The effect of feedback on lower-level employees’ empowerment, motivation and performance in a selected steel production company

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ABSTRACT

Title: The effect of feedback on lower-level employees’ empowerment, motivation and performance in a selected steel production company

Keywords: Feedback, lower-level employee, task observations, steel industry, meaning, impact, competence, self-determination, self-esteem, motivation, role-based performance

The general aim of the study was to determine the effect of feedback derived from task observations on lower-level employees’ empowerment, motivation and performance in a selected steel production company. Feedback plays an important role in empowering and motivating employees to improve performance. Previous research indicates that relationships exist between feedback and empowerment, motivation and performance. However, past research was confined to particular context(s), and the effect of feedback on lower-level employees has received little research attention. It was identified that feedback derived from task observations could potentially become a tool to enable lower-level employees to be empowered to perform to the best of their abilities.

The research design used is a quantitative non-experimental cross-sectional approach, where questionnaires were used to collect data. The targeted population was all 500 lower-level skilled workers at one business unit of a selected steel production company. Only 308 lower-level employees were available and willing to participate.

The findings of the study indicate that there is a statistically significant positive relationship between feedback as derived from task observations and employee empowerment, motivation and performance. The positive relationship found between feedback and empowerment indicates that feedback derived from task observations can be used as a critical component in empowering and motivating lower-level employees to improve performance.
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1. INTRODUCTION AND PROBLEM STATEMENT

1.1 INTRODUCTION

This study focuses on the influence of feedback on lower-level employees’ empowerment motivation and performance. This chapter includes the following topics: explanation of the background, problem statement, research objectives and scope of the study, research methodology to be followed, limitations or anticipated problems, and chapter division of the study.

1.2 BACKGROUND OF THE STUDY

A key responsibility of a successful manager is to empower and motivate employees to improve performance (Aguinis et al., 2012:105). According to Aguinis et al. (2012:106), feedback is a critical component in empowering and motivating employees to improve performance. Feedback empowers and motivates when it is constructive (McShane & Von Glinow, 2010:148). Empowered and motivated employees play an important role in helping the organisation to survive now as well as in the future (Drake et al., 2007:72).

Spreitzer (1995) put forth a model that suggests that effective feedback and rewards will positively affect employees’ feelings of empowerment (meaning, competence, self-determination and impact). This study by Spreitzer (1995) was, however, on management.

Drake et al. (2007: 85) pointed to a gap in the existing literature, namely that most studies related to the effect of feedback on empowerment and motivation tend to focus on other levels, while the effect of feedback on lower-level employees has received little research attention.
Rather than concentrating on management level, Drake et al. (2007) studied empowerment, motivation and performance by examining the impact of feedback on non-management employees of an accounting firm. They found that feedback has a different effect on the empowerment, motivation and performance of lower-level employees compared to the effect that it has on higher level employees.

The fact that lower-level employees seem to react differently to feedback compared to higher-level employees, gives rise to the following important questions: What motivates lower-level employees to perform to the best of their abilities?

Findings from Drake et al.’s (2007) study, which was performed in an accounting firm, are confined to that particular context. A task employed was relatively simple. According to Drake et al. (2007:85), the results may not be generalised to tasks that are more inherently interesting or complex.

The focus of this research is on the influence of feedback on lower-level employees’ empowerment, motivation and performance in a selected steel production company in South Africa. The results of this study show which dimension(s) of empowerment are positively related to employee motivation, which, in turn, is positively related to performance.

1.3 PROBLEM STATEMENT

Success in motivating employees is essential in organisations in an endeavour to utilise the full potential of the people so as to ensure the long-term survival and competitive advantage (Nel et al., 2008). According to McShane and Von Glinow (2010:183), with the right individuals, sufficient resources and organisational environment, empowerment can substantially improve motivation and performance.
Task observations, for example, can be used as one of the sources of effective feedback by first-line managers. Task observations have demonstrated to be an effective tool for first-line managers in managing compliance and safety performance (Lebon & Sigurjónsson, 2012).

The advantages of task observation include that first-line managers obtain first-hand knowledge and information about what the employees are doing by observing the real situation and allowing them to see the working environment, tools and equipment used, as well as the complexity of the job. A disadvantage of task observation, on the other hand, is that the presence of first-line managers can cause the employee to alter his/her normal behaviour. Employees can alter their work behaviour when they know that they are being observed (HR Guide to the Internet, 2001).

It is very important that first-line managers deliver effective feedback by using the strengths-based approach (Aguinis et al., 2012:107). This can be achieved by doing the following: (1) closely linking the negative feedback to employees’ knowledge and skills rather than talent, (2) delivering the feedback in a considerate manner, (3) delivering feedback that is accurate and specific, and (4) following up.

The selected steel production company in this study uses performance-based team rewards for lower-level employees in an attempt to create a motivating climate. However, is this enough? What about the role of effective feedback? McShane and Von Glinow (2010:148) asserted that money is not the only aspect that motivates people to perform effectively. These authors also highlight the potential role that feedback derived from job analysis techniques can play in motivating people.

The steel production company targeted in this study currently uses job or task observations to verify compliance with safety and procedures and this, in turn, is used to provide feedback to lower-level employees.
It is nevertheless believed that the company under study pays less attention to the influence of feedback derived from job analysis techniques such as task observations as far as creating a motivating climate is concerned. Because efficient feedback could potentially become a tool to enable lower-level employees to be empowered to perform to the best of their abilities, this issue seems worthwhile to be investigated in a scientific manner.

From the discussion thus far, the following research questions arise: How do lower-level employees perceive feedback from their superiors in the selected steel production company? Is it empowering and motivating to improve performance?

The expected contribution of this study is that individuals (lower-level employees) in the selected steel production company will have a better understanding of why feedback is important and what contribution is expected from them to help the company to survive in the long term and sustain a competitive advantage. Findings will also help management to form a better idea of the extent to which powerful job analysis techniques such as direct (job/task) observations are being used effectively to empower and motivate employees to improve performance.

The findings of this study also add to a growing body of knowledge on the influence of feedback derived from task observations that can be used to empower employees to be motivated to improve performance.

As pointed out earlier, studies by Drake et al. (2007:85) suggest that the effect of feedback on management empowerment, motivation and performance, suggested by Spreitzer (1995), in terms of management levels, differs from that of lower-level employees – what motivates and improves performance for management might not work for lower-level employees. The implication is that the selected steel production company in South Africa must explore which techniques will work for lower-level employees within their industry.
1.4 RESEARCH OBJECTIVES

The research objectives are divided into general and specific objectives.

1.4.1 General objectives

The general objective of the study is to determine the effect of feedback derived from task observations on lower-level employees’ empowerment, motivation and performance in a selected steel production company.

1.4.2 Specific objectives

The specific objectives are:

- To conduct a literature study on the main concepts (feedback, empowerment, motivation, performance, task observations) and their inter-relationships as determined by previous research.
- To empirically determine whether there is a relationship between feedback as derived from task observations and empowerment, motivation and performance.
- To provide recommendations to management in the selected steel production company based on the findings.

The scope of study is discussed in the next section.

1.5 SCOPE OF THE STUDY

The study is conducted in the field of organisational behaviour and particularly concerns the topic of performance management.
This study focuses on a selected steel production company in South Africa; in the Vanderbijlpark region of Gauteng. Only lower-level employees will be included in the study.

According to Aguinis et al. (2012:106), feedback is a critical component in a performance management system. Although feedback may be derived from alternative sources, this study only focuses on the effect of feedback on lower-level employees’ empowerment, motivation and performance, as specifically derived from task observations.

The next section explains the research method that was used to reach the aforementioned study objectives, as well as the scope of the study.

1.6 RESEARCH METHODOLOGY

The research methods consist of two phases, namely a literature review in Phase 1 and an empirical study in Phase 2.

1.6.1 Phase 1: Literature review

The literature review focuses on the following main concepts: Feedback, task observations, lower-level employee empowerment, motivation and performance. The literature review was done in order to answer the following questions about the problem:

- Determine the current level of the problem.
- Determine what other researchers have found.
- How did the previous researchers define the problem or variables, and how did they go about solving and addressing the problem?
- Define main constructs from literature.
- Obtain a guiding theoretical framework to determine which models and theories are relevant to the problem.
The sources consulted include, but were not limited to, the following:

- Textbooks on organisational behaviour, change management and human resource management
- Journals: business, psychology, management, leadership, organisational behaviour and change management
- Internet: Google Scholar.
- Databases: Business Source Premier, EBSCOhost, Nexus, SACat, Emerald, SA ePublications

1.6.2 Phase 2: Empirical study

This section focuses on the research design, participants, measuring instruments and statistical analyses.

1.6.2.1 Research design and approach

The purpose of the research design is to plan the research to obtain appropriate data to investigate the research hypothesis and/or research questions (Welman et al., 2005:78). Research can be classified as quantitative or qualitative. Table 1.1 shows the difference between quantitative and qualitative research, as suggested by Weare (2004:1.2).
Table 1.1: Differences between quantitative and qualitative research

<table>
<thead>
<tr>
<th></th>
<th>Quantitative research</th>
<th>Qualitative research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assumption</td>
<td>Predictable and measurable relationship between phenomena.</td>
<td>It takes into account that society and human behaviour are not predictable.</td>
</tr>
<tr>
<td>Aim</td>
<td>Measure differences between variables so that you can formulate the hypothesis and look for relationships between variables so that you can make predictions from the findings.</td>
<td>Used to try and understand meanings. You try to describe concepts and ideas, identify characteristics and behaviour, map territory and suggest relationships.</td>
</tr>
<tr>
<td>Process of doing research</td>
<td>Select theory before doing research and then test it. It is a process of deductive reasoning.</td>
<td>You start with specific events and try to identify commonalities by inference. You first systematically gather data. Then you generate the theory by process of inductive reasoning. Then you examine the data patterns, descriptions and relationships hoping to identify variables and generate theory.</td>
</tr>
<tr>
<td>Strength</td>
<td>Can lead to definable outcomes that can lead to practical action. Its findings are seen as generalisable. It is fairly easily understood by ordinary people.</td>
<td>Can gain a rich understanding of participant concepts, of the meaning that they assigned to everyday events and how these two are related. You describe a situation from the participant’s point of view. Tentative hypotheses and theory will be grounded in the real world.</td>
</tr>
<tr>
<td>Weakness</td>
<td>Cannot generate theory. If previous theories were inaccurate, quantitative method will be unlikely to help you to find out. Assumes a direct relationship of what people say they will do and what they actually do. This might not be the case in real-life situations.</td>
<td>Time consuming and resource intensive. Process of data collection requires high level of skills. Results can be specific to a particular situation and not very generalisable to others.</td>
</tr>
</tbody>
</table>

The research design used is a quantitative non-experimental cross-sectional approach. According to Welman et al. (2005:93), in non-experimental, hypothesis-testing research, the relationships that occur between two or more variables are examined. The selected approach is suitable because in this study the relationships between feedback derived from task observations and empowerment, motivation and performance respectively was examined.

1.6.2.2 Participants

The targeted participants are all lower-level skilled employees who are artisans, millwrights, fitters, operators and electricians in the selected steel production company in Vanderbijlpark’s iron-making section. The sample consisted of all available and willing participants who are permanent employees of the selected steel production company. The
estimated target population is 500 workers. A non-probability accidental sampling technique was used. This method allows participants to participate based on their availability and willingness to complete questionnaires.

Participants were briefed about the purpose of the study and why they are requested to participate. The lower-level employees in this study had a level of literacy valid for completion of the questionnaires.

1.6.2.3 Measuring instruments

A structured questionnaire was used to collect the data. Advantages of questionnaires are: responses can be quantified and easily summarised, easy to use with large samples, relatively inexpensive, and can obtain large volumes of data (Cummings & Worley, 2009:124). Primary data was collected and used. A level of measurements used is intervals measurement.

