The impact of violence and intimidation on strike actions and their effect on union membership in the Platinum Mining Industry

Lusanda Khanyiso Sam
98116755

A Submission to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Master of Business Administration.

10th November 2014
Abstract

This study investigates the impact of violence and intimidation, especially the extent to which these have an effect on the behaviour of union joining and leaving in the platinum mining site located in the North-West Province. Accepting the premise that unions have substantial leverage, both in terms of legislative provisions of the Labour Relations Act for bargaining for wage increases and the capacity for organized industrial action, the study zoned in on the localized offshoots of the experience of union domination as intimidation.

This has particular value in understanding the often-ignored reasons why employees behave in ways that express solidarity, on the one hand, and rivalry, on the other—both of which articulate to a propensity to behave in ways that mask or avoid vulnerability. One of these ways is union-joining behaviour.

Framed on a qualitative methodology, this study measured the aforesaid behaviour through research questions and hypothesis that scale intentions to join through normative beliefs above organizational justice. In order to provide a logical link between its independent variables of violence/intimidation and the union-joining dependent variable, it marshalled scientific constructs gleaned from Icek Azjen’s Theory of Planned Behaviour. Accordingly, it used convenient sampling to manage the data gathered from the Theory of Planned Behaviour Questionnaire, which was apt to accurately and validly score the values of research constructs—such as they were ranged against moderators and mediators.

The study arrived at the following significant findings: the propensity to join unions is as much prompted by an urgent sense of threat to job security and personal safety as it is by the need to leverage organizational justice. On the basis of these findings, the study makes bold recommendations to all concerned stakeholders.
Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

Lusanda Khanyiso Sam

10th November 2014
Acknowledgements

I would like firstly to acknowledge the Almighty God who gave me the courage, wisdom and strength to complete this study.

I would like to take this opportunity to express my gratitude to everyone who supported me throughout the course of this MBA project. I am thankful for their aspiring guidance, invaluably constructive criticism and friendly advice during the project work. I am sincerely grateful to them for sharing their truthful and illuminating views on a number of issues related to the project. A special mention goes to my supervisor who was patient with me all the time.

To my wife, Sino, who sat alone so many nights while I was up in the study, plugging away at this research. Many thanks for your patience and standing by me with encouragement during the two years of study. My son: Khazimla and my daughter Asiphile Sam thank you for your patience, support and understanding during the past two years.

Lastly, many thanks go to my Anglo American Platinum Limited (AAPL) colleagues, for affording me the time and space to undertake this research and for their on-going support in this endeavour.
# TABLE OF CONTENTS

Abstract .......................................................................................................................... i
Declaration .................................................................................................................... ii
Acknowledgements ...................................................................................................... iii
TABLE OF CONTENTS ............................................................................................... iv
LIST OF FIGURES ....................................................................................................... viii
LIST OF TABLES ......................................................................................................... ix

## CHAPTER 1: INTRODUCTION AND PROBLEM STATEMENT ................................. 1

1.1 Background ......................................................................................................... 1
1.2 Problem statement ............................................................................................. 3
1.3 Purpose of the study ........................................................................................... 4
1.4 Aims and objectives of the study ....................................................................... 5
1.5 Scope and delimitation of the research ............................................................... 5
1.6 The rationale of the research ............................................................................. 6
1.7 A gap in the literature ....................................................................................... 6

## CHAPTER 2: LITERATURE REVIEW .................................................................... 11

2.1 Introduction ......................................................................................................... 11
2.2 Industrial relations developments in the platinum industry – contemporary debates ........................................................................................................................................... 11
2.3 Trade unions in the workplace ........................................................................... 12
   2.3.1 History of trade unions in South Africa .................................................... 13
   2.3.2 Role of the trade unions ............................................................................ 14
2.4 Aspects affecting the union standing and performance .................................... 19
   2.4.1 Union rivalry ............................................................................................ 20
2.4.2 Strikes ........................................................................................................... 20

2.5 Violence and intimidation during the strikes............................................. 23

2.5.1 Violence and strikes .............................................................................. 23

2.5.2 Intimidation and strikes ......................................................................... 25

2.6 Paradigm theory in systems thinking......................................................... 27

2.6.1 The conflict paradigm ............................................................................ 27

2.6.2 Maslow’s Theory of Needs ...................................................................... 29

2.6.3 Behaviour Planning Theory ..................................................................... 30

2.6 Conclusion ..................................................................................................... 35

CHAPTER 3: RESEARCH HYPOTHESES OF THE STUDY ............................. 37

3.1 Introduction .................................................................................................. 37

3.2 Construction of hypotheses......................................................................... 37

3.3 Hypotheses of the study ............................................................................. 39

3.4 Conclusion ..................................................................................................... 40

CHAPTER 4: RESEARCH METHODOLOGY ............................................... 41

4.1 Introduction .................................................................................................. 41

4.2 Research method and design ...................................................................... 41

4.3 Unit of analysis ............................................................................................ 42

4.4 Population of the study .............................................................................. 43

4.5 Sampling method and size .......................................................................... 43

4.6 Measuring instrument.................................................................................. 44

4.6.1 Questionnaire design ............................................................................ 44

4.6.2 Data collection ........................................................................................ 44

4.6.3 Validity and reliability ............................................................................ 45
CHAPTER 5: RESULTS OF THE STUDY ............................................................ 50

5.1 Introduction .............................................................................................. 50

5.2 Descriptive statistics for respondents’ profiles ............................................ 50

5.2.1 Personal profile of the respondents ........................................................ 50

5.2.2 Union membership profile of the respondents ........................................ 53

5.2.3 Union membership profile of the respondents ........................................ 55

5.3 Factor analysis ........................................................................................... 57

5.3.1 Creation of constructs .......................................................................... 57

1. Outcome Evaluations - B1, B2, B3, B4, B5, B6, B7, B8, B9, B10 ........ 58

5.3.2 Internal consistency reliability ............................................................... 60

5.3.2 Statistics of the constructs ................................................................... 62

5.4 Results as per hypotheses ......................................................................... 66

5.4.1 Employees who feel intimidated are more likely to join the intimidating trade union ........................................................... 66

5.4.2 Lower level task grade employees are most likely to feel the effect of intimidation ............................................................. 70
5.4.3 Employees subjected to violence and intimidation with current union being perceived as intimidating with behavioural predictors ......................... 71

5.5 Results analysis summary and conclusion ........................................ 74

CHAPTER 6: DISCUSSION OF THE RESULTS ........................................... 77

6.1 Introduction .......................................................................................... 77
6.2 Profile of the mineworker in the platinum industry ............................. 77
6.3 Hypothesis 1: Employees feeling intimidated and joining the intimidating trade union ............................................................... 78
6.4 Hypothesis 2: Lower level grade employees are most likely to feel intimidation ......................................................................................... 81
6.6 Proposed model for the study ............................................................... 87
6.7 Conclusion ............................................................................................ 88

CHAPTER 7: CONCLUSIONS AND RECOMMENDATIONS ...................... 90

7.1 The highlights of this study ................................................................. 90
7.2 The value of this study ......................................................................... 97
7.3 Main findings ....................................................................................... 97
7.3.1 Practical recommendations .............................................................. 98
7.3.2 For academics in future research .................................................... 99
7.4 Concluding remarks ............................................................................ 99

REFERENCES .......................................................................................... 101

APPENDIX - 1 ......................................................................................... 108
LIST OF FIGURES

Figure 1: Marikana conflict dynamic ................................................................................... 8

Figure 2: Maslow's hierarchy of needs. ............................................................................... 8

Figure 3: Trends in the number of stoppages in South Africa, 2009 – 2013 ....................... 22

Figure 4: Behaviour planning ‘routes’ ............................................................................... 31

Figure 5: Salary Distribution and Disparity ........................................................................ 33

Figure 6: The conceptual framework of the study ............................................................. 39

Figure 7: Deductive and Inductive research approaches .................................................. 41

Figure 8: Gender profile of the respondents ..................................................................... 51

Figure 9: The age bands of the respondents .................................................................... 51

Figure 10: The tenure of the respondents in the company ................................................ 52

Figure 11: Type of employment of the respondents .......................................................... 52

Figure 12: Employee levels of the respondents ................................................................ 53

Figure 13: The profile of the union membership of the respondents ............................... 54

Figure 14: Number of years as a union member ............................................................... 54

Figure 15: Union membership change in the past 3 years .............................................. 55

Figure 16: Respondents’ experience of intimidation and violence during strikes .......... 56

Figure 17: Whether intimidation and violence was the reason respondents joined union .. 56

Figure 18: A conceptual model for preventive medicine using mobile technologies in LRS .................................................................................................................................. 88
## LIST OF TABLES

Table 1: Research Methodology ....................................................................................... 42

Table 2: Guidelines for internal consistency ..................................................................... 46

Table 3: Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity ......................................................................................................................... 57

Table 4: Rotational component matrix .............................................................................. 59

Table 5: New constructs from factor analysis ................................................................... 60

Table 6: Cronbach's alpha coefficient of constructs.......................................................... 61

Table 7: Statistics for the power of control ......................................................................... 62

Table 8: Statistics for the outcomes evaluation .................................................................... 64

Table 9: Statistics for the attitude and intention ................................................................... 64

Table 10: Statistics for the behavioural beliefs .................................................................... 65

Table 11: Statistics for the normative belief ........................................................................ 65

Table 12: Statistics for the subjective norm ...................................................................... 66

Table 13: The cross tabulation correlation test of the experience in intimidation and reason to join the union ................................................................................................................... 67

Table 14: The cross tabulation chi-square test of the experience in intimidation and reason to join the union ................................................................................................................... 67

Table 15: Pearson correlation of employee subjected to violence and intimidation with current union being perceived as intimidating .......................................................................................... 68

Table 16: Regression analysis of the employee intimidation on the joining of intimidating union ................................................................................................................................ 69

Table 17: Regression analysis coefficients for Vis and Uin ................................................ 69
Table 18: The chi-squared test for grade test and the effects of intimidation .......... 70

Table 19: The chi-square cross tabulation table for grade test with the effects of intimidation ......................................................................................................................................... 71

Table 20: ANOVA for Uin as a function of Vis with the predicting variables ............... 72

Table 21: Model summary with predicting variables ......................................................... 72

Table 22: Regression Coefficients of the change management as a function of employee engagement with predictors ............................................................................................................................................... 73

Table 23: Summary of the results analysis ....................................................................... 75
CHAPTER 1
INTRODUCTION AND PROBLEM STATEMENT

1.1 Background

Trade unions have both a positive and negative impact on the economy of any country. This means it has a direct bearing on retention and attrition levels in mining companies. Trade union activity in an industry also attracts interest from potential investors and workers who targets that industry for job security, better wages and better working condition (Crain, 2006). In the South African platinum industry the National Union of Mineworkers (NUM) has traditionally been the largest union within the platinum mining sector in South Africa representing the interest and the activities of the mineworkers. This continued until 2012, when many mineworkers deserted NUM, which was the main union and as such, had been entrusted by the employees to achieve organisational justice. The mineworkers formed a workers committee to negotiate with the employers on their behalf, which introduces a new phenomenon as the workers committee was outside the bargaining structure of the Platinum industry. After which, the workers committee and its member transferred and to Associating of Mineworkers and Construction Union (AMCU), fought for recognition and became player in the platinum industry.

With the emergence of AMCU, the dynamics of organised labour in the mining industry changed. AMCU, which originated from the coal mines, came into existence after its leader, Joseph Mathunjwa, was expelled from NUM for bringing the union into disrepute after he had arranged an unprotected strike at Douglas Colliery (De Lange, 2012). Some have argued that AMCU was conceived in bitterness and born in dissension by Joseph Mathunjwa, who was the chairman of the NUM branch at the Douglas Colliery in Mpumalanga before his dismissal. This led to a two-week wildcat strike that was resolved only when he was re-appointed in 1999 (Steward, 2012). In that same period, AMCU, steered a violent strike.

It has been especially noted that the infamous Marikana conflict was “a product of workers agitation for good conditions of service, which bordered on increment in workers monthly wages” (Abegunde, 2014: 27). NUM and the mining companies had failed to deliver on the mineworker’s expectations of organisational justice. Coetzee (2004) explained
organisational justice in a simple way as the employee’s perceptions of fairness in the organisational settings. This author argued that this perception influences the employee attitudes and their behaviour, and consequently their performance and organisational success.

The years 2012 to 2014 saw an unprecedented number of strikes taking place in South Africa’s platinum industry. These strikes were characterised by high levels of violence, occurring on the back of rivalry between two trade unions, NUM and AMCU, which were fighting for supremacy in the industry. In 2012, the number of strike incidents rose from 67 to 99 in the mining sector. Of the 99 strikes, 45 were unprotected strikes and often organised by workers’ committees, rather than being organised under the auspices of a trade union (Department of Labour, 2013). This happened because employees felt alienated from their current union and also believed that the unions did not relay their problems (Bernstein, 2013). The Department of Labour (2013) attributes the unrests in the mining sector to high unemployment levels, high cost of living, income inequality and large-scale migration to mining communities by jobseekers.

