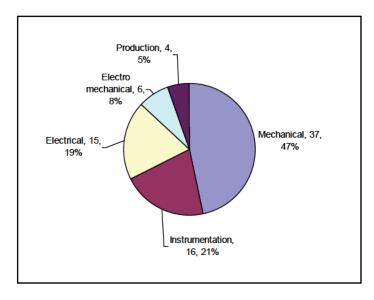


Figure 2: Respondent distribution in terms of discipline

The majority (42.7%) of respondents are senior artisans followed by A-class artisans (28%), foremen (24%) and B-class artisans (5.3%). The average period that the respondents have been in the same position is 5.4 years.

In terms of growth aspirations, most of the respondents wish to be foremen (31.5%) followed by artisan (30.1), engineer/manager (21.9%), technician (4.1%) and 12.3% indicated that they were going to follow another path. When asked what the minimum qualification is for the position which they want to grow into, 48.2% of respondents indicated that the qualification is matric or N3. The respondents expect to reach the position that they grow into in 3.4 years.

Respondents were required to answer the questions given in Section 2 by making use of a five point Likert scale (strongly disagree, disagree, neutral, agree and strongly agree). The first set of questions asked in Section 2 together with the number of respondents selecting each option, are shown in Table 1.

The responses are on the whole evenly distributed with means of around 3, except for the fact that most respondents are currently permanently employed. This is also indicated by the mean of 4.5. 39 of the respondents indicated that they are not pursuing higher qualifications whilst 28 indicate that they are pursuing higher qualifications, while more respondents (39), than not (25), are pursuing formal training to improve their skills.

Approximately half of the respondents are actively looking for new positions in their current organisation or in South Africa and/or outside South Africa. The respondents are almost equally divided in terms of whether they have job security and most of them (55%) feel that if they were to resign today they would not be out of work for 3 months. Lastly 44% of respondents are satisfied with their current position, 26 % are neutral and 29 % are not satisfied.

Survey Question	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	M ean
I am currently busy with formal training to improve my skills and experience	12	13	12	24	15	3.2
I am currently permanently employed	4	1	3	14	55	4.5
I am currently actively seeking employment in another position within my current organization	21	12	12	11	21	3.0
I am currently actively seeking other / employment within South Africa	22	12	13	11	18	2.9
I am currently seeking other / employment outside of South Africa	28	9	14	14	12	2.6
I am scared of leaving my current position, because of the risk in job security and maybe not having an income	18	11	18	20	11	2.9
Should I resign today, it will be likely that I will not have a job for 3 months	24	19	12	13	10	2.6
I am satisfied with and in my current position	8	15	21	28	7	3.1

Table 1: Results of Section 2 first questions

The final questions asked in Section 2 together with the number of respondents selecting each option are shown in Table 2. For this section the answers are once again evenly distributed with means of the questions around 3 apart from the availability of artisans, taking responsibility for own development and salary level. The results are discussed in detail below.

In terms of organisational structure, respondents are equally divided between 'whether they are satisfied with the current structure' and 'whether the structure allows them to develop and be promoted'. It is clear that there are not sufficient artisans within the organisation (63%), and that sufficient artisans are not being trained for the organisation (51%) and for the industry as a whole (55%). Most respondents seem to have personal development plans (54%) but are not receiving training in line with these plans (55%). The majority of respondents are interested in their own development and in being promoted (78%). The majority also perceive the current salary levels for artisans in industry not to be good (70%) and but seem to be neutral in terms of whether the organisation that they work for is competitive in the salary market (49%).

Questions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean
I am satisfied with the organizational structure of my current employer	13	17	20	6	3	2.9
The organizational structure of my employer allows me to continuously develop myself in order to be promoted to a higher level	15	19	10	28	6	2.9
My organization has sufficient artisans for the company's current & future needs	25	25	13	12	4	2.3
My organization is training sufficient artisans for the company's current & future demand	19	22	15	14	8	2.6
My organization are training more artisans than required for the companies current & future demand	29	15	24	5	5	2.3
I have an updated Personal Development Plan (PDP)	15	12	7	33	10	3.1
I receive training and development as specified in my PDP	20	24	10	21	2	2.5
I don't care about development and I am not willing to do anything more to improve myself to be promoted	42	20	4	4	7	1.9
The salary level for artisans in the industry as a whole is good	33	23	14	7	1	2.0
My company's salaries for artisans are not very good, but compare well with the industry's salaries	15	24	19	17	3	2.6

Table 2: Results of Section 2 final questions

Responses to the open questions in Sections 3, 4 and 5 were categorised and grouped in order to conclude on the various levels of influence of each factor.