Two measuring instruments were used, namely the psychological empowerment scale (Drake et al., 2007) and role-based performance scale (Welbourne et al., 1998). The psychological empowerment questionnaire, originally developed by Spreitzer (1995), as modified and used by Drake et al. (2007:87), was adopted to measure empowerment and motivation. The role-based performance scale was adopted to measure employee performance. Previous research convincingly established both scales’ validity and reliability and will be discussed more extensively in Chapter 3. A copy of the measuring instruments is attached as Appendix A.

1.6.2.4 Procedure and ethical considerations

Written permission was obtained to access the intended target group from the selected steel production company. Hardcopy questionnaires were administered with written instructions during respective training sessions at training centres as per department at the selected steel production company in Vanderbijlpark. Participants completed the questionnaire willingly and anonymously. It was explained to participants that the questionnaire will treated with
confidentiality. Copies of questionnaires were directly collected after participants completed them.

1.6.2.5 Statistical analysis

The data was captured and analysed using Statistical analyses software (SPSS), with the assistance of the Statistical Consulting Services of the North-West University. The reliability of the measuring instrument was determined by using Cronbach alpha coefficient and validity using confirmatory factor analysis. The following methods were used for data analysis:

- Descriptive statistical analysis (means, standard deviations, frequency distributions) was computed to describe the data.
- Spearman correlation to measure the degree of association between interval or ratio variables.

1.7 LIMITATIONS/ANTICPATED PROBLEMS

This study was limited to lower-level employees at only one business unit of the selected steel production company and might not represent the whole selected steel industry and other steel industries as whole in South Africa and globally.

Questionnaires were used for this study. The disadvantages of questionnaires are: response bias, over interpretation of data, no empathy, and predetermined questions/missing issues (Cummings & Worley, 2009:124).

1.8 CHAPTER DIVISION

The chapters in this mini-dissertation are presented as follows:
Chapter 1: Introduction and problem statement. This chapter includes the following topics: explanation of the background, problem statement, research objectives and scope of the study, research methodology to be followed, and limitations or anticipated problems of the study.

Chapter 2: Literature review (at least 50 basic and recent resources)

Chapter 3: Description of the implementation phase

Chapter 4: Empirical study: Results and discussion

Chapter 5: Conclusions and recommendations – achievement of the study objectives and recommendation for future research

1.9 CHAPTER SUMMARY

In this chapter, the following topics were discussed: an explanation of the background, problem statement, research objectives and scope of the study, research methodology to be followed, limitations or anticipated problems, as well as the chapter division of the study. Chapter 2 will focus on the literature review. The literature review will focus on the main concepts, which are feedback, task observations, lower-level employee empowerment, motivation and performance.
2. LITERATURE REVIEW

2.1 INTRODUCTION

In the previous chapter, the following topics were discussed: explanation of the background, problem statement, research objectives and scope of the study, research methodology to be followed, limitations or anticipated problems, and chapter division of the study.

In this section, the literature relevant to this study is reviewed. The purpose of the literature review is to define, from literature, the main constructs, which are feedback, empowerment, motivation and performance as well as their inter-relationships as determined by previous research. The current level of the existing knowledge about the effect of feedback on employees’ empowerment, motivation and performance is provided – what has been found in previous research, how the previous researchers defined the problem or variables and how they went about to solve or address it.

A theoretical framework about theories and models relevant to the effect of feedback on employees’ empowerment, motivation and performance was synthesised from literature.

The following topics were identified as important: definitions; effect and sources of feedback on employees; definition, antecedent and consequences of employee empowerment; core self-evaluation and their consequences and correlates; definition of employee motivation and performance; as well as instruments or methods used to measure performance. Lastly, the relationship between employee psychological empowerment, motivation and performance is reviewed. Each of these topics is reviewed and critiqued relevant to the study.
2.2 FEEDBACK

In this section, the concept of feedback is explored. Firstly, the definition of feedback is addressed from literature. Secondly, the influence of feedback is reviewed. Lastly, task observation as the source of feedback is reviewed. Each subtopic is reviewed in order to understand what effective feedback is, how important it is, and why employees need effective feedback.

2.2.1 Definition of feedback

According to McShane and Von Glinow (2010:147), feedback is “any information that lets us know whether we have achieved the goal or are properly directing our efforts”. Feedback helps individuals to discover their strengths so that they can build on them. Furthermore, feedback helps individuals to discover their weaknesses so that they can improve on them. Cummings and Worley (2009:379) asserted that effective feedback from the work itself represents information that employees receive about the value of their work.

Toastmasters International (2011:10) defines feedback as a method for people to communicate, clarify, and make a plan to achieve goals. Furthermore, feedback can be defined as the form of reinforcement and behaviour guidance of the employees (McShane & Von Glinow, 2010:148). Feedback empowers and motivates when it is useful (La Grange & Geldenhuys, 2008:42). Toastmasters International (2011:10) stated that if feedback is provided correctly, it motivates the receiver to share responsibilities, complete tasks properly and increase performance.

To deepen the understanding of the definition of feedback, it is very important to have a look at the characteristics of effective feedback. According to McShane and Von Glinow (2010:148), the characteristics of effective or constructive feedback are as follows:

- Feedback should be specific and relevant – feedback should refer to specific metrics or to the individual behaviours or outcomes within his or her control.
- Feedback should be *timely* – the information should be available soon after the behaviour or results occur so that employees see a clear association between their actions and the consequences.
- Feedback should be *sufficiently frequent* as per job requirements.
- Feedback should be *credible* – employees are more likely to accept feedback from trustworthy or credible sources.

### 2.2.2 Effect of feedback

According to Anderson *et al.* (2009:33), positive and immediate direct task feedback from customers and superiors give the employee clear information concerning his or her performance effectiveness, thereby fostering feelings of competence. Moreover, immediate feedback allows the cognitive assessment of the impact (Anderson *et al.*, 2009:33). Effective feedback is more related to feelings of competence and impact (Kraimer, as cited by Spreitzer, 2008:61).


- Effective feedback is known to provide effective reinforcement through informative and motivational properties.
- Feedback empowers and motivates when it is constructive.
- Feedback is associated with enhanced performance.
- Individuals will be aware of the behaviour that is expected and rewarded by the organisation.
- Feedback encourages employees to put in more effort.
- Feedback serves to guide, motivate and reinforce effective behaviour and helps to eliminate ineffective behaviour.
- Feedback can empower and motivate employees to perform better.
- Feedback motivates improvement where it is needed.
Feedback ensures that the employee has the tools needed to remain on course.

2.2.3 Sources of feedback

McShane and Von Glinow (2010:149) stated that effective feedback can originate from different sources (balanced scorecard, multisource (360-degree), dashboards, customer surveys, equipment gauges, verbal communications etc.). The source of feedback relevant to this study is task observation.

Task observations

According to Devaul (2005:34), task observations have the following purpose and/or advantages:

- It is an effective training aid for the new members of the team to learn the task and to know what is expected of each member working on that job.
- Observation can be recorded and tracked.
- Doing a job observation is a conscious effort for someone to observe others performing their task with an intent of ensuring correct work practices.
- It also provides reminders of when an employee gets distracted or forgets an important step in the procedure.
- It is not intended to be a disciplinary tool or to find fault with what is being done.

2.3 EMPLOYEE EMPOWERMENT

In order to examine the relationship between feedback and empowerment, it is important to explore and thoroughly understand the concept of employee empowerment; what are its antecedents and consequences in relation to the employees. In this section, the definition and antecedents and consequences of employee empowerment are reviewed. Lastly, the core self-evolution concept as an antecedent of employee empowerment is explored.
2.3.1 Definition of employee empowerment

According to Spreitzer (2008:54), for companies to maintain a competitive advantage in today’s global business environment, they need the knowledge, ideas, creativity and energy of every employee. Great companies do this by empowering their employees to be motivated to increase performance. Spreitzer (2008:61) stated that when employees feel empowered at work, positive individual outcomes are likely to occur.

According to Blanchard (2007:14), employee empowerment is the process of releasing power in the employees, which include their knowledge, experience and motivation to achieve positive outcomes for the organisation. One way of empowering people is to provide them with effective feedback. Providing effective feedback communicates trust and a sense of teamwork (Blanchard, 2007:16).

Spreitzer (2008:54) stated that, over the last 20 years, two complementary views on employee empowerment have emerged in the literature. The first one is macro-oriented and focuses on employee socio-structural or contextual empowerment. The second one is micro-oriented and focuses on employees’ psychological empowerment.

Kristiansen (2013) studied the relationship between leadership and employee empowerment. This study is in line with Spreitzer (2008), in that two main constructs of empowerment can be distinguished, i.e. structural and psychological. The study investigated the integrative approach of empowerment. Structural empowerment is seen as fostering feelings of employee empowerment. Psychological empowerment determines whether empowerment occurred or not.

The focus of this study is on employees’ psychological empowerment. The construct of employee empowerment has been developed over time (Kristiansen, 2013:13). The development of the construct of employee empowerment is shown on Figure 2.1.
Employee empowerment can be defined as a psychological concept. McShane and Von Glinow (2010:182) define employee empowerment, as validated by Spreitzer (1995), Drake et al. (2007), Stander and Rothmann (2009), as a psychological concept represented by four dimensions, i.e. meaning, self-determination, competence and impact.

The four dimensions of empowerment are explained below (McShane & Von Glinow, 2010:182):

- **Meaning** means that employees care about their work and believe what they do is important.
- **Competence** means employees are confident about their ability to perform the work well and have capacity to grow with new challenges.
- **Self-determination** means that employees feel that they have freedom, independence, and discretion over their work activities.
- **Impact** means that employees view themselves as active participants in the organisation, i.e. their decisions and actions have an influence on the company’s success.

If one of the dimensions is lacking, the employee’s sense of empowerment will fade.
Spreitzer (as cited by Tuuli & Rowlinson, 2010:142) stated that the four dimensions of empowerment combined create an overall gestalt of psychological empowerment, so that the lack of any dimension will deflate, but not completely eliminate, the overall degree of empowerment. If one of the dimensions is lacking, it does necessarily mean that the employee is not empowered, but he/she is less empowered.

According to Seibert et al. (2004:334), it is very important to distinguish between empowerment climate and psychological empowerment. Empowerment climate is associated with organisational structures, policies and practices. Psychological empowerment is associated with an individual employee. This study focused on psychological empowerment.

2.3.2 Antecedents and consequences of employee empowerment

The literature shows that different antecedents and consequences of employee empowerment have been studied in the past. The antecedents and consequences of employee empowerment were synthesised from literature. Only relevant literature deemed necessary for the study is included.

2.3.2.1 Antecedents and consequences of employee empowerment

Tan (2007) proposed a theoretical framework model on antecedents and consequences of psychological empowerment. The proposal is shown in Figure 2.2. The model was tested on 284 randomly-selected British managers.
The model in Figure 2.2 shows that broad ranges of organisational behaviour influence empowerment and therefore outcomes. Empowering employees results in producing better organisational performance and consequently a competitive advantage (Tan, 2007:283).

Drake et al. (2007) tested a theoretical framework model on antecedents and consequences of psychological empowerment, as proposed by Spreitzer (1995). The model was tested in an accounting firm on lower-level employees (125 accountants). The task used in the research was a simple decoding designed to reflect the work that a lower-level employee will perform. Lower-level employees are regarded as those without managerial experience or duties and/or

---

**Figure 2.2: Theoretical framework model on antecedents and consequences of psychological empowerment (Source: Tan, 2007:42)**

**Antecedents**

Organisation-specific level:
1. Organisational structure
   - Organicity
   - Centralisation
2. Organisational
3. HR practices
   - Rewards
   - Training
   - Information sharing
4. Leadership trust
5. Conflict and ambiguity
   - Role conflict
   - Role ambiguity

**Psychological empowerment:**
- Meaning
- Competence
- Self-determination
- Impact

**Consequences**
- Job satisfaction
- Organisational commitment
- Turnover intentions
are likely to have more structured or routine tasks (Drake et al., 2007:72). The model is shown in Figure 2.3.