All these factors are cited by Department of Labour (2013) as contributory to the unrest, with spillover effects into related industries. This is evident in the mining sector on account of its history with a with migrant labour force and, though not mentioned, high levels of debt in the unsecured loans market further aggravates the situation. Protracted and violent strikes have become an unfortunate part of South Africa’s economic story. Within this context, there has been increasing academic interest, particularly in South Africa on how management and organised labour might successfully coexist and develop more positive industrial relations. There have been calls from many commentators saying that trade unions should consider adopting new approaches to collective bargaining and assume greater responsibility for creating more cooperative and productive workplaces (Freeman 1992; Lincoln and Boothe 1993 as cited in Deery, Erwin and Iverson, 1999)

These events including the events experienced at Marikana in August 2012, where 44 people lost their from the violence by the worker, and being shot by police, and the more recent platinum strikes, in 2014 necessitates an investigation into the dynamics of underlying impact of violence and intimidation during strike on union affiliation and its conduct. The continued high levels of violence and intimidation have not only adversely impacted on mine employees, but also on mine productivity levels. This has led to a drop in mining company share prices, as well as reducing their profitability levels, thus impacting job security for the
mineworkers, and decrease taxation contributions to the government. This study shows provide alternatives rather than merely describing the root problems in the platinum mining sector.

1.2 Problem statement

The rise of labour is regarded as a key component of the internal liberation struggle, and has laid the foundations for a new union-friendly labour regime (Webster, 2013: 209). At the centre of this regime is an unprecedented high wage demands in the order of R12 500 which in turn led to the creation of high expectations from its members. These higher wages, which were negotiated by trade unions, are seen by workers as a main benefit for them for their trade union membership failing which the union’s role in behaviour planning becomes dysfunctional.

In 2012, a number of platinum industry employees, who were NUM members, rebelled against the leadership of the union after failing to compel the union to take their grievances to their employer. Their employers were the world’s three main platinum producers: Anglo American Platinum, Impala Platinum and Lonmin Platinum. The period following this rebellion led to an unprotected strike in terms of the legislated processes in South African labour relations (Labour Relation Act, 1995) by employees mainly from Lonmin Platinum. In addition to the strike, union members involved also embarked on violence and destruction of property. Subsequently, a total of 44 people were killed in the process, 34 of which were shot by police on the Marikana hill. In the aftermath of the Marikana tragedy, NUM was replaced as the majority union by the AMCU in South Africa’s platinum industry (Grant, 2014).

The magnitude of destructive and violent behaviour that took place during this time was new and unprecedented in the platinum industry. The violence that occurred was directed not only at the company property, but also at fellow employees, including supervisors and managers (Chinguno, 2013). It would appear that the migration of employees between the two main unions, NUM and AMCU, contributed to the intimidation and further violence between the different union memberships. In an attempt to prove itself to members so that they could see it as their saviour from the perceived inability of NUM to serve workers’ interest, AMCU embarked on unprecedented high wage demands in the order of R12 500, which in turn led to the creation of high expectations from its members. To augment support for employee wage demands in the build up to wage negotiations, the salaries of managers...
and senior executives were publicised to create comparison with those of underground workers on the mines.

The rift between the striking employees and their erstwhile trade union, NUM, had become so wide that, not only had confidence been lost in NUM, but AMCU was also formed. In the wake of the deepening strike, the competition and rivalry between the two unions had a spillover effect of violence, intimidation and death. The impact of the violence and intimidation was such that even the non-striking members of NUM, and non-unionised employee were finding it impossible to go to work. This means the violence and intimidation had a ripple effect across the employees irrespective of union affiliation.

After the 2012 strikes, which were organised by the workers’ committee, AMCU saw an opportunity and emerged as the new force in the platinum sector. AMCU emerged strongly challenging the hegemony of NUM, the established union. From the outset it was apparent that a new era in South African industrial relations was unfolding (Chinguno, 2013). According to Cregan (2013), industrial action has a significant impact on unionised workers joining labour unions. NUM had in the past faced competition from many trade unions that were targeting black workers, but had successfully managed to reinvent itself and rise above those unions. The challenge that NUM faced with AMCU was that AMCU managed not only to exploit the weaknesses of NUM, but further packaged those weaknesses in a way that appealed to workers by promising workers that AMCU would negotiate better wage increments on their behalf. This is hardly surprising: “Unions remain strongly committed to the expansion of centralised bargaining to cover those workers outside the bargaining council system” (Webster, 2013: 222).

Pencavel (2009) suggested that economics can provide some guidance in determining which unions or which union movements have been successful and which have not been. The paradox, with intense competition amongst unions, is that the wages continue to go up. That would be good news for the workers, but at the same time that would lead to a loss of jobs, as some of the companies end up not being able to afford the high labour bills demanded by unions.

1.3 Purpose of the study

The purpose of the research is to investigate the impact of violence and intimidation during strike action in the platinum mining industry. This knowledge and understanding can assist in improving the handling of the conflict within this industry and may also bring some insights
into the behaviour of the mineworker, which bring more awareness of the modus operandi of unions within the mining industry. The underlying premise and motivation for this research project is those employees, who are subjected to intimidation and violence during the strike would have a high propensity to join a union they perceive to be intimidating. The knowledge and understanding obtained in the study can assist the government, through the Department of Mineral Resources; the mining industry, (especially the platinum mines); the employees; and even the union with an interest in the mining industry.

1.4 Aims and objectives of the study

In view of the research problem presented, the general aim of this study is to determine the factors which impact trade union membership in the South African Platinum mines and what role if any does intimidation and violence play in union membership.

In particular, the objective of this research is to determine whether the fear and experience of intimidation and violence by platinum mine workers are related to trade union affiliation in the South African Platinum mining sector.

It is hypothesised in this study that the fear of intimidation and violence resulted in change of union affiliation resulting in the ability of new union to activate one of the longest strikes in South African history. The strike took place for a period of five months and it began on the 23 January 2014 and ended on 24 June 2014.

1.5 Scope and delimitation of the research

The scope of this research is limited to investigating the impact of intimidation and violence during the strike and their effect on union membership in the platinum mining industry. In order to manage the scope of this research the two mines of Anglo American Platinum in Rustenburg were selected, since they have all the characteristics of striking employees and are highly unionised. Includes was also the Base Metal Refinery (BMR) of Lonmin Platinum. The motivators of the scope are also the research objectives, financial constraints and limited time for the selection of the study sites.
1.6 The rationale of the research

Protracted strikes, coupled with fatalities, are foremost indicators of instability in the mining sector. In this context, union membership is perceived to be both a blessing and a curse. On the one hand, union membership provides leverage for employees in the collective bargaining process, as well as a sense of belonging in the mining community. On the other hand, union membership has been used to perpetrate violence against members and non-members, thus intimidating other employees whilst causing detriment to the mining value chain at Rustenburg Platinum Mines. Current research (Brand, 2013) has shown that safety needs and physiological needs for a living wage to stave off hunger, and inflation, are not mutually exclusive. It is therefore incorrect to separate the physical threats to life of mining employees from rock falls and wage disputes. This study addresses this hiatus by using Icek Ajzen's Theory of Planned Behaviour, as well as Maslow's Hierarchy of needs to reveal the symmetrical relationship between violence and union membership at Rustenburg Platinum Mines.

1.7 A gap in the literature

After the don of democracy in South Africa in 1994, efforts were made to ensure preservation of the workers and employer’s right amongst other. This resulted in the formation of Labour Relations act 66 of 1995. In South Africa the Labour Relations Act (LRA) gives employees the right to strike. At the same time, it affords the employer an opportunity to lockout the striking employee. This strike or lockout took place during the time of dispute. This approach meant amongst other to ensure that there is rule of engagement between the stakeholders in the workplace. This was a catalyst to avoid strikes like the one from the South African Rubber Manufacturing Company (SARMCOL), which turn to political violence as was observed in Howick, at Mpopomeni Township in 1985. The strike, later turned political, and violence led to the death of 120 people (Zmte, 2014).

Within the new dispensation, the strikes took place but did not result in death of a sizable number of people until the security strike in 2006. Almost 60 guards died during the strike, according to Kevin Derrick, acting chairperson of the Private Security Industry Provident Fund (mg, 2006). This unprecedented phenomenon in the post 1994 was not closely resembled until 2012, where the mining industry encountered unprecedented strike with high
levels of intimidation and violence. This strikes of 2012, resulted in the death of 44 people. The main difference with the security strike is that the there was a change in union membership after traditionally negotiating union was deserted, police were involved in the death of 34 people as they shot them, and 18 months later the same union and mine workers were involved in a five month protracted strike. This meant a new while very relevant phenomenon on strikes and violence including the behaviour of mineworkers and the union, need to be investigated, and draw interest from the research. There is limited body of knowledge on the combination of behaviour and union and violence and intimidation during strikes and need researcher to bring necessary findings to predict some of the occurrences and possibly root causes.

In summary, this scenario, has limited literature on the subject, especially in the two main aspects;

Firstly, huge conflict that led to violence and intimidation in the employee / employee relationship and the deaths of the workers and police. There was an examination of the conflict dynamic on the basis of a synthesis of Brand (2013) conflict dynamic theory with Maslow's articulation of 'security of employment' needs (Wahda & Bridell, 2007) within a framework of Planned Behaviour Theory (TPB, Ajzen, 1991.) Within this paradigm, there is no triangulation of measurable effects of violence, intimidation and income loss as linked to union membership and strikes.

Secondly, the underlying issue of the Marikana conflict. Brand (2013) reviews the Marikana conflict from the following angles: Manifestations, Causes, Triggers, Aggravators, and Moderators, all of which are depicted in the model below (culled from Jonathan Goldberg, John Brand provides a framework that is amenable to reviewing some of the underlying issue of the Marikana conflict. The author reviews the Marikana Conflict from the following angles; manifestations, causes, trigger, aggravators, and moderator, all of which are depicted in the model below (culled from Jonathan Goldberg, 2013). In this study the author came to the conclusion that there are several key underlying facts that are contributed toward the Marikina Conflict. The myriads of factors are depicted in this tree with branched in figure 1.
The basic personal security needs of the Rustenburg Platinum Mines mineworkers during the strike were inextricably tied to organisational justice. In fact, Wahda and Bridwell (1976) reported that there was little evidence for Maslow's ranking of these needs and even less evidence that these needs are in a hierarchical order. It is necessary to account for the needs of striking mine employees beyond safety and physiological needs in Maslow's Hierarchy (figure 2), as described by Finkelstein (2006) below:

Figure 2 Maslow's hierarchy of needs.

Source: Finkelstein (2006)
It can be argued that management has to guarantee that the mining employees do not have experience hunger, by implementing ‘starvation wages-for-profit’, thus challenging safety and physiological needs as the sole determinants of the employee behaviour in violent strikes.

In the platinum industry there is a generally observed phenomenon that strikes tend to be characterised by intimidation and violence against non-striking employees, but during these platinum strikes a new behavioural phenomenon—hereafter referred to as Perceived Behavioural Control, which (Ajzen, 1991) said it is consistent with the emphasis on factors that are directly linked to a particular behaviour. The author further asserts that the perceive behaviour control refers to the perception of the ease or difficulty of performing the behaviour of interest.

The perceived behavioural control exhibited by the workers indirectly against the mining house by deciding to leave their long surviving trade union, which traditionally negotiated on their behalf, to form a workers committee and later AMCU was consistent to the perceive behavioural control. “Different lifestyles and material realities are creating a leadership which is not fully in tune with what members are facing” (Tabane 2012:3—quoted in Dames 2013:3). This development requires going beyond Maslow’s theory and complementing it with Icek Ajzen’s Behaviour Planning Theory (BPT).

### 1.8 Chapter outline

The research report is set out as follows: chapter 2, a literature review, provides insight into the different key constructs and their relationships. The discussion is based on unions and their roles, in the intimidation and violence during strikes, including the causes. Flowing from this is the behavioural theory, which seeks to explain the behaviour of the mineworker within the context of intimidation and violence. This chapter is concluded by summarising the key constructs, which serve as the base for the conceptual framework that is discussed in chapter 3.

In Chapter 3, the developed conceptual framework, which is derived from the existing theories and previous empirical studies, is set out. To give a context of the study, and the hypothesis of the study is given, both null and alternative.

Chapter 4 presents the research approach, methodology and design. The selected methodology and design are defended in this chapter. In addition, the population and
sampling method are discussed. After which, the measuring instrument design and data collection are explained. The data analysis section, where the relevant descriptive and inferential statistics used in this study are discussed, follows this section. Within this chapter the ethical considerations and research limitations are also discussed.

The results of the study, which consisted of both exploratory and inferential statistics, are given and interpreted. This chapter is followed by the discussion of the results in chapter 6, then the conclusions and recommendation as discussed in chapter 7.

The recommendations include both management recommendation and proposal for future research. The appendices and references are in the last section of the report.
CHAPTER 2
LITERATURE REVIEW

2.1 Introduction

The theory covered in this literature review begins with a contemporary debate on industrial relations developments in the platinum industry. This is followed by a discussion of the trade union in the workplace, where the history of trade unions in South Africa and the role of the trade union are evaluated. The aspects that influence trade union performance, which include union rivalry, the majoritarian system and strike action follow this. The review of the role of the union sets its trajectory of breakdown in planned behaviour from the premise set by Eddie Webster’s observation that “at a recent workshop on the Mineral Energy Complex (MEC), [he] could not help noticing that no mention was made by companies of capital’s changing strategies of control in the workplace” (Webster 2013: 209). Because of this gap, unions have three essential roles to fulfil: “they seek recognition for workers through organising at work; they redistribute economic goods and benefits from management to workers through collective bargaining; and they represent workers by giving voice to their concerns in the larger political and legal arena” (Crain, 2006, 158).