The responses to Section 3 are illustrated in Figure 3, 42% of the respondents, listed low remuneration as the main reason for the current shortage of artisans, with lack of training of new artisans being perceived as the next main reason by (30%). Only 12% of respondents feel that development opportunities contribute to the shortage of artisans, while 7% of respondents attributed the problem to the factor of not fully recognising the importance of artisans in industry.

Figure 4 shows the perceptions in terms of the effect of employment factors on artisan retention. 40% of respondents indicated that remuneration level is the dominating factor, with 23% of respondent indicating that the reason is lack of recognition of the value and importance/need of artisans in our industry, 14% of respondents also indicated that better development opportunities are important to them.

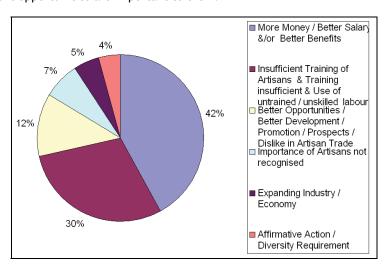


Figure 3: Reasons for shortage of artisans in the SA industry

When comparing the information of Figure 3 and Figure 4, it can be seen that both in terms of why there is a shortage of artisans and in the employment factors, there is an emphasis on remuneration. Better opportunities for artisans are also important in these two figures at 12 % and 14 % respectively. The insufficient training of artisans is seen to be one of the main causes for lack of artisans whilst better treatment and working conditions are required to retain artisans.

Recognition of artisans is also very important with 7% of respondents having the perception that artisans are leaving due to not being recognised and 7% indicating that recognition is an important employment factor. 7% of respondents also perceive that artisans also have a need that experience be counted along with qualifications when looking at this. In the past, a grade 10 was sufficient to become an artisan in South Africa. At the moment an artisan needs a grade 12 qualification yet the scope of the work has not changed much. A qualification can never replace or compensate for lack in skills and experience, while experience and skills can to a large extent compensate for a lack in qualification.

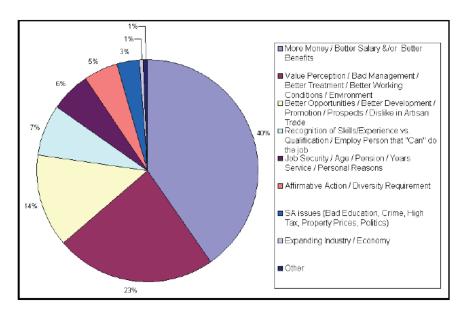


Figure 4: Distribution of Employment factors

The response for section 4 of the survey as illustrated in Figure 5 indicating the organisation factors that influence job satisfaction and retention levels. The respondents indicated that better working conditions is the most important factor, followed by management style and approach, and thirdly better or fair treatment. This observation is also supportive of the result so far in terms of "recognising the artisan trade" and giving it equal attention and consideration; compared to other positions and functions in the organisation.

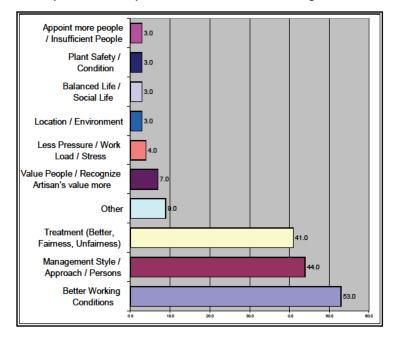


Figure 5: Distribution for Organisational factors

Also in Section 4, respondents were asked whether they are utilised for tasks which are allocated to higher level positions, whether they are capable of being used for tasks of higher level positions and whether they felt that they should be promoted to a higher job.

The results are shown in Figure 6.

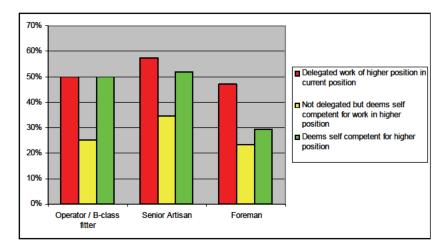


Figure 6: Histogram of higher responsibility

The results not only support the assumption that employees seek the challenges and stimulation that higher level tasks and activities offer them, but also that the current development path is not supportive of the demands of the organisation. Employees deem themselves competent for higher positions and tasks, the employer also utilises them for higher tasks, thereby supporting the principles of requiring more levels in the artisan structure and further that skills and experience can to a large extent compensate for lack of qualifications.