**Antecedents**

<table>
<thead>
<tr>
<th>Manipulated variable:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance feedback</td>
</tr>
<tr>
<td>Performance rewards</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Control variables:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-esteem</td>
</tr>
<tr>
<td>Locus of control</td>
</tr>
</tbody>
</table>

**Consequences**

<table>
<thead>
<tr>
<th>Psychological empowerment:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence</td>
</tr>
<tr>
<td>Self-determination</td>
</tr>
<tr>
<td>Impact</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Task motivation</th>
</tr>
</thead>
</table>

| Performance (profit)     |

**Figure 2.3: Model of psychological empowerment of lower-level employees (Source: Drake et al., 2007:73)**

The model in Figure 2.3 is based on the research done by Spreitzer (1995) on 393 managers of a Fortune 50 industrial organisation. It shows that providing effective feedback and rewards to employees increases feelings of psychological empowerment. In turn, empowered employees will be motivated to increase performance. Drake et al. (2007) found that feedback and rewards have a different effect on empowerment, motivation and performance of lower-level employees compared to the effect that it has on higher-level employees.

Anderson et al. (2009: 32) explored three sets of factors as important to antecedents of psychological empowerment of sales people. These three sets of factors are socio-political support, discretion empowerment and job characteristics. One of the job characteristics was
task feedback. The influence of feedback on employees’ empowerment, which, in turn, fosters motivation and increased performance, is the core of this research.

According Anderson et al. (2009:33), the consequences of the psychological empowerment of sales people on job outcome are job satisfaction, customer-oriented selling and customer satisfaction. The conceptual model of the antecedents and consequences of employee empowerment of sales people is shown in Figure 2.4.

![Conceptual model of psychological empowerment of sales people](Source: Anderson et al., 2009:31)

According to Menon (as cited by Anderson et al., 2009:32), the above model emphasises the importance of the mediating link between empowering acts and outcomes from subordinates’ perspective instead of widely researched managerial perspectives.

22
Tuuli and Rowlinson (2009) conducted a study on the performance consequences of psychological empowerment on 380 project management-level staff. The model emphasises the importance of linking the psychological empowerment with performance behaviour and intrinsic motivation, ability and opportunity to perform as mediators. The results indicate that psychological empowerment has direct, positive task and contextual behavioural consequences. Moreover, the effects of psychological empowerment are partially mediated by intrinsic motivation, ability and opportunity to perform.

Tuuli and Rowlinson (2010) further explored the contextual meaning and the consequences of empowerment. According to Tuuli and Rowlinson (2010:145), empowerment is related to what individuals or teams experience and what organisations and leaders do. These authors’ model indicates that the consequences of empowerment are project success, job satisfaction, and savings in time, rapid decision-making and teamwork.

Harris et al. (2009) explored the influence of psychological empowerment on the relationship between the leader member exchange (LMX) quality and job outcomes (job satisfaction, turnover intentions and performance) on 244 and 158 employees, respectively. Empowerment, job satisfaction and LMX were measured by means of subordinates’ responses. Job performance and turnover intentions were measured by means of supervisors’ responses. The results of the study provide evidence that general empowerment moderates the relationship between LMX and job outcomes.

According to Cummings and Worley (2009:378), one of the antecedents of psychological empowerment is the core dimensions of jobs and the consequences are personal and work outcomes. The relationships among the core dimensions of jobs, psychological empowerment and personal and work outcomes are based on Kachman and Oldham’s model of job design (Cummings & Worley, 2009:378). The model is shown in Figure 2.5.
Figure 2.5 indicates that five core dimensions of work affect three psychological states, which, in turn, produce personal and job outcomes. The five core dimensions are skill variety, task identity, task significance, anatomy and feedback. Personal and job outcomes are high internal work motivation, high quality work performance, low absenteeism and turnover. The model also indicates that individual differences, i.e. knowledge and skills, growth-need strength and context satisfaction moderate the relationships among the core dimensions of work, psychological states and outcomes.
2.3.2.2 Core self-evaluation and their consequences and correlates

Judge and Kammeyer-Mueller (2011:339) asserted that there is a stronger need for organisations to seek out individuals who are confident in their own abilities and who believe that they are in control of their own lives. Self-confidence and assertiveness help individuals to adapt to and create positive change in contemporary organisations (Judge & Kammeyer-Mueller, 2011:331).

Self-confidence and assertiveness of individuals can be predicted using core self-evaluation (CSE) traits (Seibert et al., 2011:984). The four constructs that represent CSE are self-esteem, generalised self-efficacy, locus of control and emotional stability (Judge et al., 2011:332).

**Definition of self-esteem:** McShane and Von Glinow (2010:44) define self-esteem as the extent to which people like, respect and are satisfied with themselves. People with high self-esteem are less influenced by external factors and tend to take responsibility for their own actions. Holt and Jung (2008:416) and Rosenberg (cited by Chang, et al., 2012:83) define self-esteem as the overall estimate one has on self-value as a person.

**Definition of generalised self-efficacy:** According to Sager et al. (2006:100), self-efficacy refers to “personal judgements regarding ones capability to arrange and discharge whatever courses action proves necessary to achieve designated levels of performance”. Chen et al. (as cited by Chang, et al., 2012) stated that “generalised self-efficacy is an estimate of one’s ability to perform and cope successfully within an extensive range of situations”.

**Definition of locus of control:** McShane and Von Glinow (2010:45) define locus of control as a person’s general feeling or belief about the amount of control he or she has over personal life events. Rotter (as cited by Sager et al., 2006:100) asserted that locus of control captures general beliefs that life’s rewards, reinforcements and outcomes are controlled by own action (internal) or by external forces (externality).
**Definition of emotional stability:** According to Judge *et al.* (2011:332), an individual employee’s emotional stability is high when he or she is prone to be optimistic and free from doubts and worries.

Moving on to consequences and correlates of core self-evaluation, Sager *et al.* (2006) reviewed 15 years of core self-evaluation theory and research. Job-related outcomes researched were job satisfaction, employee performance, work commitment, perceptions of job characteristics, occupational stress, and individual difference correlates. Results of the studies indicate that job outcomes are correlated with core self-evaluation.

Spreitzer (as cited by Drake *et al.*, 2007:78) found significant evidence that intrinsic personality variables of self-esteem and locus of control are related to empowerment. Drake *et al.* (2007:80) used self-esteem and locus of control as control variables in the employee empowerment and motivation model. See Figure 3 for the model. The results indicate that there is no significant correlation between locus of control and dimensions of psychological empowerment. Only competence is significantly correlated with self-esteem. This significant correlation result is consistent with prior literature (Spreitzer, 1995).

Seibert *et al.* (2011:984) predicted that core self-evaluation (CSE), as identified by Judge *et al.* (1997), would be an important antecedent to the perceptions of psychological empowerment. Seibert *et al.* (2011:984) also predicted that one behavioural consequence of psychological empowerment is employee performance. The results of the study indicate that CSE is positively related to psychological empowerment and, in turn, psychological empowerment is positively related to employee performance.
2.4 EMPLOYEE MOTIVATION AND PERFORMANCE

South African companies need motivated, skilled and productive employees in order to compete effectively in the global market. In this section, the literature on the definition of employee motivation and performance is reviewed.

2.4.1 Employee motivation

Motivation is one of the important drivers of individual behaviour and performance in an organisation (McShane & Von Glinow, 2010:132). According to Kotler and Armstrong (2012:172), a motivated person is ready to act. Motivated employees are self-starters who are internally driven to attain goals (Spinelli & Adams, 2012:41). One of the effective motivational strategies is to create a climate that makes employees feel like a family (Wang, 2013:39).

Definition of employee motivation

“Motivation can be defined as something that causes or influences an employee to act or perform” (HR Connect, 2007). According to Nel et al. (2008:351), motivation can be defined as an intentional and persistent behaviour aimed at achieving the goal. A motivated employee works willingly and passionately towards achieving organisational goals. Latham and Pinder (as cited by McShane & Von Glinow, 2010:34) stated that “work motivation represents the forces within a person that affect his or her direction, intensity, and persistence of voluntary behavior.” Direction means motivation is goal oriented, not random. Intensity means putting effort in to achieve the goal. Persistence means employees sustain their efforts until they reach their goals or quit beforehand.

McNeese-Smith (as cited by Paramasur, 2010:525) defines motivation as a “psychological process that stimulates and sustains action coupled with an inner drive that urges one to act”.
According to Herzberg (as cited by Abd-El-Salam et al., 2013:35), motivation has two dimensions, i.e. intrinsic and extrinsic. Intrinsic motivation is a feeling of responsibility, competence, accomplishment and personal growth (Vecchio, as cited by Abd-El-Salam et al., 2013:35). Extrinsic motivations are feelings derived from rewards, pay and fringe benefits (Kuvaas, as cited by Abd-El-Salam et al., 2013:35).

### 2.4.2 Employee performance

Fracaro (2013:14) stated that performance is a role that every employee plays to achieve the goals of the organisation. When an employee is not performing as expected, something is adversely affecting performance. According to Hameed and Waheed (2011:224), the success or failure of an organisation depends on employee performance.

**Definition of employee performance**

Whetten and Cameron (cited by Hayward, 2005:13) stated that employee performance is ability $\times$ motivation. However, Hellriegel (as cited by Hayward, 2005:15) asserted that there are other factors that contribute to employee performance. Those factors are internal factors (organisation has control over them, e.g. job description) and external factors (organisation has no control, e.g. demands for job-grading systems).

McShane and Von Glinow (2010:34) asserted that performance is influenced by four factors, i.e. motivation, ability, role perception and situational factors. Ability refers to the necessary skills and related knowledge required to successfully complete the task. Role perception is understanding job duties and expectations. The situational factor refers to the resources controlled by the organisation or external factors that are beyond an employee’s immediate control that constrain or facilitate behaviours and performance. If one of the four factors is lacking in any given situation, the employee will perform the task poorly.
According to Tinofirei (2011:12), employee performance is a “successful completion of tasks, as set out or measured by supervisors or an organization to pre-defined acceptable standards while efficiently and effectively utilising available resources within the changing environment”.

Campbell (as cited by Koopmans et al., 2011:856) defined employee performance as behaviours or actions relevant to organisational goals. According to Koopmans et al. (2011:856), three notions accompany the definition by Campbell: (1) employee performance should be defined in terms of behaviour not results; (2) only behaviours that contribute to the goals of the organisation are included in the employee performance definitions; and (3) employee performance is multidimensional.

2.3.4 Measuring employee performance

Different instruments and methods have been used to measure employee performance. Drake et al. (2007) used profits generated for the period to measure employee performance on lower-level employees in an accounting firm (125 accountants). The task used for the study to measure performance was a simple decoding exercise. Participants received feedback on the performance as profits generated.

Tinofirei (2011) did a study on 127 participants on the unique factors affecting employee performance in non-profit organisations. The reliability and validity of the measuring instrument were not indicated and discussed in the results obtained for the study.

Hayward (2005) studied employee relationships between employee performance, leadership, and emotional intelligence in a South African parastatal organisation. Employee performance was measured using the parastatal performance appraisal process. The process is similar to the traditional individual balanced scorecard method.
Welbourne et al. (1998) introduced a theory-based measure of employee performance, i.e. the role-based performance scale (RBPS). The RBPS scale is supported by the results from a validation study using ten datasets consisting of a variety of occupations and organisational contexts from six different companies.