2.2 Industrial relations developments in the platinum industry – contemporary debates

Workers used unprotected strikes in the mining sector in 2012, which spread from the platinum mines to gold, coal and iron ore operations, to highlight their unhappiness with trade union leaders, with accusations, including union bosses being too close to management and too willing to compromise on workers’ demands (Gordon, Roberts & Struwig, 2013). According to Peyper (2012), miners have abandoned NUM in great numbers, as miners feel the union’s leadership has lost touch with their concerns. The unrest also highlighted the challenges of rising inequality, a lack of service delivery and social cohesion in mining communities, and the challenges for organisations using migrant labour (Bernstein, 2013).
Over the years there has been agitation by the mineworkers for the improvement of living and working conditions. Chinguno (2013) argues that the Marikana strike was not an isolated event, but was connected to the industrial relations regime and the broader post-apartheid order. This was characterised by weakness in the control function of the unions. Bernstein, (2012) submits that, “root causes of the Lonmin Marikana mine strike massacre, as in all fatal incidents, lie much deeper and wider than fixing blame on the few people who pulled triggers or pushed the wrong buttons”.

With the current low commodity prices of platinum putting more pressure on the profitability of high cost underground mines, unstable employer-employee relationships, poor supervisor-supervisee relationships in the workplace and pressure from communities for meaningful social responsibility, organisational commitment has become more important than ever for the mines’ sustainability.

Alleviation and stabilisation strategies, which can only be done after understanding the root causes of certain behaviours and paradigms within this environment, are important for the normalisation of business. An unstable regulatory environment deters shareholders from bringing the necessary investments into South Africa. This instability contributes to the declining investor sentiment within the platinum sector. It also squarely addresses Sosibo’s (2012:2-8) depiction of the use of violence as the modus operandi of labour strikes and protests, all in the name of organisational justice. As far as the mineworkers are concerned, it provides the study with a perspective of how behaviour and consciousness are “controlled” by external as well as internal factors.

2.3 Trade unions in the workplace

Within the realm of the trade union in the workplace, two aspects are reviewed. These are the history of the trade union in South Africa and the role of the trade unions.
2.3.1 History of trade unions in South Africa

Harcourt and Wood (1998), in the previous research, described the evolution of the South African Labour Movement, as consisting of four phases:

1. **1924-1979: The formal exclusion of Africans from industrial relations.**

   According to Harcourt and Wood (1998), during this period Africans were relegated to the bottom of the labour market and denied the means to improve their situation, either by bargaining for better terms and conditions of employment or by accumulating valued skills and experience.

2. **1979-1988: Liberalisation and the attempts at containment**

   The authors explained that this period was marked by the passing of the 1979 Industrial Conciliation Amendment Act (Act number 94 of 1979), which created an Industrial Court for adjudicating disputes; interpreting labour laws and hearing cases of instruct (Author please clarify this phrase, starting with “hearing cases”) employment practices. Harcourt and Wood (1998) further argue that some of the trade unions were hesitant to participate at first due to the mistrust of the government. According to Harcourt and Wood (1998), one of the greatest achievements of this period was that the Court did institutionalize labour conflict only to the extent that it restricted the parties' behaviour during strikes and negotiations.

3. **1988-1989: The return to repression**

   This was a period during which the state reversed earlier progressive decisions by the 1988 passing of the Labour Relations Amendment Act (number 83 of 1988) to repeal or restrict key trade union rights. "In particular, the new law created a right to appeal decisions from the relatively pro-union Industrial Court to a more conservative Labour Appeal Court, a new division of the Supreme Court" (South African Law Reports, 1987, as cited in Harcourt and Wood, 1998, 83).


   Harcourt and Wood (1998) proceed to describe the abovementioned period as a period that was marked by the unbanning of political parties and also the amending of the 1988 Labour Relations Act (number 66 of 1995).
The end of apartheid and democratization in South Africa not only heralded a broad political transition; it also led to profound changes in the workplace.


Labour struggles, including those of mineworkers, also contributed to the ending of apartheid (Bezuidenhout and Buhlungu 2008). The struggles of mineworkers and their unions are a powerful illustration of the multifaceted nature of the South African transition. Bezuidenhout and Buhlungu (2008), describe a typical NUM member as historically a migrant worker from the Eastern Cape or Lesotho, who lived in a single-sex hostel and worked in a gold mine. Today the demographics of a typical mineworker have not significantly changed: they still stay in single-sex hostels and make decisions in groups, some agree to those decisions just to avoid being the outlier.

In addition, Bezuidenhout and Buhlungu (2008) describe the South African experience as showing that workers have broad interests, whom those interests extend beyond the shop floor into the political arena, and that unions can enhance their credibility as representative institutions by assuming primary responsibility for advancing these interests.

Recent South African history shows that favourable labour laws and policies can greatly improve the organizing and collective bargaining successes of unions, even in the most adverse economic conditions. It also shows that unions can have a considerable influence on the development of labour laws and policies by actively participating in political processes. All employees now have a statutory right to strike, once mediation has failed (Bezuidenhout and Buhlungu 2008). This exposes those members who might not be interested in taking part in the strike for any reason.

2.3.2 Role of the trade unions

For the purposes of this study, unions in the mine contribute to planned behaviour by providing the scope of action in parallel with benchmarked expectations. Whereas historically the focus has been largely on collective bargaining, where unions have used their resources to advance the interests of their fee-paying members in negotiations with
employers around wages and working conditions and during arbitration (Crain, 2006), this study also draws attention to counterproductive behaviour. While trade unions are generally studied for their role in organising and representing members in the workplace, unions also have a long history of playing a key role as the ideal civil society organisation, where they contribute to creating, maintaining and building democratic societies (Fick, 2009).

The dynamics as indicated in the model in figure 1 and the manifestations of frustration of expectations in the mining sector, it is particularly significant that Jones (2003) investigated how employees’ perceptions of unfair treatment predicted their decisions to retaliate against their supervisors and the organisation. It is also noteworthy that “it is widely documented that unionised establishments pay higher wages than otherwise comparable non-union firms, yet with some variation depending, among other factors, on the competitiveness of the labour market and the degree of centralisation and coordination” (Torm, 2012: 207).

Bacon & Hoque (2012) acknowledge that trade unions have had a significant impact recently in terms of promoting fair treatment at work and advancing the interests of disadvantaged workers. Studies have shown, for example, that equal opportunities (EO) practices are more likely to have been adopted in unionised than non-unionised workplaces, and outcomes such as pay rates have been found to be more equitable in unionised workplaces. Trade unions provide leverage.

The most manifest dimension of the aforesaid leverage is organizational justice. According to Searle & Ball (2004), organizational justice is a concept that is inextricably intertwined with trust based on a psychological contract and the drive towards fairness. This is a drive concerned with “how resources are allocated and how employees are likely to respond” (Meyer, 2001: 47-8). Distribution and procedures thereof are in a major part the core business of trade unions. Employees in the mining industry seek recourse in unions when there is a perceived lack of fairness of outcomes (distributive justice), procedures (procedural justice), and treatment by authorities (interactional justice), where “interactional justice comprises perceptions of interpersonal justice, which refers to the extent that authorities treat employees with dignity and respect, and informational justice, which is the extent to which authorities provide adequate explanations for decisions” (Folger & Cropanzano, 1998; Colquitt, 2001; Greenberg, 1993—quoted in Jones 2003).

Since decisions are not solely based on wage increases but security in general, it is noteworthy that organizational justice also ascribes primacy to “consistency of application
across people and time, freedom from bias; accuracy of information; ethical basis in terms of prevailing standards and morality; finally, correctability, focusing on mechanisms to amend poor decisions" (Searle & Ball, 2004: 710). Contrary to wage distribution-based organizational justice, therefore, what is at stake is the level of trust coupled with prospects for support if and when the fortunes of the market change or, indeed, if an organization has to fairly ensure a seamless transition for workers who have to be either made redundant or retained on slightly less favourable conditions. Unions are therefore instrumental in entering the fray to ensure, amongst others, that there is an increase of buy-in into “perceived organizational support (POS) how distributive, interpersonal and informational justice affects the extent to which employees identify with an organization” (Wang & Law, 2008: 213).

Organizational justice, therefore, covers a wide spectrum of workplace issues that have to do with fairness, broadly speaking. A recent study on organizational justice shows that employees in organisations are particularly concerned about the extent of fairness (or justice) managers show, and that this concern could shape employees' work behaviours and attitudes positively or negatively (Omoruyi, Chipunza & Samuel, 2011: 125). This study, however, is concerned with the question of how well unions perform this task and how the consequences—unintended or otherwise—have led employees to identify with unions by actively joining them or leaving them in the wake of violent strikes and intimidation. Employees who seek security and fairness at the door of the unions have found themselves ironically facing the prospects of intimidation as opposed to belonging or protection. It is worth departing from the run-of-the-mill model of organizational justice that concerns itself with, say, the mining house as the organization. That is to say, the same measure of fairness that undergirds engagement with the employer is here used to scrutinize the union’s commitment to organizational justice.

The emphasis here is perceived organizational support identified by Wang & Law (2004) because as negotiations proceed in the course of seeking distributive and procedural justice with employers, unions also carry the responsibility of ensuring that those employees that identify with it do not victimize others who do not. There are two scenarios in point with regard to this. The first relates to the rivalry between NUM and AMCU, where identifying with either organization places employees more at risk than at ease because of violence and intimidation.

It is even more significant that the reason mineworkers feel like denizens who do not belong, is the perceived lack of fairness of outcomes (distributive justice), procedures (procedural
justice), and treatment by authorities (interactional justice), where “interactional justice comprises perceptions of interpersonal justice, which refers to the extent that authorities treat employees with dignity and respect, and informational justice, which is the extent to which authorities provide adequate explanations for decisions” (Folger & Cropanzano, 1998; Colquitt, 2001; Greenberg, 1993—quoted in Jones 2003).

Furthermore, Standing (2011) also described a group of employees termed the precariat as those who do not belong to any professional or craft community; with no social memory on which to call and no shadow of the future hanging over their deliberations with other people, making them opportunistic. The biggest dangers are social illnesses and the risk that populist politicians will play on their fears and insecurities to lure them onto the rocks of neo-fascism, blaming “big government” and “strangers” for their plight. As a result, the precariat trap arises because it takes time for those on the margins of poverty to obtain access to benefits, which means their hardships are underestimated, while they have no incentive to take low-income temporary jobs once they are receiving benefits.

According to Heery (2004, as cited in Burgess, Connell & Winterton, 2013), trade unions have been ill-prepared for these dramatic changes of workers diversity and, historically, have been somewhat ambivalent towards vulnerable workers, tending to see them as a threat to the conditions of core employees or acquiescing to management’s use of contingent workers to manage fluctuations in demand for labour. This was experienced in the platinum mines in Rustenburg during the 2012 wildcat strikes, when the workers decided to form a workers’ committee to represent them, instead of their traditional unions (Bernstein, 2013). It is a well-known fact that:

Strike action is also being fuelled by a growing number of breakaway unions, as well as the use of replacement (scab) labour. This is in part the result of economic pressure in which established unions struggle to deal with retrenchment and workers struggle for jobs. Strike action is also the result of employer unilateralism and divisive tactics (Webster 2013: 220).

Without any other recourse to NUM’s acquiescing to the use of contingency workers in addition to the lack of organisational justice, conditions arose for retaliation. Taking his cues from Bies & Tripp (2010), Jones notes that retaliation offers a means of restoring self-esteem and satisfying a desire for revenge and also “allows one to maintain a belief in a just world by causing something “bad” to happen to a “bad” person who perpetrated an injustice
(Lerner, 1980—quoted in Jones, 2003). This has to be understood in a context of labour dispute pointed out by Abegunde (2013), who recalls:

AMCU had its first conflict with Lonmin at the company’s Karee mine in May 2011 over an internal disagreement, which resulted in a wildcat strike that led to the death of three people and stoppage of production at the mine for almost a month. After the mine-workers’ resumption of work, most of them immediately resigned their membership of NUM and joined AMCU (Abegunde 2013: 33).

It is in this and other similar contexts that Bies and Tripp (2001) find that individuals calculate the costs and benefits of retaliation and may be more likely to retaliate if such an action is deemed worthwhile. This especially holds true if and when the “Marikana conflict is situated within a grievances mechanism” (Abegunde, 2014: 29) that breaks down and prompts retaliation against Lonmin (RAO) and retaliation against NUM shop stewards (RAS). In like manner, Heery (2010) provides us with a useful framework for analysis, distinguishing four different trade union approaches to contingent workers: exclusion, subordination, inclusion and engagement. The exclusion approach involves opposition to the use of contingent workers, as well as refusal to represent them, so as to protect core employees from having their conditions undermined by those with less secure contracts. The subordination approach accepts contingent workers, but as an employment buffer to protect existing members.

The inclusion approach welcomes contingent workers into membership, and attempts to negotiate comparable terms and conditions or have the contracts made permanent, thereby reducing inequalities and building solidarity. The engagement approach goes further in actively approaching vulnerable groups and providing support for them to become organised.