The responses to the open question on what should be changed in the typical current development path are shown in Figure 7.

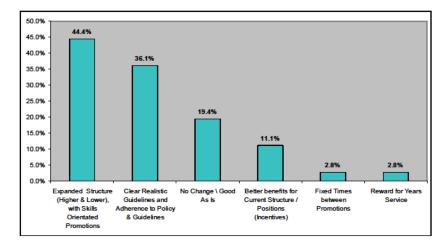


Figure 7: Responses on how to improve the current development path

5. CONCLUSION AND RECOMMENDATIONS

The fact that of the 73 organisations identified and asked to participate, only the organisation of the primary researcher took part seems to indicate an apathy in industry for artisan development.

The results of the study are not generalisable due to the fact that only one organisation is represented. Further studies in other organisations are required to confirm the results of this study. The artisans that took part in the study were predominantly white males over the age of 35. This is most probably linked to the fact that current training of artisans has lagged behind. The perceptions of the artisans that did take part in the study is however important as they bring their experience to the issue.

On average, most artisans are not preparing themselves for higher positions by formal qualifications and/or training. The employer also does not seem to be encouraging artisans to become better skilled as on average they do not have personal development plans and less than average of artisans are receiving training in line with their Personal Development Plans.

Artisans indicated that they are interested in their own development. This is however not well supported by the number of artisans undertaking further study.

Salary levels for artisans in the industry are perceived to be low. Salary levels are also perceived to be the main employment factor which is important for the retention of artisans as well as being the main reason for the current shortage of artisans. To improve the situation, the salaries of artisans should thus be critically evaluated.

Employers are exploiting artisans by delegating higher level tasks and responsibilities to them. The artisans are used to coach, train and mentor future technicians and engineers in plant operation and maintenance.

The needs of employees should be considered to prevent relief in terms of sacrificing one need over the other when considering Maslow's hierarchy of needs [4]:

- 1. The first two levels which are that of material needs is evident in remuneration dominating the results of the study, the need for financial security, retirement and future satisfaction of physical needs.
- 2. The third level of interpersonal is evident in the dissatisfaction in organisational factors, indicating the need for fairness and consistency (clear realistic guidelines and adherence to policy and guidelines), order, predictable situations.
- 3. The fourth level of belonging, need for love and esteem from other is evident in the need for recognising the importance of artisans, recognition of skills and competencies, equal treatment, recognition and better treatment.
- 4. The fifth level of needs is that of self esteem and then growth needs, which is evident in the need for development, opportunities, promotion and prospects.

REFERENCES

- [1] Iol. 2008. Ageing workforce needs replacing. Iol [online]: Available from: http://www.iol.co.za/index.php?set_id=1&click_id=3045&art_id=nw20080722134457 221C476780 [Accessed 22 July 2008]
- [2] Fin24.com. 2008. *R14.4bn needed to train artisans*. Fin24 [online]: Available from: http://www.fin24.com/articles/default/display article.aspx?ArticleId=1518-25-2361972 [Accessed 22 July 2008]
- [3] Engineering News. 2006. KZN welcomes Toyota's contribution to economic growth. 8 September 2006.
- [4] Wexley, K.N and Yukl, G.A. 1984. Organisational Behaviour and Personnel Psychology. 2nd edition. Illinois: Irwin.
- [5] Swanepoel, B., Erasmus, B., Van Wyk, M. & Schenk, H., 2000. South African

- human resources management. 2 ed, Kenwyn: Juta& Co Ltd.
- [6] Pearlman, K., Schmidt, F. L. and Hamner, W. C. 1983. Contemporary Problems in Personnel. 3 ed, USA: John Wiley & Sons, Inc.
- [7] Ramlall, S. 2003. Managing employee retention as a strategy for increasing organizational competitiveness. *Applied H.R.M. Research*, 8 (2), 63-72.
- [8] Samuel, G. 2005. The relationship between leadership and internal customer satisfaction within a motor manufacturing company in Gauteng. Thesis (MBA), Rhodes University.