2.4.4 Relationship between employees’ psychological empowerment, motivation and performance

Several studies have shown that relationships among employees’ psychological empowerment, motivation and performance exist.

Studies by Kachman and Oldham (1980), Spreitzer (1995), Tan (2007), Anderson et al. (2009), Harris et al. (2009), and Seibert et al. (2011), as discussed in section 2.3, show that there is a direct relationship between employees’ psychological empowerment and performance.

Drake et al. (2007:76) asserted that empowered employees will be motivated to increase performance. Tuuli and Rowlinson’s (2009) model emphasises the importance of linking psychological empowerment with performance behaviour, intrinsic motivation, ability and opportunity to perform as mediators.
2.5 CHAPTER SUMMARY

This chapter set out to review evidence regarding the effect of feedback on employees’ empowerment, motivation and performance. Topics reviewed reveal that there is evidence in literature that suggests that there are measurable and significant relationships between feedback, employee empowerment, motivation and performance. However, there seem to be differences of opinion in terms of whether there is a direct relationship between employees’ psychological empowerment and performance, or the relationship is mediated by employee motivation.

The next chapter focuses on the description of the implementation phase, i.e. the research methodology.
3. DESCRIPTION OF THE IMPLEMENTATION PHASE

3.1 INTRODUCTION

This chapter focuses on the processes followed to obtain the findings. This chapter details the research methodology followed to investigate the relationships between feedback and empowerment, motivation and performance. The following topics are discussed: research approach and design, participants, sample, measuring instruments used, including reliability and validity, procedure followed, ethical considerations, statistical analyses and research hypotheses.

3.2 RESEARCH APPROACH AND DESIGN

The research design used is a quantitative non-experimental cross-sectional approach, where questionnaires were used to collect data. According to Welman et al. (2005:93), in non-experimental, hypothesis-testing research, the relationships that occur between two or more variables are examined. The selected approach is suitable in this study because the relationships between feedback derived from task observations and empowerment, motivation and performance respectively were examined. The advantages and weaknesses of a quantitative study were discussed in detail in Chapter 1, Table 1.

3.3 PARTICIPANTS

The targeted population was all 500 lower-level skilled (i.e. artisans, millwrights, fitters, operators and electricians) employees in the selected steel production company in Vanderbijlpark within the iron-making department.

3.4 SAMPLE
The sample consisted of all available and willing lower-level skilled employees who are permanent employees of the selected steel production company within the iron-making department from all four different sections. A non-probability accidental sampling technique was used. This method allows participants to participate based on their availability and willingness to complete questionnaires.

3.5 MEASURING INSTRUMENTS

3.5.1 Reliability and validity

According to Page and Meyer (2006:84), the reliability and validity of measures taken in a study partly reflect the level of confidence we have in the results yielded by the research design. Sarantakos (2013:107) stated that both reliability and validity are quality measures of research instruments. According Sarantakos (2013:107), “reliability and validity of a measure are closely interrelated. However, the one cannot predict the other”. Table 3.1 shows the criteria of reliability and validity.

Table 3.1: Criteria of reliability and validity

<table>
<thead>
<tr>
<th>Validity</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is a measure of the quality of measurements.</td>
<td>Is a measure of the quality of measurements.</td>
</tr>
<tr>
<td>Tests the quality of indicators and research instruments.</td>
<td>Tests the quality of indicators and research instruments.</td>
</tr>
<tr>
<td>Measures relevance, precision and accuracy.</td>
<td>Measures objectivity, stability, consistency and precision.</td>
</tr>
<tr>
<td>Tests the ability to produce findings that are in agreement with theoretical or conceptual values.</td>
<td>Tests consistency, i.e. the ability to produce the same findings every time the procedure is repeated.</td>
</tr>
<tr>
<td><strong>Asks:</strong> Does the instrument measure what it is supposed to measure?</td>
<td><strong>Asks:</strong> Does the instrument produce the same results every time it is employed?</td>
</tr>
</tbody>
</table>

Source Sarantakos, 2013:107
Welma et al. (2005:144) stated that reliability is concerned with the findings of the research and relates to the credibility of the findings. According to Huysamen (as cited by Welma et al., 2005:147), the internal consistency method can be used to determine the reliability of a measuring instrument. A high internal consistency implies a high degree of generalisation across the items within the measurement/test (Welma et al., 2005:147).

According to Nunnally and Bernstein (as cited by Stander & Rothmann, 2009:6), Cronbach’s reliability coefficient alpha values of at least 0.7, as a guideline, indicate acceptable internal consistencies of the measuring instrument. However, overall Cronbach’s reliability coefficient alpha values of 0.62 are still acceptable (Spreitzer, 1995:1453).

According to Welma et al. (2005:143), validity is the extent to which research findings accurately represent what is happening. Walker and Almond (2010:81) stated that there are several ways to measure the validity of the resulting scale, some of which involve statistical testing. Those measures include, but are not limited to, the following:

**Face validity** – Does it look right? This is based on professional judgement.

**Content validity** – Do items accurately represent all aspects of the concept? This is informed by theory and based on judgement.

**Construct validity** – How well does the measure represent the concept at a theoretical level? Construct validity relates to how well the variables were selected and defined with regard to the construct being measured. According Welma et al. (2005:142), construct validity of the scores of a measuring instrument refers to the degree to which it measures the intended construct rather than the irrelevant constructs or measurement errors. This can be achieved in a number of ways, e.g. by convergent and discriminatory validity. Convergent validity is shown when an instrument is highly correlated with responses on another instrument known to be measuring the same construct. Discriminant validity is used to demonstrate the validity of an instrument by showing negative correlations with other distinctly different constructs. Confirmatory factor analysis (CFA) or exploratory factor analysis can be used to investigate construct validity (Walker & Almond, 2010:81).
CFA is a special type of structural equation modelling analysis (Ullman, 2006:35). According to Sharma et al. (2005:935), fit indices are used in structural modelling to establish whether the overall model can be accepted or rejected. Only fit indices that are most widely respected, reported and considered to be applicable to this study are discussed and used as guidelines (Hopper et al., 2008; Ullman, 2006; Sharma et al., 2005, Drake et al., 2007; Welbourne et al., 1998). The fit indices used include those in the previous research. Moreover, the fit indices used in this research are mostly insensitive to sample size, model misspecification and parameter estimates (Hopper et al., 2008:56). Fit indices are categorised as absolute, incremental and parsimony fit indices (Hopper et al., 2008:53). The details of the relevant fit indices are as follows:

- Absolute fit indices

According to McDonald and Ho (as cited by Sharma et al., 2005:53), absolute fit indices “determine how well a priori model fits the sample data and which proposed model has the superior fit”. The fit indices included are model chi-square ($\chi^2$), and root mean square error approximation (RMSEA).

**Model chi-square ($\chi^2$) goodness of fit statistic:**

According to Hu and Bentler (as cited by Hopper et al., 2008:53), the $\chi^2$ “assesses the magnitude of discrepancy between the sample and fitted covariances matrices”. Hopper et al. (2008:54) outlined the disadvantages of the chi-square fit index as follows:

- The test assumes multivariate normality, and severe deviation from normality may result in the model’s rejection, even when the model is properly specified.
- Chi-square statistics are sensitive to sample size. They nearly always reject the model when large samples are used. When small samples are used, it lacks power and may not discriminate between good-fitting and bad-fitting models.

Relative chi-square ($\chi^2$/degrees of freedom (df)) is used as an alternative index to assess model fit (Hopper et al., 2008:54). It minimises the impact of sample size (Wheaton et al., as
cited by Hopper et al., 2008:54). The criteria for acceptance vary across research, ranging from less than 2 (Tabachnick & Fidell, as cited by Hopper et al., 2008:54) to less than or equal to 5 (Wheaton et al., as cited by Hopper et al., 2008:54).

RMSEA

According to Ullman (2006:44), RMSEA is a measure of non-centrality relative to sample size and degrees of freedom (df). Schermelleh-Engel and Mossbrugger (2003:36), Browne and Cudeck (cited by Singh, 2009:203), and McCallum et al. (as cited by Hopper et al., 2008:53) interpreted the values of RMSEA as indicated in Table 3.2.

Table 3.2: Interpretation of RMSEA values

<table>
<thead>
<tr>
<th>RMSEA value</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 0.05</td>
<td>Close fit</td>
</tr>
<tr>
<td>0.05-0.08</td>
<td>Reasonable fit</td>
</tr>
<tr>
<td>0.08-0.1</td>
<td>Mediocre fit</td>
</tr>
<tr>
<td>&gt; 0.1</td>
<td>Poor fit/not acceptable</td>
</tr>
</tbody>
</table>

According to Themessl-Huber (2014:221), the lower the RMSEA value, the better the fit. An RMSEA value of 0 indicates a perfect fit (Brown, as cited by Themessl-Huber, 2014:221). Although there is general consensus on the cut-off points of acceptable fit of an RMSEA value of 0.08 and below, Chen et al. (2008:11) asserted that there is no empirical evidence to suggest any cut-off RMSEA value for acceptance of the model fit. They suggested that the RMSEA fit index be used in conjunction with the relative chi-square fit index. Isaac et al. (2010:383) suggested that a good-fitting model that has an RMSEA value of 0.1 and below is still acceptable.
• Incremental fit indices

According to Hopper et al. (2008:55), incremental fit indices are a “group of indices that do not use the chi-square in its raw form but compare the chi-square value to a baseline model”. The incremental fit indices are the normed fit index (NFI) and comparative fit index (CFI).

CFI

Hopper et al. (2008:55) asserted that CFI is a revised form of NFI that takes into account the sample size. CFI assumes that all latent variables are uncorrelated, i.e. the null/independence model and compares the sample covariance matrix with this null model (Hopper et al., 2008:55). Schermelleh-Engel and Mossbrugger (2003:36) stated that CFI values range from 0 to 1, with higher values indicating a better fit. According to Isaac et al. (2010:383), good fitting models have values of 0.9 and above. Therefore, the cut-off CFI value of ≥0.9 is suggested for accepting the model fit. Hopper et al. (2008:56) suggested that CFI be used in conjunction with other relative chi-square and RMSEA fit indices.

3.5.2 Measuring instruments

Two measuring instruments were used, namely the psychological empowerment scale (Drake et al., 2007) and the role-based performance scale (Welbourne et al., 1998). The psychological empowerment scale was originally developed by Spreitzer (1995). The empowerment scale is adopted in this research as modified and used by Drake et al. (2007:87) to measure the effect of feedback on empowerment and motivation. The role-based performance scale is used to measure the effect of feedback on performance.

3.5.2.1 Psychological empowerment scale
The psychological empowerment scale was originally developed by Spreitzer (1995). It was modified and tested by other researchers (Drake et al., 2007; Stander & Rothmann, 2009; Uner & Turan, 2010). The psychological empowerment scale, as adopted from Drake et al. (2007), consists of 24 items with seven dimensions (meaning, impact, competence, self-determination, task motivation, internal locus of control and self-esteem). The response format is a seven-point Likert-type scale, where 1 = strongly disagree, 2 = disagree, 3 = mildly disagree, 4 = neither agree nor disagree, 5 = mildly agree, 6 = agree, 7 = strongly agree. A copy of the measuring instrument is attached as Appendix A. An example of a response item is “I knew exactly what impact my job performance had on the profitability of my company.”

Previous research has convincingly established its validity and reliability (Spreitzer, 1995; Drake et al., 2007; Stander & Rothmann, 2009; Uner & Turan, 2010). According to Uner and Turan (2010:8), the psychological empowerment scale has undergone a most comprehensive investigation, including measure of reliability and validity. Table 3.3 shows the overall alpha values obtained from previous studies using the psychological empowerment scale.