Civil society organisations (CSOs) act as a watchdog, holding those in power accountable; to provide a voice for citizens; to provide a platform for people to challenge the power of the political and economic elite; and to act as a link between citizens and the elite to discuss and find solutions to social, economic and political problems (Fick, 2009). Lack of voice or indeed what has come to be known as informational justice, which is the extent to which authorities provide adequate explanations for decisions (Colquitt, 2001; Greenberg, 1993), has led to the following statement: “TPB predictors may influence decisions to retaliate” (Jones, 2013: 2-3).
In South Africa, debates regarding the effectiveness of trade unions centre on three broad areas: the appropriateness of the tripartite alliance between trade union federation Cosatu, the ruling ANC and the South African Communist Party (SACP), the strong oligarchical tendencies of Cosatu which have undermined shop-floor democracy, and Cosatu’s inability to mobilise members outside its traditional base, namely workers in full-time employment in the formal economy (Buhlungu, Brookes & Wood, 2008). The alliance has led to a “brain drain” of leaders in the trade union movement, with positions such as shop stewards seen as a stepping-stone to management or politics (Buhlungu et al., 2008). However, their study found that the tripartite alliance continued to enjoy strong support, and that internal democracy among Cosatu-affiliated unions remained robust. “We cannot conclude that the Alliance has been sustained by disempowering members or that a vibrant culture of internal democracy and recall has not persisted” (Buhlungu et al., 2008, 458). Worse still – and this is a major concern of this study – Webster (2013) notes:

A surge of militancy over the past five years has led to the re-emergence of violence in industrial conflict, effectively bypassing established institutions. The task of managing the workplace is made more difficult by the hostility of employers to the institutions of collective bargaining, persisting divisions within the labour movement, and the growing involvement of Cosatu in national politics. (Webster, 2013: 211).

2.4 Aspects affecting the union standing and performance

There are three main aspects that influence the union standing within an area of interest and its subsequent performance. These include: union rivalry which is found between the competing unions, organisational justice, which is the employee’s perceptions of fairness in the organisational settings, and strikes, which are a key weapon the union use when they are in dispute with the employer on issues of common interest.
2.4.1 Union rivalry

Since the last decades of the twentieth century, many trade unions in major developed countries have established union recruitment and retention strategy in the form of union organizing, in which industrial action plays a central part (Gall (2003), as cited in Cregan (2013)). Union organizing was developed as a response to worldwide declines in union membership (Visser (2006), as cited in Cregan (2013)). According to Cregan (2013), the use of workplace conflict to improve membership is a risky strategy.

According to Buhlungu, Brooks & Wood (2008), the South African labour movement has been a source of inspiration to unions worldwide. Just like many trade unions in Africa, the trade unions in South Africa played a dual role of fighting for improved working conditions for workers, whilst at the same time fighting for the liberation of the country against the apartheid regime alongside the ANC (Webster and Buhlungu 2007).

South Africa’s largest and most active union federation, the Congress of South African Trade Unions (Cosatu) has retained high levels of penetration in the private sector, and made concerted inroads into the public sector (Buhlungu, Brooks & Wood, 2008).

In the mining sector Cosatu’s affiliate is the National Union of mineworkers (NUM). Over the years, NUM has been a dominant trade union, representing mainly black workers (Bezuidenhout and Buhlungu 2006). Historically the major competitors in the mining sector were Solidarity and United Association of South Africa (UASA), representing mainly mine officials and non-black African workers.

Pencavel (2009) suggested that economics can provide some guidance in determining which unions or which union movements have been successful and which have not been. The paradox, with intense competition amongst unions, is that the wages continue to go up. That would be good news for the workers, but at the same time that would lead to a loss of jobs, as some of the companies end up not being able to afford the high labour bills demanded by unions.

2.4.2 Strikes

“Employees’ right to strike is an essential component of their right to freedom of association, and one of the weapons wielded by trade unions when collective bargaining fails. Strike
action is the most visible form of collective action during labour disputes, and is often seen as the last resort of workers’ organisations in pursuit of their demands” Manamela & Budeli (2013: 308).

Interestingly, Gale (2006:1, as quoted in Kgosimore, 2007) states that an employee strike is an episode during which a company’s or organisation’s work force engages in a work stoppage in an effort to elicit changes from its employer in such areas as wages, benefits, job security, and management practices. This is usually achieved through employees withholding their labour from the employer in an attempt to force the employer to accede to their demands. Most of the strikes in South Africa are undertaken by trade unions during the collective bargaining process, when trade unions and employers fail to agree on some issues of mutual interest. Strikes may take different forms. They may be protected or unprotected, and they may be partial or complete.

In South Africa the right to strike is protected in terms of section 23(2) (c) of the Constitution and section 64(1) of the LRA. What stands out, however, is this reality:

In August 2012, South African police, in an attempt to break an illegal strike at platinum mines in the country’s northwest, shot and killed 34 miners in broad daylight. The standoff between the South African state, the multinational Lonmin, Rustenburg Platinum Mines Company, and striking miners at its Marikana mine, opens up questions about the global political economy, to be sure, but it also fits into a decades’ long narrative about struggles for equivalence—for relative equality—in industrial South Africa and about state, labour, and industry manoeuvres that have, from time to time, resulted in spectacular violence (Magaziner & Jacobs, 2013: 138).

According to the Department of Labour 2013 industrial action report South Africa has experienced a rise in strike incidents from 2009 to 2013, with the exception of 2011, when strikes recorded were lower. In 2009, the Department recorded 51 cases of industrial action, 74 cases in 2010, 67 in 2011, 99 in 2012 and 114 industrial incidents in 2013.
Figure 3 Trends in the number of stoppages in South Africa, 2009 – 2013

Source: Department of Labour (2014)

The mining industry continued to experience more working days lost (515 971 in 2013), contributing 27.9% of the total days lost (Department of Labour, 2014) (figure 3).

The paucity of unions has been described as the leading cause of the surge in wildcat strikes during the mid-2000s, providing the only option for workers to ‘voice’ their demands for higher wages and other concerns (Torm, 2012).

In a 2012 survey that was conducted by Cosatu, it becomes clear that 60% of the workers interviewed believed the use of violence was a necessary strategy in strikes (NALEDI 2012, as cited in Chinguno (2013).

According to Brand (2013), the cause of labour-market conflict and long and violent strikes is the absence of ordinary democracy in industrial relations. That, in this author’s view, can be mitigated through making strike balloting compulsory and strike balloting needs to be amended in the Labour relations act.

The process of strike balloting occurs when a secret ballot is conducted among the members of a union to determine whether to go on a strike, and decided by a clear majority. The proposed strike ballot must be subject to independent verification where the number of employees exceeds a certain number, commonly 50 employees. The LRA stipulates that a
union’s constitution must have a process for a ballot, but most unions include a one-liner that says that balloting will be by show of hands.

The proposal that strike balloting should be incorporated into the LR A has gained significant momentum from many different stakeholders. The African National Congress (ANC) believes that strike balloting can be a useful tool for unions to recruit members, test support for the action amongst members and curb violence (Marrian, 2014). This kind of proposed amendment has met significant opposition from organised labour and also in particular from Cosatu as they believe that this would open the way for “strikes to be interdicted left, right and centre” (Marrian, 2014).

However, according to Gavin Stansfield (2012), critics of the amendment underline the difficulties associated with organising a ballot within single or even multiple workplaces, the time and cost associated therewith and the practical difficulties associated with counting the ballots and collating their results. In many instances, this may delay the onset of proposed strike action. Supporters of the amendment, on the other hand, argue that the introduction of a strike ballot is necessary in order to verify that the members themselves (being the persons ultimately affected by the strike and by not earning a wage for the duration of the strike action), are in support of the strike, as opposed to merely trade union officials wishing to assert their muscle by calling their members out on strike action” (Stansfield 2012).

2.5 Violence and intimidation during the strikes

The violence and intimidation during strikes further elaborate on the environment that the platinum industry is faced with, and need their attention.

2.5.1 Violence and strikes

Cahn and Lloyds (1996:6), as quoted by Kgosimore (2007), define violence as any physical or non-physical (verbal) behaviour or action that is directed at imposing one’s will on another person. Wallace (1996:2) as quoted by Kgosimore (2007) defines it as any behaviour that restricts or denies another person certain rights or liberties. Kgosimore (2007) defines violence as verbal or non-verbal acts that are aimed at depriving the victims of their rights and dignity by hurting them physically or psychologically and these acts range from
gossiping, emotional abuse and humiliation, to physical assault and killing. Masiloane (2010) defines violence as any action or behaviour that is directed at influencing another person’s behaviour, thus limiting such person’s freedom of choice.

Violence that occurs in the workplace is a business, management, human resources, public health and safety, education, legal, economic political, as well as a social problem. When defining workplace violence, Kgosimore (2007) considers two approaches to have an inclusive definition. The first approach is to look at human rights and the second is to extend the definition of workplace violence to any behaviour that arises out of a work-related issue and threatens the health and safety of an employee, whether this occurs in or away from the workplace location.

Verdugo and Vere (2003: 2—quoted by Kgosimore, 2007) define workplace violence narrowly as any act or behaviour that violates one’s rights to be safe from fear or injury while at work, Mayhew and Chappell (2005:346) and Steinman (2003:3-4) also as quoted by Kgosimore (2007) give a more inclusive definition. They define it as: “Incidents where staff are abused, threatened or assaulted in circumstances related to their work, including commuting to and from work, involving an explicit challenge to their safety or well-being” and “Incidents where employee(s) are physically or emotionally abused, harassed, threatened or assaulted (overt, covert, direct, and indirect) in circumstances related to their work, including commuting to and from work, involving explicit or implicit challenge to their safety, well-being or health”, respectively (Kgosimore, 2007: 65).

Violence in strikes is usually perpetrated by striking employees against those employees who are seen as not supporting the strike. According to these employees, they are also fighting for the rights of the very same people who are assisting the company to operate during the strike. They were of the view that it is not unfair for them to dissuade other employees from working during the strike, because the continuous operation of the industry during the strike does not only minimise the chances of getting what they are striking for, but it also has a profound financial implication due to the principle of ‘no work, no pay’ Masiloane (2010).

Masiloane (2010) argues that violence against the non-striking employees is directed at dissuading them from continuing to work during the strike, while violence against the striking employees by the non-striking employees could either be pre-emptive, defensive or reactive. Frustration and anger are seen as the main causes of strike violence. According to
Masiloane (2010), “This frustration gradually builds up as employees start to realise that their expectations could possibly not be met, and that they will continue to forfeit income as a result of the strike. This may tempt them to identify any factor or symbol that may arrest or retard the resolution of their strike action, and subsequently, becomes the target of the frustration. Frequently, non-striking employees constitute such a factor or symbol” (Masiloane, 2010: 36).

In conclusion, it is important to note that violence during both protected and unprotected strike action is, therefore, unacceptable, is not functional to collective bargaining, and is discouraged in terms of both international and national labour laws.

2.5.2 Intimidation and strikes

According to Jewell (2001), as cited in Lamontagne (2010), the origin of the word “intimidate” is the Latin words *Labour timidat*, meaning to “make timid”. “According to The Random House Dictionary of the English Language (1987), intimidate is defined as “to make timid, to fill with fear, to overawe or cow, as through the force of personality or by superior display of wealth, talent, etc.; to force into or deter from some action by inducing fear.” Intimidation is derived from the verb intimidate Lamontagne (2010: 58).

Bolino and Turnley (2003) describe intimidation as a strategy in which individuals let others know that they can make things difficult for them if they are pushed too far, deal aggressively with individuals who get in their way, or use forceful behaviour to get colleagues to behave appropriately. The principal goal of individuals using intimidation is to be seen as tenacious and forceful.

Morrison (1992), as cited in Lamontagne (2010), further defines intimidation as “an interactional style that emphasizes the bullying, exploiting, or manipulating of others, solely for one’s own advantage” Lamontagne (2010: 58).

According to Jones (1990); Jones & Pittman (1982—as cited in Bolino and Turnley, 2003), the most common forms of intimidation are psychological in nature, involving for example verbal insults and exclusion. Specifically, intimidation is an impression in which individuals let others know that they can make things difficult for them if they are pushed too far, deal
aggressively with individuals who get in their way, or use forceful behaviour to get colleagues to behave appropriately.

Jones (1990—as cited in Bolino and Turnley, 2003) points out, that the principal goal of individuals using intimidation is to be seen by others as tenacious and forceful. In the context of union rivalry the author would argue that union members in certain instances are forced to support their trade unions and their decisions even though they may not agree, due to the fear of being intimidated. However, people who intimidate others also run the risk of being perceived unfavourably. Bratton (2008), as cited in Lamontagne (2010), identified political intimidation as “threats to personal safety, threats to the safety of family members, and the loss of property” Lamontagne (2010: 58).

Suffice to conclude that the literature overwhelmingly indicates that the volatile environment of strikes at Rustenburg Platinum Mines was a culmination of dispute resolution mechanisms that point to five key points:

(a) The failure of institutionalised dispute mechanisms through the CCMA, as indicated by the statistical increase in strikes in the Platinum belt and Rustenburg Platinum Mines in particular;

(b) The propensity to join unions is as much prompted by an urgent sense of threat to job security and personal safety as it is by the need to leverage organisational justice;

(c) The behavioural beliefs and predictors that are associated with violence, as described by Jones (2003) in his elucidation of Ajzen’s Behaviour Planning Theory, strike an analytical resonance with John Brand’s articulation of moderators, triggers and aggravators that, like retaliation, are essentially manifestations of disregard for the Labour Relations Act;

(d) Retaliation in the form of intimidation and violence that exhibit retaliation against the organisation (RAO) and retaliation against supervisors (RAS) of NUM has had the unintended consequences of eroding the human capital of mineworkers, as well as the value chain of mining in the mainstream economy; and

(e) Violence and intimidation, as Webster (2013) confirms, is also a function of the breakdown of the compact between business, labour and power that was initiated by
the New Growth Path which, in turn, has charged the volatile strikes with a sense of non-compromise, on the one hand, and entitlement on the other.

In summary, violence and intimidation take place during strikes. This is on the rise in the mining industry, especially after the unprecedented strikes of 2012 in the mining industry.

2.6 Paradigm theory in systems thinking

2.6.1 The conflict paradigm

This study addresses the research problems of the study holistically by innovating its examination of the conflict dynamic on the basis of a synthesis of John Brand’s conflict dynamic theory with Maslow’s articulation of ‘security of employment’ needs within a framework of Planned Behaviour Theory. Within this paradigm, it is possible to triangulate the measurable effects of violence, intimidation and income loss as linked to union membership and strikes.

The model begins with describing the underlying causes, and how it manifested, the factors which aggravated matters and those factors which mitigated.

 Causes

Brand (2013) lists a number of issues which, in his view, contributed to the conflict, as they had not been addressed for a long period. These were: working conditions that were not improving, living conditions which were deteriorating, and perceptions that union leadership was corrupt.
Manifestations

Disregard for the law was seen as a contributor, as the workers failed to honour the collective agreement that was in place and already agreed with the unions. They also failed to follow the traditional dispute procedures that were in place. There was also a deliberate ignorance of the country’s Labour Relations Act. The failures and disregard of the law manifested themselves in the unprotected strike that the workers engaged in, mainly because they felt that their voice was not heard. Hostility was manifested by the anger the employees displayed during their demonstration. This was also visible in the defiance they had shown to the police and Lonmin, and towards their trade union which was NUM at the time.

Triggers

The main trigger was the IMPLATS strike by the rock drill operators which started on the 12th January 2012. According to Bernstein (2013) the results of that strike was evidence of institutional failure in both the company and the union.

Aggravators

Brand (2013) identifies a number of aggravating factors. A few that are most relevant to the study are outlined:

Fear: The fear of employees was based on the violence that was experienced by their colleagues. Employees who wanted to return to work were threatened and, in some instances, they were victimised and assaulted by their colleagues when these colleagues found out that they were working.

Poor leadership: The union leadership was seen by the employees as being distant to their needs and were perceived to have lost touch with their constituency. This led to the employees taking matters into their own hands and forming their own committee. The perception of this poor leadership also contributed to members leaving NUM and searching for a new representation.
Moderators

In his view the moderating factor was the presence of the church, and the role the church played in trying to assist the workers. The fact that the workers had not been paid for a period meant that they could not sustain themselves any longer.

2.6.2 Maslow’s Theory of Needs

The basic personal security needs of the Rustenburg Platinum mineworkers during the strike were inextricably tied to organisational justice. In fact, Wahba and Bridwell (1976) reported that there was little evidence for Maslow’s ranking of these needs and even less evidence that these needs were in a hierarchical order. There is a need to account for the needs of striking mine employees beyond safety and physiological needs in Maslow’s Hierarchy, as described by Finkelstein (2006). Whereas it can be argued that management has to ensure that the mining employees have not experienced hunger through ‘starvation wages-for-profit’, the resultant behaviour in violent strikes cannot be solely accounted for on the basis of these Safety and Physiological Needs:

The uncritical acceptance of Maslow’s need hierarchy theory despite the lack of empirical evidence is discussed and the need for a review of recent empirical evidence is emphasized. A review of ten factor-analytic and three ranking studies testing Maslow’s theory showed only partial support for the concept of need hierarchy. A large number of cross-sectional studies showed no clear evidence for Maslow’s deprivation/domination proposition, except with regard to self-actualization. Longitudinal studies testing Maslow’s gratification/activation proposition showed no support, and the limited support received from cross-sectional studies is questionable due to numerous measurement problems. (Wahda & Bridell, 1976: 212)

This development requires going beyond Maslow’s theory and complementing it with Icek Ajzen’s Behaviour Planning Theory. The latter, this study shows, provides alternatives rather than merely describing the root problems in the mining sector.
2.6.3 Behaviour Planning Theory

Two pillars of measurement and scaling: the Ajzen Questionnaire and the mapping of insecurity on the Maslow hierarchy. Union instability as a function of union-joining and/or desertion are linked to violence and intimidation that can be traced to failure of and fissures in planned behaviour and extreme ontological insecurity. Crispen Chinguno has noted that:

The other workers were drawn into the strike partly through coercion, intimidation and persuasion. The workers managed to connect the strike to the broader community struggles and further elevated the action. An unemployed member of the community explained: "we saw that it was clear the police were prepared to use brutal force; as a result we had no choice as a community, we had to support the cause of the workers. (Chinguno, 2013: 160).

Solidarity on the basis of collectivism and the need for the security of belonging to a union indicate a heightened paradox in that intimidation and violence have, at critical points of the Rustenburg Platinum Mines strike, far outweighed persuasion. In order to explain this in measurable indices, it is necessary to accept a priori that “The problem of worker fragmentation and social distance is important in understanding the underlying dynamics” (Chinguno, 2013: 161). Therefore, the proper rationale for a confluence of Maslow’s hierarchy with Icek Ajzen’s Theory of Planned Behaviour is that streamlined behaviour, no matter how well-synergized, requires a measure of baseline security for employees in a volatile environment of violent labour strikes. It makes sense, then, to go beyond contingency planning and the rigours of the application of the Theory of Planned Behaviour. It is worth looking at the diagrammatic programming of behaviour below, assuming that there is no instability or overwhelming environmental threats in the context of John Brand’s triggers (also read as Predictors within Ajzen’s PBT). This assumption rests on the principle of *caeteris paribus*, which predicates conditions of rational and objective measurement to the point where all things are equal.

In this study, all things being equal means:

(a) All labour relations in Rustenburg platinum Mines being sound and articulating to stability;

(b) All Rustenburg Platinum Mines employees being fairly represented by their union of choice;
(c) All union-led interventions and bargaining processes being constitutive of planned behaviour in relation to the working environment;

(d) All union employees being in a secure environment; and

(e) All bona fides being in order on the part of all parties involved in a Rustenburg Platinum Mines labour strike.

Therefore, the Behaviour Planning model followed throughout assumes all these assumptions to hold true, if only to facilitate streamlined measurement as per imperatives of qualitative study (figure 4).

**Figure 4: Behaviour planning ‘routes’**

Source: (http://people.umass.edu/aizen/tpb.diag.html)

In a study that used the theory of Ajzen’s planned behaviour (Ajzen, 1991) as a theoretical framework for understanding retaliation in the workplace, Jones (2003) investigated how employees’ perceptions of unfair treatment predicted their decisions to retaliate against their supervisors and organisation. He also tested whether individuals who perceive different types of injustice direct their retaliation at different targets in order to account for other contextual factors. This is very useful for this study, especially noting that the theory of planned behaviour (TPB, Ajzen, 1991) states that behavioural intentions are the most immediate precursor of behaviour and, in turn, intentions are predicted by behavioural control, expected utility, and perceived norms. His elucidation of precursors becomes even more relevant when he contextualizes it:
As applied to retaliation, behavioural control refers to beliefs about the existence of safe opportunities to “get back”. Support for behavioural control as a predictor of retaliation comes from studies showing that employees who perceived a low, rather than high, chance of punishment were more likely to model co-workers’ anti-social behaviour (Robinson & O’Leary-Kelly, 1998—quoted in Jones, 2003).

At the beginning of 2014, platinum sector mine workers who belonged to AMCU and who were seeking organisational justice went on strike to compel employers to increase entry level wages to R12 500 a month (what they referred to as a living wage). The strike continued for a period of five months before an agreement was reached (McKay, 2014). In the intervening period, there was violence and even intimidation that resulted in fatalities that indicated loss of both income, life and – most of all – behavioural control in the Rustenburg Platinum Mines environment. It is noteworthy that Eddie Webster (2013: 210) looks askance at the fact that while the new labour regime promotes centralised bargaining and through the Sector Education Training Authorities (SETA) unions and employers are involved in the supply of skilled labour, no systematic attempt has been made to introduce employees into company boards and the introduction of employee representation to enterprise failed to develop (Macun 1998, Webster and Macun 1998, Klerk 1999, Psoulis et al 1999—cited in Webster 2013). Instead, in the case of Rustenburg Platinum Mines, we find an awkward situation where a former NUM leader sits on the board, consents to and receives extravagantly excessive executive bonuses and stands contrary to the interests and security of mineworkers at Rustenburg Platinum Mines.

The Normative Beliefs of striking workers were driven by the subjective norm of a ‘Minimum Living Wage’ (figure 5). The Control Beliefs were that the employers were unreasonable vis-à-vis market forces that allow for hefty CEO bonuses and the Perceived Behavioural Control was regulated by job retention at low wages.
However, NUM conflated Control Beliefs with Perceived Behavioural Control, which resulted in an Intention to negotiate through terms that were already deemed unreasonable. This, according to Icek Ajzen’s (1991) theory of planned behaviour, is responsible for the Attitude toward the rebellious behaviour of members towards NUM which, in turn, resulted in the Intention to Strike rather than negotiate. Breaking the subjective norm meant breaking ranks with NUM, in order to operationalise the intention to strike. This propensity constitutes what David Jones (2003) in the fashion of Ajzen (1991) calls "Expected utility" which refers to the extent to which an individual believes that the outcomes of retaliating are worth the potential costs.

Source: John Brand (2013)
According to Jones (2003), the theory of planned behaviour (TPB, Ajzen, 1991) states that behavioural intentions are the most immediate precursors of behaviour and, in turn, intentions are predicted by behavioural control, expected utility and perceived norms. As applied to retaliation, behavioural control refers to beliefs about the existence of safe opportunities to “get back”. Support for behavioural control as a predictor of retaliation comes from studies showing that employees who perceived a low, rather than high, chance of punishment were more likely to model co-workers’ anti-social behaviour (Robinson & O’Leary-Kelly, 1998—quoted in Jones, 2003).

What the workers were demanding had nothing to with market forces per se, but everything with the subjective norm behind the intention to strike that is “getting back” in the name of organisational justice which they felt the mining houses owed them.

These workers had the temerity to claim equivalence. Some commentators quickly noted the symbolic value of the R12, 500 that the striking miners demanded: R12, 500 is the average income of South Africa’s white citizens—three hundred percent more than the average amount paid for the work of the Marikana dead. This was a bold demand, at which Rustenburg Platinum Mines management, some in the ruling party, the media and the National Union of Mineworkers (NUM) scoffed. (Magaziner & Jacobs, 2013: 139).

It was inevitable that the platinum sector strike resulted in many mine workers opting to change their union membership from the more established NUM to AMCU (De Lange, 2012; Steyn, 2013). NUM is an alliance partner of the ANC through its affiliation to Cosatu. The ANC is South Africa’s ruling party. AMCU, on the other hand, was formed by disgruntled coal mining leaders of NUM in 1998 (De Lange, 2013).

The change of union membership that took place in the platinum industry suggests that the younger generation of workers do not necessarily feel indebted to the NUM and its political association with the ruling party and feel that NUM has lost touch with the concerns of their electorates (Peyper, 2012). It seems that they are simply expecting delivery from the leaders that they have elected, as per the Normative Beliefs they hold about accountability. Cregan (2013) further explains this as the weakening of exchange relationships that leads to union leaving behaviour.

The Department of Labour (2013) attributes the unrest in the mining sector to high unemployment levels, the high cost of living, income inequality and large-scale migration to
mining communities by jobseekers as contributory factors, with spill-over effects into related industries. This is evident in the mining sector due to its history with a migrant labour force and, though not mentioned, high levels of debt in the unsecured loans market further aggravates the situation.

These events, including those experienced at Marikana in August 2012, where 34 people lost their lives after being shot by police, and the more recent platinum strikes, in 2014, necessitated an investigation into the dynamics underlying union affiliation and conduct. The continued high levels of violence and intimidation have not only adversely impacted on mine employees, but on mine productivity levels as well, leading to a drop in mining company share prices. Their profitability levels also impacted on their taxation contributions.

2.6 Conclusion

Based on the review of the literature in this chapter, there are relationships which are extracted on the basis of the values of fairness they exhibit in support of employees beyond distributive justice and procedural justice. In their relentless pursuit for organizational justice, unions themselves had to prioritize what Wang & Law (2008) frame as interpersonal and informational justice affects the extent to which employees identify with an organization. As it applies to the employer-employee relations, organisational justice drives the perceived concept of fairness which is associated with the decision outcome with regard to wage increases, absorption of temporary precariat employees, and retention vis-à-vis retrenchment. It must be noted that organizational justice applies with equal measure to unions that do not protect employees but intimidates them when negative decisions are communicated by the employer.