Table 3.3: Alpha values obtained from previous studies

<table>
<thead>
<tr>
<th>Research</th>
<th>Sample</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spreitzer (1995)</td>
<td>393 managers</td>
<td>0.72 (industrial sample) &amp; 0.62 (insurance sample)</td>
</tr>
<tr>
<td>Drake et al. (2007), modified scale including motivation and feedback items.</td>
<td>125 accountants</td>
<td>0.76</td>
</tr>
<tr>
<td>Stander and Rothmann (2009)</td>
<td>Manufacturing (n=583), mining (n=75), chemical (n=285), service (n=167), government organisation (n=296)</td>
<td>0.91</td>
</tr>
<tr>
<td>Uner and Turan (2010)</td>
<td>250 nurses &amp; 161 physicians</td>
<td>Varied between 0.84 – 0.94 for both groups</td>
</tr>
</tbody>
</table>

38
According Bollen (as cited by Kraimer et al., 1999:132), CFA is “appropriate for investigating construct validity because it allows direct examination of the degree to which specific items jointly load on hypothesised factors (i.e., convergent validity) and display negligent cross loading on other factors (i.e., discriminant validity)”.

Convergent and discriminatory validity was determined using confirmatory factor analysis (Drake et al., 2007:80). According to Drake et al. (2007:80), an examination of the correlation matrix between all included items in the scale was convergent and discriminatory, as each item was highly correlated with other items predicted to measure the same factor, not with other items. Confirmatory factor analysis in Drake et al.’s (2007:80) studies yielded a Comparative Fit Index (CFI) of 0.90 with a Root Mean Square Error of Approximation (RMSEA) of 0.06. According to Stander and Rothmann (2009:5), acceptable fit is indicated by a CFI index value greater than or equal to 0.9 and unacceptable fit is indicated by an RMSEA value of more than 0.08.

It can be concluded that the psychological empowerment scale, including the modified one by Drake et al. (2007), is valid and reliable to be used in this study.

3.5.2.2 Role-based performance scale

The role-based performance scale was developed by Welbourne et al. (1998). It consists of 20 items with five dimensions (job, career, innovation, team and organisation) and four statements on each dimension. The response format is a four-point Likert-type scale, where 1 = poor, 2 = fair, 3 = good and 4 = excellent performance. A copy of the measuring instrument is attached as Appendix A. An example of a response item is “quantity of work output”.

Welbourne et al. (1998:547) found that, for the entire scale (all 20 items), alpha values ranged from 0.86 to 0.96. In terms of validity, Welbourne et al. (1998:548) found that the hypothesised five-factor model demonstrated a significantly better fit in terms of fit indexes.
3.6 PROCEDURE

The permission with a recommendation by the human resource manager was provided by the general manager of a selected steel production company (see the appendix B) to administer the questionnaire. I administered the hardcopy questionnaires with written instructions on how to complete it during respective training sessions at training centres as per sections at the selected steel production company in Vanderbijlpark. Copies of questionnaires were directly collected after participants completed them. In total, 308 questionnaires were filled and collected.

3.7 ETHICAL CONSIDERATION

The cover letter on the questionnaire encouraged the participants to understand the purpose of the study. Voluntary participation was highlighted and explained on the cover letter of the questionnaire and before administering the questionnaire. Participants completed the questionnaire willingly and anonymously. It was explained to participants that the questionnaire will be treated with confidentiality. I took full responsibility of administering the questionnaire and helped with any queries the respondents had.

3.8 STATISTICAL ANALYSIS

The data was captured and analysed using statistical analysis software (SPSS), with assistance from the Statistical Consulting Services of the North-West University.

Descriptive statistical analysis (means, standard deviations, frequency distributions) was computed to describe the data.
The reliability of the measuring instruments was determined by using Cronbach alpha coefficient. Guidelines for interpreting reliability (Cronbach alpha coefficient values) results are indicated in Table 3.4.

**Table 3.4: Interpretation of Cronbach alpha coefficient values (Walker & Almond, 2010:81)**

<table>
<thead>
<tr>
<th>Cronbach alpha coefficient value, ( \alpha )</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.8+</td>
<td>good</td>
</tr>
<tr>
<td>0.7-0.79</td>
<td>fairly good</td>
</tr>
<tr>
<td>0.6-0.69</td>
<td>just acceptable</td>
</tr>
<tr>
<td>&lt;0.6</td>
<td>unacceptable</td>
</tr>
</tbody>
</table>

The cut-off Cronbach’s reliability coefficient alpha value for this research is 0.6 (Spreitzer, 1995:1453).

The validity of the measuring instruments was determined using confirmatory factor analysis. Table 3.5 indicates the guideline used for acceptance or rejection of fit indices based on the details discussed in section 3.5.1.

**Table 3.5: Guidelines for fit indices cut-off criteria**

<table>
<thead>
<tr>
<th>Fit index</th>
<th>Acceptable value</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative chi-square (( \chi^2/df ))</td>
<td>( \leq 5 )</td>
<td>(Wheaton et al., as cited by Hopper et al., 2008:54).</td>
</tr>
<tr>
<td>RMSEA</td>
<td>( \leq 0.1 )</td>
<td>Isaac et al. (2010:383)</td>
</tr>
<tr>
<td>CFI</td>
<td>( \geq 0.9 )</td>
<td>Isaac et al. (2010:383)</td>
</tr>
</tbody>
</table>

Spearman’s correlation coefficient was used to determine the relationships between feedback and empowerment, motivation and performance. Spearman’s correlation coefficient (\( r_s \)) is the
most-used and most powerful nonparametric test of correlation (Walker & Almond, 2010:154). According to Walker and Almond (2010:154), interpretation of the correlation coefficient for the social sciences is as follows:

- Correlation coefficient produces a number between -1 and +1. Negative values indicate a negative correlation and positive values indicate a positive correlation.
- 0.6-1 strong relationship
  0.3-0.59 moderate to fairly strong relationship
  0.15-0.3 weak relationship
  0-0.14 little or no association

### 3.9 RESEARCH HYPOTHESES

H1: There is a positive relationship between feedback and employee empowerment, motivation and performance.

H2: Empowered employees who receive feedback will result in motivated employees.

H3: Motivated employees who receive feedback will perform better than those who did not receive feedback.

### 3.10 CHAPTER SUMMARY

This chapter dealt with all aspects pertaining to the method used for the empirical study. The chapter focused on discussing the research approach and design, participants, sample, measuring instruments used, including reliability and validity, the procedure followed, ethical considerations, statistical analyses and research hypotheses.
4. EMPIRICAL STUDY: RESULTS AND DISCUSSION

The previous chapter focused on the methodology and techniques applied to conduct the empirical study. This chapter focuses on presenting and discussing the results. Results reported and discussed are the characteristics of the participants, descriptive statistics, the reliability and validity of measuring instruments, as well as relationships between measured variables.

4.1. RESULTS

4.1.1 Response rate

The targeted population was all 500 lower-level skilled workers at one business unit of a selected steel production company. Only 308 lower-level employees were available and willing to participate. Only 308 questionnaires were distributed. All 308 questionnaires that were distributed during training sessions were collected from the participants who were available and willing to participate, i.e. the response rate was 100%.

4.1.2 Demographic information

Characteristics of the participants are presented graphically in terms gender, race, designation, work experience and age, respectively.

4.1.2.1 Gender

Figure 4.1 presents the distribution by gender.
Figure 4.1: Participants by gender

More men (95%) participated in the research than women (5%).

4.1.2.2 Race

Figure 4.2 presents the distribution by race.

Figure 4.2: Participants by race
More Africans (76%) participated in the research than white people (24%). Only 1 Asian person participated. No coloured persons participated in the study.

4.1.2.3 Designation

Figure 4.3 indicates distribution by designation.

![Designation Distribution Chart](image)

Figure 4.3: Participants by designation

The designation of participants was distributed as follows: millwrights (6%), Fitters (15%), operators (47%), electricians (3%), boilermakers (4%), instrumentation mechanics (2%), welders (4%) and others (19%).

4.1.2.4 Work experience

Figure 4.4 indicates the distribution by work experience in the company. The mean (M) and standard deviation (SD) of the participants’ work experience and age are provided in Table 4.1.
Table 4.1: Demographic information: Work experience and age

<table>
<thead>
<tr>
<th>Item</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work experience, years</td>
<td>297</td>
<td>11</td>
<td>9.61</td>
</tr>
<tr>
<td>Age, years</td>
<td>301</td>
<td>35</td>
<td>10.15</td>
</tr>
</tbody>
</table>

The majority (47%) of the participants had less than five years’ working experience. The average work experience of participants was 11 years (SD = 9.61).

4.1.2.5 Age

Figure 4.5 indicates the distribution by age.
The majority of participants (44%) were aged between 21 and 30. The average age of participants, as presented in Table 4.1, was 35 years (SD = 10.15).

4.1.3 Descriptive statistics

The results of the descriptive statistics (mean = M, standard deviation = SD) of the research are presented in this section. Table 4.2 indicates the descriptive statistics of the control variable self-esteem.
Table 4.2: Descriptive statistics of the control variable self-esteem

<table>
<thead>
<tr>
<th>Control variable</th>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Mildly disagree</th>
<th>Neither agree nor disagree</th>
<th>Mildly agree</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-esteem</td>
<td>1. On the whole, I am satisfied with myself.</td>
<td>3</td>
<td>1</td>
<td>7</td>
<td>8</td>
<td>33</td>
<td>122</td>
<td>134</td>
<td>308</td>
<td>6.15</td>
<td>1.062</td>
</tr>
<tr>
<td></td>
<td>2. I feel that I have number of good qualities.</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>28</td>
<td>133</td>
<td>133</td>
<td>304</td>
<td>6.25</td>
<td>.902</td>
</tr>
<tr>
<td></td>
<td>3. I am able to do things as well as most other people.</td>
<td>1</td>
<td>1</td>
<td>5</td>
<td>12</td>
<td>33</td>
<td>119</td>
<td>135</td>
<td>306</td>
<td>6.18</td>
<td>.979</td>
</tr>
<tr>
<td></td>
<td>4. I feel I have lot to be proud of.</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>17</td>
<td>28</td>
<td>117</td>
<td>139</td>
<td>307</td>
<td>6.17</td>
<td>1.047</td>
</tr>
<tr>
<td></td>
<td>5. I feel that I am the person of worth, at least on an equal plane with others.</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>12</td>
<td>44</td>
<td>121</td>
<td>120</td>
<td>304</td>
<td>6.08</td>
<td>1.026</td>
</tr>
<tr>
<td></td>
<td>6. I take a positive attitude towards myself.</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>27</td>
<td>100</td>
<td>165</td>
<td>304</td>
<td>6.33</td>
<td>.984</td>
</tr>
</tbody>
</table>

On average, participants agree that self-esteem (SD = 1.00) has an effect on them. Table 4.3 indicates the descriptive statistics of the meaning dimension psychological empowerment.

Table 4.3: Descriptive statistics of the meaning dimension of psychological empowerment

<table>
<thead>
<tr>
<th>Dimension of psychological empowerment</th>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Mildly disagree</th>
<th>Neither agree nor disagree</th>
<th>Mildly agree</th>
<th>Agree</th>
<th>Strongly agree</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meaning</td>
<td>1. The task being observed is important to me.</td>
<td>8</td>
<td>11</td>
<td>1</td>
<td>16</td>
<td>40</td>
<td>141</td>
<td>90</td>
<td>307</td>
<td>5.81</td>
<td>1.275</td>
</tr>
<tr>
<td></td>
<td>2. My job activities are meaningful to me.</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>17</td>
<td>27</td>
<td>113</td>
<td>140</td>
<td>307</td>
<td>6.11</td>
<td>1.197</td>
</tr>
<tr>
<td></td>
<td>3. The task being observed is meaningful to me.</td>
<td>9</td>
<td>2</td>
<td>6</td>
<td>20</td>
<td>33</td>
<td>102</td>
<td>133</td>
<td>305</td>
<td>5.87</td>
<td>1.310</td>
</tr>
</tbody>
</table>
On average, participants agree that the meaning dimension of psychological empowerment (SD = 1.261) has an effect on them. Table 4.4 indicates the descriptive statistics of the impact dimension of psychological empowerment.

Table 4.4: Descriptive statistics of the impact dimension of psychological empowerment

<table>
<thead>
<tr>
<th>Dimension of psychological empowerment</th>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Mildly disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Mildly agree</th>
<th>Strongly agree</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact</td>
<td>1. I knew exactly what impact my job performance had on the profitability of my company.</td>
<td>7</td>
<td>6</td>
<td>16</td>
<td>48</td>
<td>123</td>
<td>102</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact</td>
<td>2. I knew how to go about my job as to maximize the profits earned by my company.</td>
<td>5</td>
<td>8</td>
<td>5</td>
<td>26</td>
<td>51</td>
<td>124</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impact</td>
<td>3. I don't know how my job performance affected my company profits.</td>
<td>69</td>
<td>85</td>
<td>18</td>
<td>24</td>
<td>38</td>
<td>48</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

On average, participants agree that the meaning dimension of psychological empowerment (SD = 1.306) has an effect on them. Table 4.5 indicates the descriptive statistics of the competence dimension of psychological empowerment.

Table 4.5: Descriptive statistics of the competence dimension of psychological empowerment

<table>
<thead>
<tr>
<th>Dimension of psychological empowerment</th>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Mildly disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Mildly agree</th>
<th>Strongly agree</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competence</td>
<td>1. I am confident I was doing the task observed correctly.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>8</td>
<td>40</td>
<td>128</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competence</td>
<td>2. I am not sure how good I was at the task observed.</td>
<td>60</td>
<td>86</td>
<td>29</td>
<td>27</td>
<td>43</td>
<td>45</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Competence</td>
<td>3. I am not sure whether I was doing the task observed correctly.</td>
<td>77</td>
<td>85</td>
<td>42</td>
<td>24</td>
<td>28</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

49
On average, participants agree that the competence dimension of psychological empowerment (SD = 1.659) has an effect on them. Table 4.6 indicates the descriptive statistics of the self-determination dimension of psychological empowerment.

Table 4.6: Descriptive statistics of the self-determination dimension of psychological empowerment

<table>
<thead>
<tr>
<th>Dimension of psychological empowerment</th>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Mildly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Mildly agree</th>
<th>Strongly agree</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-determination</td>
<td>1. I feel free to choose the amount of the effort I spend on the task observed.</td>
<td>18</td>
<td>36</td>
<td>17</td>
<td>32</td>
<td>52</td>
<td>106</td>
<td>44</td>
<td>305</td>
<td>4.83</td>
<td>1.800</td>
</tr>
<tr>
<td></td>
<td>2. I knew I could do the task in any order I chose.</td>
<td>31</td>
<td>40</td>
<td>13</td>
<td>34</td>
<td>54</td>
<td>101</td>
<td>33</td>
<td>306</td>
<td>4.55</td>
<td>1.911</td>
</tr>
<tr>
<td></td>
<td>3. I knew I could chose the pace at which I worked on the observed task.</td>
<td>23</td>
<td>53</td>
<td>12</td>
<td>35</td>
<td>63</td>
<td>90</td>
<td>29</td>
<td>305</td>
<td>4.47</td>
<td>1.857</td>
</tr>
</tbody>
</table>

On average, participants agree that the competence dimension of psychological empowerment (SD = 1.659) has an effect on them. Table 4.7 indicates the results of the descriptive statistics of the dimensions of performance.
Table 4.7: Descriptive statistics of the dimensions of performance

<table>
<thead>
<tr>
<th>Dimensions performance</th>
<th>Statement</th>
<th>Poor</th>
<th>Fair</th>
<th>Good</th>
<th>Excellent</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job</td>
<td>1. Quantity of work output</td>
<td>16</td>
<td>54</td>
<td>163</td>
<td>72</td>
<td>305</td>
<td>2.95</td>
<td>.789</td>
</tr>
<tr>
<td></td>
<td>2. Quality of work output</td>
<td>12</td>
<td>35</td>
<td>163</td>
<td>91</td>
<td>301</td>
<td>3.11</td>
<td>.754</td>
</tr>
<tr>
<td></td>
<td>3. Accuracy of work</td>
<td>11</td>
<td>56</td>
<td>148</td>
<td>88</td>
<td>303</td>
<td>3.03</td>
<td>.788</td>
</tr>
<tr>
<td></td>
<td>4. Customer service (internal and external)</td>
<td>9</td>
<td>61</td>
<td>153</td>
<td>78</td>
<td>301</td>
<td>3.00</td>
<td>.764</td>
</tr>
<tr>
<td>Career</td>
<td>1. Obtaining personal career goals.</td>
<td>21</td>
<td>59</td>
<td>163</td>
<td>61</td>
<td>304</td>
<td>2.87</td>
<td>.810</td>
</tr>
<tr>
<td></td>
<td>2. Developing the skills needed for his/her future career.</td>
<td>29</td>
<td>45</td>
<td>154</td>
<td>77</td>
<td>305</td>
<td>2.91</td>
<td>.881</td>
</tr>
<tr>
<td></td>
<td>3. Making progress in his/her future career.</td>
<td>20</td>
<td>64</td>
<td>139</td>
<td>80</td>
<td>303</td>
<td>2.92</td>
<td>.858</td>
</tr>
<tr>
<td></td>
<td>4. Seeking out career opportunities.</td>
<td>25</td>
<td>62</td>
<td>132</td>
<td>83</td>
<td>302</td>
<td>2.90</td>
<td>.897</td>
</tr>
<tr>
<td>Innovation</td>
<td>1. Coming up with new ideas.</td>
<td>14</td>
<td>56</td>
<td>159</td>
<td>75</td>
<td>304</td>
<td>2.97</td>
<td>.785</td>
</tr>
<tr>
<td></td>
<td>2. Working to implement new ideas.</td>
<td>9</td>
<td>59</td>
<td>167</td>
<td>69</td>
<td>304</td>
<td>2.97</td>
<td>.735</td>
</tr>
<tr>
<td></td>
<td>3. Finding improved ways to do things.</td>
<td>12</td>
<td>47</td>
<td>172</td>
<td>73</td>
<td>304</td>
<td>3.01</td>
<td>.745</td>
</tr>
<tr>
<td></td>
<td>4. Creating better process and routines.</td>
<td>9</td>
<td>54</td>
<td>175</td>
<td>66</td>
<td>304</td>
<td>2.98</td>
<td>.717</td>
</tr>
<tr>
<td>Team</td>
<td>1. Working as part of the team or work group.</td>
<td>10</td>
<td>20</td>
<td>139</td>
<td>136</td>
<td>305</td>
<td>3.31</td>
<td>.738</td>
</tr>
<tr>
<td></td>
<td>2. Seeking information from others in his/her work group.</td>
<td>7</td>
<td>30</td>
<td>159</td>
<td>108</td>
<td>304</td>
<td>3.21</td>
<td>.709</td>
</tr>
<tr>
<td></td>
<td>3. Making sure his/her work group succeed.</td>
<td>5</td>
<td>42</td>
<td>153</td>
<td>104</td>
<td>304</td>
<td>3.17</td>
<td>.720</td>
</tr>
<tr>
<td></td>
<td>4. Responding to the needs of others in his her work group.</td>
<td>8</td>
<td>45</td>
<td>152</td>
<td>98</td>
<td>303</td>
<td>3.12</td>
<td>.751</td>
</tr>
<tr>
<td>Organisation</td>
<td>1. Doing things that helps others when it’s not part of his/her job.</td>
<td>10</td>
<td>45</td>
<td>159</td>
<td>87</td>
<td>301</td>
<td>3.07</td>
<td>.754</td>
</tr>
<tr>
<td></td>
<td>2. Working for overall good of the company.</td>
<td>5</td>
<td>36</td>
<td>159</td>
<td>102</td>
<td>302</td>
<td>3.19</td>
<td>.700</td>
</tr>
<tr>
<td></td>
<td>3. Doing things to promote the company.</td>
<td>6</td>
<td>62</td>
<td>141</td>
<td>92</td>
<td>301</td>
<td>3.06</td>
<td>.768</td>
</tr>
<tr>
<td></td>
<td>4. Helping so that the company is a good place to be.</td>
<td>6</td>
<td>40</td>
<td>150</td>
<td>105</td>
<td>301</td>
<td>3.18</td>
<td>.730</td>
</tr>
</tbody>
</table>

On average, participants perceived their performance to be good. Table 4.8 indicates the descriptive statistics of task motivation and feedback.
Table 4.8: Descriptive statistics of task motivation and feedback

<table>
<thead>
<tr>
<th>Variable</th>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Mildly disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Mildly agree</th>
<th>Strongly agree</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task</td>
<td>1. I enjoy doing the task observed.</td>
<td>7</td>
<td>10</td>
<td>11</td>
<td>26</td>
<td>55</td>
<td>120</td>
<td>77</td>
<td>306</td>
<td>5.55</td>
<td>1.412</td>
</tr>
<tr>
<td>motivation</td>
<td>2. I will have liked to participate in more tasks observations</td>
<td>5</td>
<td>14</td>
<td>10</td>
<td>34</td>
<td>61</td>
<td>112</td>
<td>70</td>
<td>306</td>
<td>5.44</td>
<td>1.416</td>
</tr>
<tr>
<td></td>
<td>3. I thought the task observed is boring</td>
<td>53</td>
<td>112</td>
<td>44</td>
<td>33</td>
<td>24</td>
<td>24</td>
<td>13</td>
<td>303</td>
<td>2.96</td>
<td>1.704</td>
</tr>
<tr>
<td>Feedback</td>
<td>4. I used the feedback I got after each task observation to figure out</td>
<td>4</td>
<td>11</td>
<td>8</td>
<td>30</td>
<td>55</td>
<td>115</td>
<td>83</td>
<td>306</td>
<td>5.61</td>
<td>1.354</td>
</tr>
<tr>
<td></td>
<td>how to do better during the next task.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. The feedback I got after each task observation affected how I went</td>
<td>10</td>
<td>20</td>
<td>17</td>
<td>35</td>
<td>60</td>
<td>110</td>
<td>55</td>
<td>307</td>
<td>5.17</td>
<td>1.581</td>
</tr>
<tr>
<td></td>
<td>about the next task.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. The feedback given after each job observation was important to me.</td>
<td>4</td>
<td>4</td>
<td>7</td>
<td>22</td>
<td>44</td>
<td>119</td>
<td>107</td>
<td>307</td>
<td>5.88</td>
<td>1.228</td>
</tr>
</tbody>
</table>

On average, participants agree that feedback has an effect on them and they were motivated to execute the task observed.