These decisions, for instance, could be based on the perceived failure of the erstwhile majority union like NUM to advance the interests of the mineworkers. In addition, there are relationships between the needs of the employees, and their planned behaviour, which is driven by a situation they found themselves in, based on their own understanding and justification. This happened within a legitimate platform of the right to strike, as provided by the LRA in South Africa, but was influenced negatively by the manifestation of disregard for the law. This seems to be true for the mineworkers, within the ambit of union, which is trying to ensure that they remain relevant by having a voice in the bargaining union. The
mineworkers trust that the union will advance their interests as part of an organizational justice agenda that, according to Meyer (2001) maintains an interest in how resources are allocated.
CHAPTER 3

RESEARCH HYPOTHESES OF THE STUDY

3.1 Introduction

The research hypotheses of the study are presented in this chapter. These hypotheses were formulated after the development of the problem statement in chapter 1. The research questions or hypotheses are critical, as they provide a clear link to the relevant literature and promote a fresh insight into the chosen topic (Saunders and Lewis (2012). In essence, the research questions and hypotheses are the researcher’s translation of the business problem into a specific need for an inquiry.

3.2 Construction of hypotheses

Cregan (2013) argues that the development of exchange relationship between unions and workers leads to union joining behaviour, the conditions of exchange are not always benign and in the form of union bargaining. Aggressive behaviour and the weakening of exchange relationship leads to union leaving behaviour. Therefore, industrial action on its own does not solely influence union joining and leaving behaviour by the impact on exchange relationship. The dimension of violence and intimidation can be better explained through Icek Ajzen’s Theory of Planned Behaviour, especially when the attitude and intention can determine behaviour.

Attitudes of intolerance with anyone else that is not a member of either NUM or AMCU shapes intentions. According to Jones (2003), the theory of planned behaviour (TPB, Ajzen, 1991) states that behavioural intentions are the most immediate precursor of behaviour and, in turn, intentions are predicted by behavioural control, expected utility and perceived norms. The behavioural intention to join either NUM or AMCU is for bargaining in the first instance because the expected utility is an improvement in working conditions and wages—based on the perceived norm that collective bargaining through unions is far more effective than individual skills or intervention. However, as Webster (2013) indicates, better skilled workers
are held back by the general collectivist stance that does little to reward specialised skills but only guarantees rising through the ranks through union careerism.

In her path-breaking paper, “Does workplace industrial action increase trade union membership”, Cregan (2013) examines the impact of industrial action on membership behaviour, "in the form of joining (by non-members) and leaving by members" (2013: 3363) in developed countries. In the present hypothesis and in the Rustenburg Platinum Mines context, joining by non-members refers to joining AMCU and leaving by members is limited to NUM. Following greater prospects for wage increase through Bargain Council agreements in the wake of the Wiehahn Commission, workers had the behavioural control belief modified by the expected utility of a qualitative improvement of working conditions and a quantitative increase of wages. After all “The LRA did not make any provision whatsoever for any other form of worker representation for the purpose of collective bargaining outside the union structure.” (Samuel, 2013: 242). The expected utility of wage increase is therefore translatable into a legitimate expectation, incumbent especially incumbent upon union-joining.

Eddie Webster’s (2013) study has shown that workers within Rustenburg Platinum mines’ are all exposed to different forms of violence, depending on whether they are the target of the rival organisation or not. Implicitly or explicitly, being a member of either NUM or AMCU renders the risk of exposure to violence and intimidation inordinately high. Joining either union distributes risk evenly across rival unions. Although, this is the case, Lamontagne (2010) indicated that employees most affected by intimidation apply were lower category employees compared to the higher category employees. Whereas these findings from Lamontage (2010) have indicated that lower-grade category employees are the most affected reports (Berstein, 2013) indicates that even higher income category employees who also hold leadership positions in unions like NUM and AMCU feel the greatest pressure and exposure to conflict.

Based on the literature review in chapter 2, the conceptual framework the following can be formulated and depicted in figure 6.
Within the conceptual framework the Research Model of Constructs are discussed:

Independent variable = Joining of the intimidating union

= Low level rank employees

Dependent variable = Experience of intimidation and violence

Mediating variables = Direct measurement of attitude and intentions (DMAI), Subjective norm (Snorm), Normative beliefs (Nbelief) and Behavioural belief (Bbelief)

3.3 Hypotheses of the study

Based on the above objectives, emanated from the problem statement, three hypothesis were formulated for the study as follows:

Hypothesis 1

Employees who feel intimidated are more likely to join the intimidating trade union.
$H_{01a}$: Employees who feel intimidated are more likely to join the intimidating trade union

$H_{A1a}$: Employees who feel intimidated are less likely to join the intimidating trade union

$H_{01b}$: There is a positive relationship between employee being subject to intimidation and perception of the current union being intimidating with Behavioural belief, normative belief, Subjective norm, and direct measurement on attitude and intentions as predictors.

$H_{A1b}$: There is no positive relationship between employee being subject to intimidation and perception of the current union being intimidating with Behavioural belief, normative belief, Subjective norm, and direct measurement on attitude and intentions not predictors.

Hypothesis 2

Lower level task grade employees are most likely to feel the effect of intimidation than employees on a higher task grade levels.

$H_{02}$: Lower level task grade employees are more likely to feel the effects of intimidation than employees on a higher task grade levels sharing.

$H_{A2}$: Lower level task grade employees are less likely to feel the effects of intimidation than employees on a higher task grade levels sharing.

3.4 Conclusion

This chapter stated the study research hypothesis which was based on the theoretical framework which was developed from the empirical evidence that was gleaned from the literature review on intimidation and violence in the platinum mining industry.
CHAPTER 4
RESEARCH METHODOLOGY

4.1 Introduction

This chapter discusses the research methodology and design that was used to investigate the impact of intimidation and violence during strike action and their effects on union membership in the platinum mining industry. There are generally two approaches in social science, which are the deductive and inductive approaches (Gray, 2009). The main difference between inductive and deductive approaches to research is that, whilst a deductive approach is aimed at testing theory, an inductive approach is concerned with the generation of new theory emerging from the data.

For deductive approaches the emphasis is generally on causality, whilst for inductive approaches the aim is usually focused on exploring new phenomena or looking at previously researched phenomena from a different perspective. Inductive approaches are generally associated with qualitative research, whilst deductive approaches are more commonly associated with quantitative research. For the purpose of this study the deductive approach was followed. The approach adopted in the study includes the formulation of the hypothesis (chapter 3), after which the observation or data is collected. This data is analysed and the results indicate whether the hypothesis is confirmed or rejected (figure 7).

**Figure 7: Deductive and Inductive research approaches**

![Diagram of deductive and inductive research approaches]

Source: Gray (2009)

4.2 Research method and design
The study used the quantitative research method, which refers to the systematic empirical investigation of social phenomena via statistical, mathematical or numerical data or computational techniques (Given, 2008). By definition, measurement must be objective, quantitative and statistically valid. An exploratory research design was chosen to explore the impact of violence and intimidation in strike actions and their effect on union membership in the Platinum Mining Industry. This type of design is useful both in establishing preliminary answers to situation and in its own right, that is, to establish answers to research problems that are relatively new or unexplored (Leedy & Ormord, 2010).

Welman (2005) suggests that the research design must be appropriate for the problem and be described clearly in respect of (a) sampling procedures; (b) classification of respondents or assignment of participants to groups; (c) appropriate interventions or measuring instruments administered to subjects and (d) the issues of both internal and external validity. The research methodology and design is given in table 1.

<table>
<thead>
<tr>
<th>Research design</th>
<th>Quantitative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research type</td>
<td>Descriptive</td>
</tr>
<tr>
<td>Research method</td>
<td>Cross-sectional survey design</td>
</tr>
<tr>
<td>Survey technique</td>
<td>Questionnaire / Self-administered</td>
</tr>
</tbody>
</table>

Source: Saunders & Lewis, 2012

4.3 Unit of analysis

The unit of analysis presents the object phenomena, entity process or events the researcher is interested in studying. Zikmund (2003) identified four different types of units of analysis, namely individuals, groups, organisations and artefacts. In this study, the units of analysis are mineworkers in the platinum industry in the Rustenburg area.
4.4 Population of the study

A population is the complete set or group of members that the research will be conducted on (Saunders and Lewis, 2012). A population is the complete set or group of members that the research will be conducted on (Saunders and Lewis, 2012). The population of relevance will consist of NUM, AMCU, UASA, Solidarity and any other trade union that may form part of the bargaining unit in Anglo American Platinum and Lonmin Platinum in the Rustenburg region of the South African Platinum mines.

4.5 Sampling method and size

Convenience sampling was used to establish an approximation of reality. Members of such samples are chosen primarily because they were available and willing to participate in the study (Weiers, 2007). The researcher used the opportunity of to approach the employees in the “waiting” area both in the morning and afternoon over a period of a week. The waiting area is the dedicated area where the employees wait to going inside the shaft of the mine for their start of the shift, while in the afternoon on end of the shift, willing employees were requesting to respond to the questionnaire. Employees were invited to participate voluntarily in the research, from a “captive audience” of employees present at the time of the research, to obtain quantitative data on the reasons for the current trade union affiliation and what impact intimidation and violence plays, as a matter of convenience. This non-probability research method does not depend upon the rationale of probability theory (Trochim, 2006). Respondents were selected based on availability and willingness to participate in the research.

The guideline as provided by Leedy and Ormond (2010), from Gay and Airasian (2003) were used to determine the size of the sample. This guideline indicates that when a population is beyond 5 000, the population size is almost irrelevant, it is recommended that a sample size of 400 should be adequate. With the total population of the mineworkers in the study site being more than 5000, the 400 sample was applicable. In the study there were 504 respondents from the convenient selected sample.
4.6 Measuring instrument

The measuring instrument includes the design of the data collection instrument, the collection method and its reliability and validity. The benefit of a questionnaire (survey) is that it can be administered either through the web, postal service, telephonically or by hand (Saunders & Lewis, 2012). In this case face-to-face interview by hand was used to collect the data from the mineworkers.

4.6.1 Questionnaire design

Three main sections of the instrument were included in the proposed structure of the questionnaire (see Appendix A). These are broken down into the following sections:

- Introduction, instructions and ethical considerations. This section introduces and explains the purpose of the research and also explains ethical consideration issues, which indicates that the participation is voluntary, that the participants have the right to withdraw at any time, and that the information would be kept anonymous and confidential.

- Biographical details. This section is meant to profile participants, and obtains the following information: gender, age, tenure in the company, type of employment, occupation level or task grade, current union membership, number of years in a union, understanding if the respondent changed to a different union in the past three years, and experiences of intimidation and violence.

- The core section (section B) of the questionnaire consisted of unique variables that are tied to the hypothesis identified for the study. These questions were all statement-based and were evaluated by the participants using a seven-point Likert scale, 1 = strongly disagree, 4 = neither disagree nor agree and 7 = strongly agree.

4.6.2 Data collection

Several studies showed that face-to-face administration results in higher response rates compared to the web-based collection (Dommeyer et al., 2004). The data was collected in the mine using a self-administered questionnaire, in the “waiting” area of the shaft at
Thembelani, Khuseleka, and a desk in BMR plant at Lonmin, as there were readily available electronic infrastructure to the respondents, the data collection was done manual, through a face-to-face administered questionnaire. The data was collected on during week 38, from the 29 September to 03 October 2014. This data was collect by a group of research assistant with the researcher of this study.

4.6.3 Validity and reliability

Validity is the extent to which the research findings accurately present what is happening (Welman et al. 2005). The author particularly emphasises the importance of construct validity, a concept which refers to the notion that the instrument used to measure must measure that which it is supposed to measure, while Welman et al. (2005) indicates that reliability relates to the credibility of the research findings. If the research is repeated, the same results as in the original research should be obtained. The research instrument must be reliable, such that there is stability and consistency in the measurement.

Cronbach’s alpha was used for reliability analysis, as it is the most commonly used in studies (Tavakol & Dennick, 2011). Cronbach’s alpha coefficient alpha is a measure of the internal consistency of a measurement, it measures the degree to which all items in a measurement measure the same attribute (Saunders & Lewis, 2012; Welman et al., 2005). The actions taken to ensure the validity and reliability were as follows:

- Sampling was conducted in line with statistically acceptable guidelines as cited by Leedy and Ormord (2003).

- The design questionnaire was submitted to two experts to ensure the alignment and relevance to the study being conducted. The recommendations from these experts were incorporated into the questionnaire.

- The measuring instrument was pre-tested for construct validity of the dependent variables. The recommendations were incorporated into the final questionnaire.

- Face validity was achieved by cursory review of the questions of the survey instrument (Welman et al., 2005). A group of colleagues and relatives was asked to read the questions and make their judgement about whether the questions were relevant and made sense. Amendments were done, based on the recommendations from this group.
The data analysis using the statistical tools was verified by the external expert.

4.7 Ethical considerations

Ethical considerations were two-fold in this study. Firstly, permission was sought and granted by the university, GIBS Ethics Committee and the approval letter is attached in appendix 2. Secondly, the guidelines as provided by Leedy and Ormord (2003) were followed, which include ensuring that participation in the questionnaire was expressly noted as being voluntary, and withdrawal could take place at any time without penalty. Participants were assured of anonymity and that all data would be kept confidential.