4.1.4 Reliability of measuring instruments

Table 4.9 presents the reliability results of the research constructs.
Table 4.9: Reliability results of the research constructs

<table>
<thead>
<tr>
<th>Variable</th>
<th>No. of items on scale</th>
<th>Cronbach coefficient $\alpha$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feedback</td>
<td>3</td>
<td>0.730</td>
</tr>
<tr>
<td>Self-esteem</td>
<td>6</td>
<td>0.890</td>
</tr>
<tr>
<td><strong>Empowerment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meaning</td>
<td>3</td>
<td>0.908</td>
</tr>
<tr>
<td>Impact</td>
<td>3</td>
<td>0.908</td>
</tr>
<tr>
<td>Competence</td>
<td>3</td>
<td>0.661</td>
</tr>
<tr>
<td>Self-determination</td>
<td>3</td>
<td>0.767</td>
</tr>
<tr>
<td>Task motivation</td>
<td>3</td>
<td>0.691</td>
</tr>
<tr>
<td><strong>Performance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job</td>
<td>4</td>
<td>0.869</td>
</tr>
<tr>
<td>Career</td>
<td>4</td>
<td>0.894</td>
</tr>
<tr>
<td>Innovation</td>
<td>4</td>
<td>0.881</td>
</tr>
<tr>
<td>Team</td>
<td>4</td>
<td>0.865</td>
</tr>
<tr>
<td>Organisation</td>
<td>4</td>
<td>0.825</td>
</tr>
</tbody>
</table>

Overall, the reliabilities of the measuring instruments psychological empowerment and role-based performance scales were acceptable, as set out by Walker and Almond (2010:81). However, the locus of control construct as control variable was eliminated from the study because the reliability was not acceptable ($\alpha = 0.423$). The reliability of the self-esteem, meaning, impact, job, career, innovation, team and organisation constructs is good ($\alpha = 0.8+$). The reliability of the feedback and self-determination constructs is fairly good ($\alpha = 0.7-0.79$). The reliability of the competence and task motivation constructs is just acceptable ($\alpha = 0.6-0.69$).

**4.1.5 Validity of the measuring instruments**

The validity of the measuring instruments was determined using confirmatory factor analysis (CFA) (relevant fit indices). The confirmatory factor analysis (CFA) results are presented in Table 4.10.
Table 4.10: The confirmatory factor analysis (CFA)

<table>
<thead>
<tr>
<th>Scale</th>
<th>N</th>
<th>degree of freedom, df</th>
<th>Chi-square, $\chi^2$</th>
<th>Relative chi-square, $\chi^2$/df</th>
<th>CFI**</th>
<th>RMSEA***</th>
</tr>
</thead>
<tbody>
<tr>
<td>RBPS*</td>
<td>308</td>
<td>160</td>
<td>422.8</td>
<td>2.642</td>
<td>0.931</td>
<td>0.073</td>
</tr>
<tr>
<td>Empowerment</td>
<td>308</td>
<td>323</td>
<td>1115.6</td>
<td>3.454</td>
<td>0.803</td>
<td>0.089</td>
</tr>
</tbody>
</table>

*Role-based performance scale  
** Comparative fit index  
*** Root mean square error approximation

All fit indices of the RBPS scale are within the cut-off point as indicated in Table 6, i.e. the relative chi-square is 2.642, with a p-value = 0.000, CFI is 0.93 (above cut-off value of 0.9) and the RMSEA is 0.073 with a p-value = 0.000. These fit indices indicate the better fit for the model. It can be confirmed that the RBPS scale is valid based on the CFA results.

On the other hand, the psychological empowerment scale, i.e. relative chi-square, is 3.454 with a p value = 0.000 and the RMSEA is 0.089, which are within the cut-off points as indicated in Table 3.5. These two fit indices indicate a better fit for the model.

The CFI of the psychological empowerment scale model is 0.803, which is below the cut-off point. The fact that CFI is below the cut-off point, as far as the guidelines are concerned, and compared to Drake et al. (2007), does not necessarily mean that the model should be rejected (Bollen, 1989). This can be expected because existing index estimates have no known population parameters. Moreover, this is an exploratory study that was done within the context of a South African steel production company.

According to Hopper et al. (2008:56), given complex structural equation modelling, it is not uncommon that some of the fit indices indicate a poor or unacceptable model fit. These authors further indicated that adhering to strict cut-off values of fit indices can lead to rejecting an acceptable model. Rather than rejecting the model, improvements can be made to identify weak constructs that are negatively affecting the model by excluding them from the model.

Based on the relative chi-square and RMSEA indices, it can be concluded that the psychological empowerment scale model is adequate to be used as far as validity is
concerned; however, future studies should endeavour to improve CFI values by identifying the weak constructs and removing them from the model within the context of the study.

4.1.6 Relationships between variables

One of the objectives of this study was to determine the relationships between measured variables. The results of the Spearman correlation of measured variables are presented in Table 4:11. The employee empowerment, motivation and performance path model, showing correlations, is shown in Figure 4.6.

Table 4:11: The results of the Spearman correlation (r) of measured variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Feedback</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Self-esteem</td>
<td>.357**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Meaning</td>
<td>.354**</td>
<td>.377**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Impact</td>
<td>.303**</td>
<td>.247**</td>
<td>.460**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Competence</td>
<td>.284**</td>
<td>.265**</td>
<td>.366**</td>
<td>.632**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Self-determination</td>
<td>.163**</td>
<td>.069</td>
<td>.080</td>
<td>.035</td>
<td>.081</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Task motivation</td>
<td>.397**</td>
<td>.306**</td>
<td>.417**</td>
<td>.341**</td>
<td>.333**</td>
<td>.094</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Job</td>
<td></td>
<td>.215**</td>
<td>.313**</td>
<td>.286**</td>
<td>.192**</td>
<td>.186**</td>
<td>.160**</td>
<td>.208**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Career</td>
<td></td>
<td>.171**</td>
<td>.274**</td>
<td>.140**</td>
<td>.075</td>
<td>.046</td>
<td>.132**</td>
<td>.213**</td>
<td>.499**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Innovation</td>
<td></td>
<td></td>
<td>.222**</td>
<td>.267**</td>
<td>.125**</td>
<td>.129**</td>
<td>.103</td>
<td>.070</td>
<td>.215**</td>
<td>.484**</td>
<td>.533**</td>
<td></td>
</tr>
<tr>
<td>11. Team</td>
<td></td>
<td></td>
<td></td>
<td>.296**</td>
<td>.368**</td>
<td>.269**</td>
<td>.209**</td>
<td>.187**</td>
<td>.188**</td>
<td>.298**</td>
<td>.512**</td>
<td>.518**</td>
</tr>
<tr>
<td>12. Organisation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.245**</td>
<td>.291**</td>
<td>.212**</td>
<td>.161**</td>
<td>.126**</td>
<td>.148**</td>
<td>.209**</td>
<td>.528**</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Correlation is significant at 0.01 level (2-tailed)  
* Correlation is significant at 0.05 level (2-tailed)

Feedback is significantly and positively related (moderate to fairly strong relationship) to the meaning (r = .354) and impact (.303) dimensions of the psychological empowerment, respectively. Moreover, feedback is also significantly and positively related (weak relationship) to the competence (r = .284) and self-determination (r = .163) dimensions of employee empowerment. The control variable self-esteem was found to be significantly positively associated with the meaning, impact and competence dimensions of psychological empowerment. No significant relation was indicated between the control variable self-esteem and the self-determination (r = .069) dimension of psychological empowerment.
Task motivation is significantly positively related to only three dimensions of psychological empowerment, i.e. meaning (r = 4.17), impact (r = .341) and competence (r = 0.333). No significant association was indicated between the task motivation and self-determination (r = .094) dimension of psychological empowerment. In turn, task motivation is significantly positively related to all dimensions of performance, i.e. job (r = .208), career (r = .215), innovation (r = .213), team (r = 0.298) and organisation (r = 0.209).

4.2 DISCUSSION

The aim of this study was to determine empirically whether there is a relationship between feedback as derived from task observations and empowerment, motivation and performance. Several studies have shown that relationships among employee psychological empowerment, motivation and performance exist.
Studies by Kachman and Oldham (1980), Spreitzer (1995), Tan (2007), Anderson et al. (2009), Harris et al. (2009), and Seibert et al. (2011), as discussed in section 2.3, show that there is a direct relationship between employee psychological empowerment and performance.

Drake et al. (2007:76) asserted that empowered employees will be motivated to increase performance. Tuuli and Rowlinson’s (2009) model emphasises the importance of linking the psychological empowerment with performance behaviour and intrinsic motivation, ability and opportunity to perform as mediators.

Hypothesis H1 predicted that there is a positive relationship between feedback and employee empowerment. The correlation results indicated that there is a positive relationship between feedback and employee empowerment, supporting hypothesis H1. An increase in effective feedback will increase employee empowerment. Feedback is positively associated with each dimension of psychological empowerment (meaning, impact, competence, self-determination). This is consistent with previous studies (Tan, 2007; Anderson et al., 2009; Harris et al., 2009, Seibert et al., 2011). Therefore, for the organisation under study to increase lower-level employee empowerment, the use of feedback derived from tasks observation will be warranted.

Hypothesis H2 predicted that empowered employees who received feedback will result in motivated employees. The results suggest that only three dimensions of psychological empowerment, i.e. meaning, impact and competence, are significantly and positively related to task motivation. The self-determination dimension of psychological empowerment is not significantly associated with task motivation. This is consistent with prior literature (Drake et al., 2007). This means that self-determination is inconsequential in increasing employee motivation. This implies that the firm under study should not expend efforts and resources in increasing the perceptions of lower-level employees towards the perception of self-determination, if they want to increase employee motivation. The firm should rather focus on increasing perceptions towards meaning, impact and competence to increase motivation.
Hypothesis H3 predicted that motivated employees who received feedback will perform better than those who did not receive feedback. The results suggested that there is a significant and positive relationship between employee motivation and each dimension of performance. The results are consistent with earlier literature (Drake et al., 2007; Tuuli & Rowlinson, 2009; Anderson et al., 2009). Motivated employees will increase performance (production, quality, customer service, achieve career goals, innovation, teamwork, “going extra mile”).

4.3 CHAPTER SUMMARY

This chapter focused on presenting and discussing the results. The next chapter focuses on research conclusions and recommendations.
5. CONCLUSIONS AND RECOMMENDATIONS

The previous chapter focused on presenting and discussing the results. Results reported and discussed were the characteristics of the participants, descriptive statistics, reliability and validity of measuring instruments, and relationships between measured variables. The purpose of this chapter is to provide conclusion(s) drawn with regard to research objectives and to make recommendation(s) to the organisation under study’s management based on the research findings. Furthermore, the study limitations are pointed out.

5.1 CONCLUSIONS

The aim of the study was to determine the relationships between feedback derived from task observations and employee empowerment, motivation and performance in a steel production company. Conclusions regarding the literature and the results of empirical studies are made.

5.1.1 Conclusions regarding the literature study

The first specific objective was to conduct a literature study on the main concepts (feedback, empowerment, motivation, performance, task observations) and their inter-relationships as determined by previous research.

Feedback, empowerment, motivation, performance and task observations were conceptualised from literature. Previous research suggests that relationships among employees’ psychological empowerment, motivation and performance exist (Tan, 2007; Anderson et al., 2009; Harris et al., 2009; Seibert et al., 2011; Drake et al., 2007; Tuuli & Rowlinson, 2009). Employees who received effective feedback will be empowered and motivated to perform better (Drake et al., 2007:76).
5.1.2 Conclusions regarding results of empirical study

The second specific objective was to empirically determine whether there is a relationship between feedback as derived from task observations and empowerment, motivation and performance. The findings of the study suggest that there is a statistically significant positive relationship between feedback as derived from task observations and employee empowerment, motivation and performance. The details of the findings are summarised as follows:

- Feedback is positively associated with each dimension of psychological empowerment (meaning, impact, competence, self-determination).
- Only three dimensions of psychological empowerment, i.e. meaning, impact and competence, are significantly and positively related to task motivation.
- There is a significant and positive relationship between employee motivation and performance.
- A positive relationship was found between feedback and empowerment, which indicates that effective feedback is a critical component in empowering and motivating employees to improve performance (Aguinis et al., 2012:106).

The third specific objective was to make recommendations to management in the selected steel production company based on the findings. Recommendations are made in the next section.