4.8 Data analysis

The returned questionnaires obtained from the face-to-face administered questionnaire were coded and exported to the statistical software for social science (SPSS) version 22 and AMOS 22 for structural equation modelling (SEM).

4.8.1 Cronbach’s alpha coefficient

The first test conducted was the Cronbach alpha to evaluate the data’s internal consistency and reliability. This is an important test, as it gives an indication of whether the data is accepted to be used for further analysis. The Cronbach’s alpha coefficient of internal consistency is used when all scale items have been standardised. Table 2 gives guidelines based on the rule of thumb by George and Mallery (2003), which were employed to determine the status of the data.

Table 2: Guidelines for internal consistency

<table>
<thead>
<tr>
<th>Cronbach’s alpha</th>
<th>Internal consistency</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \alpha \geq 0.9 )</td>
<td>Excellent</td>
</tr>
<tr>
<td>( 0.87 \leq \alpha \leq 0.9 )</td>
<td>Good</td>
</tr>
</tbody>
</table>
Based on these guidelines, all the relevant data for the study was found to have internal consistency and reliability and was utilised to test the proposed hypotheses as articulated in chapter 3.

### 4.8.2 Factor analysis

Factor analysis was used to reduce the factors and extract the key constructs for the study. The suitability of the factor analysis was conducted by employing the Kaiser-Meyer-Olkin (KMO) and Bartlett’s test for sphericity (DiStefano, Zhu, & Mindrila, 2009). These two tests indicate the suitability of the data from this study for structure detection. The KMO measure of sampling adequacy indicates the proportion of variance in the variables that might be caused by underlying factors. In this measurement high values close to 1.0 are generally indicative of factor analysis as a useful instrument for the data. It is a norm that, when this value is less than 0.5, the results of the factor analysis might not be very useful, while Bartlett’s test of sphericity shows the significance of the study, with value of less than 0.05.

Only loadings above 0.3 were considered. Some items load upon more than one factor/component. Six factors were extracted. These factors were Power of control (factor 1), Outcome evaluation (factor 2), Attitude and intention (factor 3), Behavioural belief (factor 4), normative beliefs (factor 5), subjective norm (factor 6). A seventh factor was the repetition of the behavioural beliefs, so only one was used.

<table>
<thead>
<tr>
<th>$0.7 \leq \alpha \leq 0.8$</th>
<th>Acceptable</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.6 \leq \alpha \leq 0.7$</td>
<td>Questionable</td>
</tr>
<tr>
<td>$0.5 \leq \alpha \leq 0.6$</td>
<td>Poor</td>
</tr>
<tr>
<td>$\alpha \leq 0.5$</td>
<td>Unacceptable</td>
</tr>
</tbody>
</table>

### 4.8.3 Descriptive statistics

Several descriptive statistics were employed in the study. For the nominal data, which included the demographic information, the frequency analyses were conducted to
understand the profile and the response of the respondents. For the ordinal data, mean scores, with their standard deviation, the skewness, and kurtosis were computed. According to Zikmund (2003), descriptive statistics provide a summary of data in the form of frequency distributions, measures of central tendency and dispersions, and provide the following definitions for frequency, mean and standard deviation. These are critical to understanding the state of the measurement.

4.8.4 Relationship of variables

The following statistical tests Chi-squared, Pearson product correlation and linear regression were used to analyse the data and conduct hypotheses testing. The chi-squared to test the existence of a relationship between the variables of nominal / nominal data and the nominal / ordinal data, while for a high rank order data Pearson correlation was used. Employees who feel intimidated are more likely to join the intimidating trade union and lower level task grade employees are most likely to feel the effect of intimidation than employees on a higher task grade levels sharing.

Additionally, Structural Equation Modelling (SEM) was used to explain the relationship among multiple variables. Because the SEM is applied the researcher was able to assess the contribution of each indicator variable in representing the associated construct and how well the combined set of indicator variables represent the construct (Anderson, Babin, Black, & Hair, 2010).
4.9 Research limitations

As the study was using the face-to-face questionnaire, it was costly and time consuming and, as a result, the study evaluated one of the selected platinum mines in Rustenburg. Despite these limitations, the theoretical knowledge that is gained will enhance the understanding of the impact of intimidation and violence during strikes and their effects on union membership in the platinum mining industry.

Efforts were made to ensure the validity and reliability of the study. Although this was done, the threats to internal validity may have been impossible to avoid completely. The following are worth noting:

- Honesty or willingness to answer truthfully might have been impacted due to the rivalry between NUM and AMCU members, because employees had just come back from a five-month long strike and they might be reluctant to openly share confidential information which might still be perceived as current.

- The use of field workers to explain the questionnaires to operator level respondents might have led to some distortion of the understanding of the questionnaire and the failures to respond to the actual statements.

4.10 Conclusion

The approach of the research methodology and design was outlined in detail as to how the research was conducted. The measuring instrument employed, including its design and data collection method, is explained. Furthermore, the validity and reliability of the study, including the action taken to ensure the validity and reliability, was explained. The area of research, including the population and sample, was discussed. The data collection and analysis methods were explained. The ethical considerations of the study were also discussed. At the end of the chapter the research limitations were discussed.
CHAPTER 5

RESULTS OF THE STUDY

5.1 Introduction

The aim of the study was to investigate the impact of violence and intimidation during strike actions and their effect on union membership in the platinum mining industry. The findings of this quantitative study are presented in this chapter. The chapter begins by describing a test for the internal reliability and consistency of the data. Subsequently, the descriptions of categorical data, as well as inferential statistical analysis results, are presented, focusing on the relationship statistics. As there was no electronic infrastructure readily available to the respondents, the data collection was done manually, through a face-to-face administered questionnaire. Several studies showed that face-to-face administration results in higher response rates (Dommeyer et al., 2004).

5.2 Descriptive statistics for respondents’ profiles

Three categories of profiles were analysed in the resulting ten variables. The three categories were the personal information of respondents, union membership profile, and experience of intimidation and violence during strikes. In the personal information category, gender, age group, years of service in the company, type of employment and the grade were analysed. The next category, which is union membership, consists of the name of the union affiliation, number of years as a union member, and whether the respondents changed union membership in the past three years. For the last category, the variables are whether the respondents have experienced intimidation and violence during strikes and whether intimidation and violence were the main reasons the respondent joined the union.

5.2.1 Personal profile of the respondents
The sample the gender profile of the respondents comprised of 60.32% (N = 304) males and 39.68% (N= 200) females (figure 8). Thus the ratio of males to females is three to two.

**Figure 8: Gender profile of the respondents**

![Gender profile](image)

The age groups of the respondents are depicted in figure 9. The majority of the respondents, which consisted of 35.05% (N = 177), were within an age band of 31 – 40 years. Furthermore, 30.30% (N = 153) were 30 years or less. This meant that almost two-thirds of the total respondents were 40 years or less

**Figure 9: The age bands of the respondents**

![Age bands](image)

The rest of the respondents, were 20.59% (N = 104) and 14.06% (N = 71), for age band of 41 – 50 years and more than 50 years, respectively.
Focusing on the tenure of the respondents, about 62% (N = 311) had five years’ experience in the company or less than five years. The employees with more than five years, where divided into two bands, those with six to ten years and those with more than 10 years. The ones with six to ten years comprised of 21.23% (N = 107), while those above ten years were 17.06% (N = 86)

**Figure 10: The tenure of the respondents in the company**

The next variable for the personal profile was the type of employment, which was either a permanent, fixed term or labour hire. More than 80% (N = 412) of the respondents were permanent employees, while the other 20% (N = 92) is the combination of the contract employees and labour hire.

**Figure 11: Type of employment of the respondents**
The last personal variable, was the employment grade of the respondents, which was divided into four levels, the operators (Level A1 – A8), drillers and loco drivers (Level B4 – B8), miners (Level C1 – C5) and then shift supervisors (Level D1 – F).

**Figure 12: Employee levels of the respondents**

![Pie chart showing distribution of respondents by employment grade.

The operators consisted of 34.26% (N = 173) of the total respondents, while the drillers and loco driver were 30.50% (N = 154). This means about 65% of the respondents were operators, drillers and loco drivers. The next group of the respondents consisted of miners which consisted of 24.36% (N = 123) and then the supervisors at 10.89% (N = 55).

In summary, the majority of the respondents were males of 40 years or less, with five years or less in the company, employed on a permanent basis as operators, drillers or loco drivers.

### 5.2.2 Union membership profile of the respondents

As the union membership in the platinum industry is critical in the study, a profile of union membership of the respondents was also established. These three variables, which were name of the union, number of years as a union member and whether the respondent changed their union membership in the past three years, are given in Figure 13-15.

The majority of the respondents belong to either AMCU or NUM. The combination of these two union memberships from the respondents is about 80% (N = 406). In these two main unions AMCU comprised 48.8% (N = 247) of the respondents, while NUM comprised 31.4 (N = 159). The third most represented union with the respondents was UASA, with 7.92%
(N = 40), then Solidarity with 0.59% (N = 3). Other unions to which respondents belonged comprised 7.33% (N = 37). However none of the 37 respondents specified these other unions. There is a further 3.76% (N = 19), which did not say which union they belonged to.

**Figure 13: The profile of the union membership of the respondents**

The other two variables was how long the respondents have been members of the unions and whether they have changed their union membership in the past three years (figure 14 and 15)

**Figure 14: Number of years as a union member**
Based on the results, about a third (31.29%) of the respondents have been union members for the past three to five years, while the other third (29.31%) have been union members for the past two years or less. The last third includes members who have been part of the union for six years or more.

In addition, 64.09% of the respondents have changed their union membership in the past three years, while 35.91% stayed with the same union. This means there is a three-to-two ratio for the respondents who changed the union membership to those who kept the same union membership.

In summary, the majority of the respondents belonged to AMCU and NUM, were part of the unions for the past five years, and have changed their union membership in the past three years.

5.2.3 Union membership profile of the respondents

Moreover, the experience of intimidation and violence by union members during strikes was critical to the investigation in the study. The profiles of the responses are given in figure 16 and figure 17.
Figure 16: Respondents’ experience of intimidation and violence during strikes.

The critical questions were “Have you experienced intimidation and violence during the strike?” and “Was intimidation and violence the main reason you joined your union?”.

Figure 17: Whether intimidation and violence was the reason respondents joined the union.

More than three-quarters (76%, 14%, N = 383) of the respondents have experienced intimidation and violence during the strike, while the last quarter (23.86%, N =120) have not experienced intimidation and violence during the strike. Among these respondents, 57.34% (N = 285) indicated that they joined the union because of the intimidation and violence, while 42.66% (N= 212), were not driven by intimidation and violence to join the union.
In summary, the majority of the respondents indicated that they have experienced intimidation and violence during strike action and have joined the union because of violence and intimidation.

5.3 Factor analysis

The KMO measure of sampling adequacy was 0.9134, indicating that the correlations were adequate for factor analysis. Bartlett’s test was used to indicate sufficiency of the correlations. The test gave a p-value = 0.000 (<0.05) which led to the rejection of the null hypothesis of lack of sufficient correlation. Thus the results of both tests look good and the factor analysis can proceed (table 3)

Table 3: Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett’s Test of Sphericity

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</th>
<th>0,913</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bartlett’s Test of Sphericity</td>
<td></td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
<td>13488,563</td>
</tr>
<tr>
<td>Df</td>
<td>780</td>
</tr>
<tr>
<td>Sig.</td>
<td>0,000</td>
</tr>
</tbody>
</table>

5.3.1 Creation of constructs

The measuring instrument (appendix 1) have the 40 questions excluding the biographical information, and included seven sub-sections, outcome evaluation, direct measures (perceived behavioural control, subjective norm, attitude and intention), intention, motivation to comply, behavioural beliefs, Control beliefs, power of control factors and normative beliefs. The details of the seven sub-sections are given:
<table>
<thead>
<tr>
<th></th>
<th>Title</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Outcome Evaluations</td>
<td>B1, B2, B3, B4, B5, B6, B7, B8, B9, B10</td>
</tr>
<tr>
<td>2</td>
<td>Direct Measures of Perceived Behavioural Control, Subjective Norm, Attitude, and Intention</td>
<td>B11, B12, B13, B14, B15, B16, B17, B18, B19</td>
</tr>
<tr>
<td>3</td>
<td>Motivation to Comply</td>
<td>B20, B21, B22, B23</td>
</tr>
<tr>
<td>4</td>
<td>Behavioural Beliefs</td>
<td>B24, B25, B26, B27, B28, B29, B30</td>
</tr>
<tr>
<td>5</td>
<td>Control Beliefs</td>
<td>B31, B32, B33</td>
</tr>
<tr>
<td>6</td>
<td>Power of Control Factors</td>
<td>B34, B35, B36, B37</td>
</tr>
<tr>
<td>7</td>
<td>Normative Beliefs</td>
<td>B38, B39, B40</td>
</tr>
</tbody>
</table>
A rotational component matrix was conducted, and factored the loadings upon each factor (table 4).