5.2 RECOMMENDATIONS

The following recommendations are made:

- First-line managers in the steel production company under study can use the feedback derived from task observations as a tool in empowering and motivating employees to improve performance. Feedback should focus on the following:
  - Is the job observed meaningful to the employee?
Is the employee aware of the impact of his/her job to the organisation?
Is the employee competent to perform the job observed?
Is the employee self-determined to do the job?
Is the employee willing to do the job?
Is the employee performing as expected?

If the answer to the aforementioned points is no, managers should come up with plans (e.g. training) to rectify or prevent deviation(s).

- Middle management should develop a system to capture and analyse data based on the psychological empowerment and role-based performance scales to monitor and encourage first-line managers to use the feedback derived from tasks to empower and motivate employees to improve performance.
- The research was done on only one business unit. Therefore, it should be expanded to other business units of the steel production company so that the results can be generalised for the entire company.
- Future research could include the effect of quality of feedback from first-line managers to lower-level employees.
- Based on the relative chi-square and RMSEA indices, it can be concluded that the psychological empowerment scale model is adequate to be used as far as validity is concerned; however, future studies should endeavour to improve CFI values by identifying the weak constructs and removing them from the model within the context of the study.

5.3 STUDY LIMITATIONS

Only one business unit of the selected steel production company was used for this research, therefore might not represent the whole company and other steel industries as a whole in South Africa and globally. The reader should be cautious when interpreting the results and generalising for the whole company and steel industry.
5.4 CHAPTER SUMMARY

In this chapter, conclusions and recommendations to management and future research were made based on a literature study and research findings. Limitations of the study were pointed out. All objectives of the study have been reached.
REFERENCES


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Toastmasters International. 2011. Speeches by management. Rev.5. USA.


APPENDIX A

EMPOWERMENT, MOTIVATION AND PERFORMANCE QUESTIONNAIRE

The purpose of this questionnaire is to obtain information from participants so that it can be used in the study to determine the relationships between feedback derived from job observations and empowerment, motivation and performance.

Completion of the questionnaire to be used in partial fulfilment of the requirements for the degree Master of Business Administration at the Potchefstroom Campus of the North-West University

Code number

Contact details:

Johannes Sono

Cell: 0827725088

Email: johannes.sono@arcelormittal.com

PLEASE NOTE: All information will be treated as STRICTLY CONFIDENTIAL and will be used for ACADEMIC PURPOSES only.

You are not forced to complete this questionnaire.

Your assistance in completing this questionnaire is highly appreciated.

It will take not more than 20 MINUTES to complete the questionnaire.
GENERAL INSTRUCTIONS

1. The selected employees are requested to complete these questionnaires.
2. Please answer all questions as objectively as possible.
3. Please answer all questions.

SECTION A: DEMOGRAPHIC INFORMATION

The following information is needed to help us with the descriptive statistical analysis of the data for comparison among different business units. All responses will be treated confidentially. We appreciate your help in providing this important information. Please mark the applicable block with a cross (X).

<table>
<thead>
<tr>
<th>A1</th>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>A2</td>
<td>Age</td>
<td>Years</td>
<td></td>
</tr>
<tr>
<td>A3</td>
<td>Race</td>
<td>African</td>
<td>White</td>
</tr>
<tr>
<td>A4</td>
<td>Designation</td>
<td>Millwright</td>
<td>Artisan</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Welder</td>
<td>Operator</td>
</tr>
<tr>
<td>A5</td>
<td>Work experience</td>
<td>Years</td>
<td></td>
</tr>
</tbody>
</table>
**SECTION B:**

**EMPOWERMENT AND MOTIVATION**

Please indicate to what extent you agree or disagree with each statement. Please mark the applicable block with a cross (X).

<table>
<thead>
<tr>
<th>Statement</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>B1</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Meaning</strong></td>
<td></td>
</tr>
<tr>
<td>1. The task being observed is important to me.</td>
<td>1</td>
</tr>
<tr>
<td>2. My job activities are meaningful to me.</td>
<td></td>
</tr>
<tr>
<td>3. The task being observed is meaningful to me</td>
<td></td>
</tr>
<tr>
<td><strong>B2</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Impact</strong></td>
<td></td>
</tr>
<tr>
<td>1. I knew exactly what impact my job performance had on the profitability of my company.</td>
<td>1</td>
</tr>
<tr>
<td>2. I knew how to go about my job as to maximise the profits earned by my company.</td>
<td></td>
</tr>
<tr>
<td>3. I do not know how my job performance affected my company’s profits.</td>
<td></td>
</tr>
<tr>
<td><strong>B3</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Competence</strong></td>
<td></td>
</tr>
<tr>
<td>1. I am confident I was doing the task observed correctly.</td>
<td>1</td>
</tr>
<tr>
<td>2. I am not sure how good I was at the task observed.</td>
<td></td>
</tr>
<tr>
<td>3. I am not sure whether I was doing the task observed correctly.</td>
<td></td>
</tr>
</tbody>
</table>
Please indicate to what extent you agree or disagree with each statement. Please mark the applicable block with a cross (X).

<table>
<thead>
<tr>
<th>Statement</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>B4</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Self-determination</strong></td>
<td>1 2</td>
</tr>
<tr>
<td>1. I feel free to choose the amount of effort I spend on the task observed.</td>
<td>3 4</td>
</tr>
<tr>
<td>2. I knew I could do the task in any order I chose.</td>
<td>5 6</td>
</tr>
<tr>
<td>3. I knew I could choose the pace at which I worked on the observed task.</td>
<td>7</td>
</tr>
<tr>
<td><strong>Task motivation</strong></td>
<td>1 2</td>
</tr>
<tr>
<td>1. I enjoy doing the task observed.</td>
<td>3 4</td>
</tr>
<tr>
<td>2. I would have liked to participate in more task observations.</td>
<td>5 6</td>
</tr>
<tr>
<td>3. I thought the task observed is boring.</td>
<td>7</td>
</tr>
<tr>
<td>4. I used the feedback I got after each task observation to figure out how to do better during the next task.</td>
<td></td>
</tr>
<tr>
<td>5. The feedback I got after each task observation affected how I went about the next task.</td>
<td></td>
</tr>
<tr>
<td>6. The feedback given after each job observation was important to me.</td>
<td></td>
</tr>
</tbody>
</table>
Please indicate to what extent you agree or disagree with each statement. Please mark the applicable block with a cross (X).

<table>
<thead>
<tr>
<th>1 = Strongly Disagree</th>
<th>2 = Disagree</th>
<th>3 = Mildly disagree</th>
<th>4 = Neither disagree or agree</th>
<th>5 = Mildly agree</th>
<th>6 = Agree</th>
<th>7 = Strongly agree</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Statement</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>B6 Self-Esteem</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>1. On the whole, I am satisfied with myself.</td>
<td></td>
</tr>
<tr>
<td>2. I feel that I have number of good qualities.</td>
<td></td>
</tr>
<tr>
<td>3. I am able to do things as well as most other people.</td>
<td></td>
</tr>
<tr>
<td>4. I feel I have a lot to be proud of.</td>
<td></td>
</tr>
<tr>
<td>5. I feel that I am a person of worth, at least on an equal plane with others.</td>
<td></td>
</tr>
<tr>
<td>6. I take a positive attitude towards myself.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>B7 Internal locus of control</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>1. Many of the unhappy things in people's lives are partly due to bad luck.</td>
<td></td>
</tr>
<tr>
<td>2. Becoming a success is a matter of hard work; luck has little or nothing to do with it.</td>
<td></td>
</tr>
<tr>
<td>3. Most people do not realise the extent to which their lives are controlled by accidental happenings.</td>
<td></td>
</tr>
<tr>
<td>4. There is really no such thing as ‘luck’.</td>
<td></td>
</tr>
</tbody>
</table>
SECTION C

PERFORMANCE

Please evaluate yourself or your subordinates based on the feedback obtained from job observations. Please mark the applicable block with a cross (X).

<table>
<thead>
<tr>
<th>1 = Poor</th>
<th>2 = Fair</th>
<th>3 = Good</th>
<th>4 = Excellent</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Statement</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>C1 Job</td>
<td></td>
</tr>
<tr>
<td>1. Quantity of work output</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>2. Quality of work output</td>
<td></td>
</tr>
<tr>
<td>3. Accuracy of work</td>
<td></td>
</tr>
<tr>
<td>4. Customer service (internal and external)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>C2 Career</td>
<td></td>
</tr>
<tr>
<td>1. Obtaining personal career goals.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>2. Developing the skills needed for his/her future career.</td>
<td></td>
</tr>
<tr>
<td>3. Making progress in his/her future career.</td>
<td></td>
</tr>
<tr>
<td>4. Seeking out career opportunities.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>C3 Innovation</td>
<td></td>
</tr>
<tr>
<td>1. Coming up with new ideas.</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>2. Working to implement new ideas.</td>
<td></td>
</tr>
<tr>
<td>4. Creating better process and routines.</td>
<td></td>
</tr>
</tbody>
</table>
Please evaluate yourself or your subordinates based on the feedback obtained from job observations. Please mark the applicable block with a cross (X).

<table>
<thead>
<tr>
<th>1 = Poor</th>
<th>2 = Fair</th>
<th>3 = Good</th>
<th>4 = Excellent</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Statement</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>C4 Team</strong></td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>1. Working as part of the team or work group.</td>
<td></td>
</tr>
<tr>
<td>2. Seeking information from others in his/her work group.</td>
<td></td>
</tr>
<tr>
<td>3. Making sure his/her work group succeeds.</td>
<td></td>
</tr>
<tr>
<td>4. Responding to the needs of others in his/her work group.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statement</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>C5 Organisation</strong></td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>1. Doing things that help others when it is not part of his/her job.</td>
<td></td>
</tr>
<tr>
<td>2. Working for the overall good of the company.</td>
<td></td>
</tr>
<tr>
<td>3. Doing things to promote the company.</td>
<td></td>
</tr>
<tr>
<td>4. Helping so that the company is a good place to be.</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B

Permission letter from the selected steel production company

ArcelorMittal South Africa
Vanderbijlpark Works

Memo

To
Aimee Allen

Company
ArcelorMittal Vanderbijlpark Works

From
Johannes Sono, Engineer Direct Reduction

Date
6 February 2014

Pages
1 of 1

Request permission to conduct the study: Influence of feedback on lower-level employees empowerment, motivation and performance.

Background

I am Johannes Sono (employee #: 4340847). I am an MBA student currently doing final year at North-West University Potchefstroom business school. As part of the requirements of the degree, a dissertation has to be completed on a subject chosen by the student.

I chose a topic on organizational behaviour, to be investigated in ArcelorMittal SA Vanderbijlpark Works. The aim of my study is to determine if there are any relationships between feedback (derived from task observations) and empowerment, motivation, performance on lower-level employees (millwrights, electrician’s, operators, filters, boilermakers, welders) and what is the implication of this study to management.

I will make use of standard questionnaires from previous researchers, validated by North-West University Potchefstroom business school. It is proposed to target H to J role employees as the focus of the study is on lower-level employees. I will distribute questionnaires personally, only during training sessions to different chosen departments. It is going to take less than 20 minutes to fill in the questionnaire. Responses will be anonymous and participation will be willingly and confidential.

The completed dissertation will be regarded as the intellectual property of the company. It will never be used by anyone, including North-West University Potchefstroom business school, without the approval and permission being granted by ArcelorMittal SA Vanderbijlpark Works. A written consent will have to be granted to the North-West University Potchefstroom business school before this work can be published.

Request

I request that I Johannes Sono (employee #: 4340847) be granted the permission to proceed with the proposed study.

Recommended: John Motaung, Manager Human Resources

Approved: Aimee Allen, General Manager

Signature: [Signature]
Date: 10/02/2014

Signature: [Signature]
Date: 11/02/2014