Table 4: Rotational component matrix

<table>
<thead>
<tr>
<th>Item</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>B36. When work or employment placed unanticipated risks on my personal safety, it makes it more difficult for me to join a union on a voluntary basis</td>
<td>.866</td>
<td>.004</td>
<td>-.006</td>
<td>-.006</td>
<td>.235</td>
<td>.021</td>
<td>-.058</td>
</tr>
<tr>
<td>B37. If higher income categories at Rustenburg Plutinum Mine provided security, it would make it more difficult for me to join a Union on a voluntary basis</td>
<td>.827</td>
<td>-.019</td>
<td>.105</td>
<td>.109</td>
<td>.175</td>
<td>-.008</td>
<td>.007</td>
</tr>
<tr>
<td>B38. The shop steward of a union thinks I should join them on a voluntary basis</td>
<td>.815</td>
<td>-.011</td>
<td>.018</td>
<td>.042</td>
<td>-.015</td>
<td>.008</td>
<td>.046</td>
</tr>
<tr>
<td>B39. If I feel threatened, vulnerable or targeted during strikes, I would make it more difficult for me to join a union on a voluntary basis</td>
<td>.789</td>
<td>.125</td>
<td>-.078</td>
<td>-.125</td>
<td>.087</td>
<td>.115</td>
<td>.006</td>
</tr>
<tr>
<td>B40. When I encounter unexpected events that placed demands on my time, it would make it more difficult for me to join a union on a voluntary basis</td>
<td>.776</td>
<td>.122</td>
<td>-.128</td>
<td>-.098</td>
<td>.243</td>
<td>.076</td>
<td>-.042</td>
</tr>
<tr>
<td>B41. Joining a union on a strict basis subject me to the treasurers political speeches and sloganeering</td>
<td>.736</td>
<td>-.015</td>
<td>.001</td>
<td>.055</td>
<td>-.174</td>
<td>.132</td>
<td>.351</td>
</tr>
<tr>
<td>B42. Joining a union makes me to miss out on Rustenburg Plutinum Mine employee activities outside of the union</td>
<td>.650</td>
<td>.027</td>
<td>.343</td>
<td>.192</td>
<td>-.054</td>
<td>-.230</td>
<td>.257</td>
</tr>
<tr>
<td>B43. I have been subjected to violence and intimidation in the mine during the strike</td>
<td>.583</td>
<td>.050</td>
<td>.162</td>
<td>.123</td>
<td>-.087</td>
<td>-.141</td>
<td>.468</td>
</tr>
<tr>
<td>B44. I join or leave a union on a voluntary basis without fear of intimidation</td>
<td>.509</td>
<td>.226</td>
<td>.090</td>
<td>.294</td>
<td>.258</td>
<td>.240</td>
<td>-.171</td>
</tr>
<tr>
<td>B45. I do not mix union meetings with shop stewards and other employees in this mine</td>
<td>.495</td>
<td>.245</td>
<td>.008</td>
<td>-.013</td>
<td>-.122</td>
<td>.217</td>
<td>-.038</td>
</tr>
<tr>
<td>B46. Joining a union on a voluntary basis gives me an opportunity to peacefully interact with the Union shop steward and other employees in the mine</td>
<td>.409</td>
<td>.794</td>
<td>.073</td>
<td>.218</td>
<td>.126</td>
<td>.131</td>
<td>.212</td>
</tr>
</tbody>
</table>

© 2014 University of Pretoria. All rights reserved. The copyright in this work vests in the University of Pretoria.
Using the Principal component extraction and Varimax rotation methods, only with eigenvalue of more than one, and only loadings above 0.3 were considered. Some items load upon more than one factor or component. Six factors were extracted, and these factors explain 68.22% of the variables. These factors were Power of control (factor 1), Outcome evaluation (factor 2), Attitude and intention (factor 3), Behavioural belief (factor 4), normative beliefs (factor 5), subjective norm (factor 6). A seventh factor was the repetition of the behavioural beliefs, so only one was used, the construct and their construct items are given in table 5.

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Construct items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power of control (Pcon)</td>
<td>B36, B37, B33, B35, B34, B32, B28, B19, B31, B29, B21, B9</td>
</tr>
<tr>
<td>Outcomes evaluations</td>
<td>B3, B1, B6, B5, B4, B2, B7, B8</td>
</tr>
<tr>
<td>Direct measurement (Attitude and intentions)</td>
<td>B17, B16, B18, B15, B10, B14, B11, B27</td>
</tr>
<tr>
<td>Behavioural belief (Bbelief)</td>
<td>B23, B22, B25, B24, B26</td>
</tr>
<tr>
<td>Normative belief (Nbelief)</td>
<td>B38, B39, B40</td>
</tr>
<tr>
<td>Subjective norm (Snorm)</td>
<td>B12, B13, B20</td>
</tr>
</tbody>
</table>

5.3.2 Internal consistency reliability

Cronbach’s alpha was used to determine the internal consistency or average correlation of six new constructs in the instrument to gauge the reliability. A "high" value of alpha is often used (along with substantive arguments and possibly other statistical measures) as evidence that the items measure an underlying or latent construct. George and Mallery
(2003) provided a generally agreed lower limit for Cronbach's alpha, which is 0.7, although it may decrease to 0.6 in exploratory research (Hair et al., 2010). In this study 0.6 was used as the acceptable level cut-off, as proposed by Hair et al., 2010, as it is an exploratory studies.

Table 6: Cronbach’s alpha coefficient of constructs

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Number of items</th>
<th>Construct items</th>
<th>Cronbach's alpha reliability coefficient</th>
<th>Rule of thumb by George &amp; Mallery (2003)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power of control</td>
<td>12</td>
<td>B36, B37, B33, B35, B34, B32, B28, B19, B31, B29, B21, B9</td>
<td>0.920</td>
<td>Excellent</td>
</tr>
<tr>
<td>Outcomes evaluations</td>
<td>8</td>
<td>B3, B1, B6, B5, B4, B2, B7, B8</td>
<td>0.915</td>
<td>Excellent</td>
</tr>
<tr>
<td>Attitude and intentions (DMAI)</td>
<td>8</td>
<td>B17, B16, B18, B15, B10, B14, B11, B27</td>
<td>0.785</td>
<td>Acceptable</td>
</tr>
<tr>
<td>Behavioural belief (Bbelief)</td>
<td>5</td>
<td>B23, B22, B25, B24, B26</td>
<td>0.857</td>
<td>Good</td>
</tr>
<tr>
<td>Normative belief (Nbelief)</td>
<td>3</td>
<td>B38, B39, B40</td>
<td>0.682</td>
<td>Questionable</td>
</tr>
<tr>
<td>Subjective norm (Snorm)</td>
<td>3</td>
<td>B12, B13, B20</td>
<td>0.830</td>
<td>Good</td>
</tr>
</tbody>
</table>

All six factors showed internal consistency reliability with Cronbach’s alpha of more than 0.6. Power of control and evaluation outcome, were excellent with Cronbach’s alpha coefficient of more than 0.9, while behavioural belief and subjective norm were in the good range with coefficient value of between 0.8 and 0.9. Attitude and intention fell in the acceptable range.
of between 0.7 and 0.8. The normative belief factor was less than 0.7, with a Cronbach’s alpha coefficient of 0.682 (table 6). Although lower than the provision of George and Mallery (2003), it was still within the provisions of acceptable range from Hair et al (2010)

5.3.2 Statistics of the constructs

The statistics for the six constructs of the study are given in table 7 -12, which are power of control, outcomes evaluation, attitude and intention, behavioural beliefs, normative beliefs and subjective norm.

Power of control

Table 7 gives the statistics for power of control. The range of the mean score of 4.21 - 5.07, with a common standard deviation of about 2.0. The means score of between 4 and 5, indicates that the respondents were in the “neither disagree nor agree” to “somewhat agree” range. The skewness coefficient are all low negative values (0 >-0.5), except for one which was -1.022 for the question “I have been subjected to violence and intimidation in the mine during the strike”, indicating that the values are concentrated toward the “somewhat agree” band with the tail in toward the disagree range. For the high negative coefficient of -1.022, it is clear that respondents “somewhat” agreed with the statement. For this question a low positive kurtosis coefficient (0.123), indicates that there is a normal distribution (mesokurtic). The majority of variables have a high negative kurtosis (about -1.0), which implies that there is a wide distribution resulting in a flat curve, compared to the normal distribution, commonly known as plaktokurtic.

Table 7: Statistics for the power of control
Outcomes evaluation

The statistics of the outcomes evaluations are given in table 8. The range for the mean score is 4.97 – 5.39. This means that all the responses are concentrated around 5.0, which is “somewhat agree” in the scale of the instrument. These respondents generally agree with the views. Maintaining union membership is important for them to stand a better chance to obtain security and protection from intimidation in the mine. Furthermore, the respondents were of the view that they experienced a better sense of protection since they joined the union. A critical variable which stood out, with a mean score of 5.38 and a kurtosis of 1.477 (leptokurtic – sharp peak), was that “I get information and explanations regarding strategies to be adopted during strikes in the mines”.

Moreover, the outcome evaluation indicated that there was compliance with union activities and expectations of the respondents.
Table 8: Statistics for the outcomes evaluation

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>51: Being a member of the union gives me an opportunity with management, shop stewards and other employees in this mine.</td>
<td>502</td>
<td>1.00</td>
<td>7.00</td>
<td>5.0478</td>
<td>1.62617</td>
<td>-1.056</td>
<td>0.109</td>
</tr>
<tr>
<td>52: Union membership is important for me to stand a better chance of security and protection from intimidation in this mine.</td>
<td>501</td>
<td>1.00</td>
<td>7.00</td>
<td>5.0120</td>
<td>1.93697</td>
<td>-1.013</td>
<td>0.109</td>
</tr>
<tr>
<td>53: It is important for me to develop a good standing membership profile, self-discipline, and a feeling of collective belonging in the union.</td>
<td>499</td>
<td>1.00</td>
<td>7.00</td>
<td>6.1443</td>
<td>1.44623</td>
<td>-0.809</td>
<td>0.109</td>
</tr>
<tr>
<td>54: I do not miss union meetings.</td>
<td>501</td>
<td>1.00</td>
<td>7.00</td>
<td>4.9721</td>
<td>1.55153</td>
<td>-0.688</td>
<td>0.109</td>
</tr>
<tr>
<td>55: I get a deeper sense of protection from violence and intimidation since I joined the Union in this mine.</td>
<td>502</td>
<td>1.00</td>
<td>7.00</td>
<td>5.0538</td>
<td>1.81343</td>
<td>-0.905</td>
<td>0.109</td>
</tr>
<tr>
<td>56: I do miss out on union activities that are outside the mine.</td>
<td>503</td>
<td>1.00</td>
<td>7.00</td>
<td>6.0915</td>
<td>1.47745</td>
<td>-0.730</td>
<td>0.109</td>
</tr>
<tr>
<td>57: I get information and explanations regarding strategies to be adopted during strikes in the mine.</td>
<td>502</td>
<td>1.00</td>
<td>7.00</td>
<td>5.3884</td>
<td>1.35161</td>
<td>-1.306</td>
<td>0.109</td>
</tr>
</tbody>
</table>

**Attitude and intention**

In the attitude and intention construct, there were eight items with a mean scores range of 4.59 – 5.37. The lowest variable was at 4.59, which states that “I perceive my current union as intimidating” (table 9). This meant that most of the respondents were neither agreeing nor disagreeing that their current union is intimidating.

Table 9: Statistics for the attitude and intention

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>51: I join a union without being compelled by acts of violence and intimidation.</td>
<td>501</td>
<td>1.00</td>
<td>7.00</td>
<td>4.8263</td>
<td>1.91096</td>
<td>-0.731</td>
<td>0.109</td>
</tr>
<tr>
<td>52: I join or leave a union on a voluntary basis without fear of intimidation.</td>
<td>502</td>
<td>1.00</td>
<td>7.00</td>
<td>4.5458</td>
<td>1.82929</td>
<td>-0.423</td>
<td>0.109</td>
</tr>
<tr>
<td>53: Most people whose opinions I value would approve of my joining a union on a voluntary basis.</td>
<td>503</td>
<td>1.00</td>
<td>7.00</td>
<td>4.9006</td>
<td>1.88018</td>
<td>-0.812</td>
<td>0.109</td>
</tr>
<tr>
<td>54: Most of the mining employees in a union with whom I am acquainted with, joined a Union on a voluntary basis.</td>
<td>500</td>
<td>1.00</td>
<td>7.00</td>
<td>5.0300</td>
<td>1.67891</td>
<td>-0.805</td>
<td>0.109</td>
</tr>
<tr>
<td>55: I get a sense of security and protection during my time at the mine.</td>
<td>500</td>
<td>1.00</td>
<td>7.00</td>
<td>5.2560</td>
<td>1.57970</td>
<td>-1.015</td>
<td>0.109</td>
</tr>
<tr>
<td>56: I perceive my current union as an intimidating union.</td>
<td>501</td>
<td>1.00</td>
<td>7.00</td>
<td>4.5960</td>
<td>1.79198</td>
<td>-0.314</td>
<td>0.109</td>
</tr>
<tr>
<td>57: I joined the union on a voluntary basis.</td>
<td>502</td>
<td>1.00</td>
<td>7.00</td>
<td>5.0418</td>
<td>1.74413</td>
<td>-0.864</td>
<td>0.109</td>
</tr>
<tr>
<td>58: Joining a union on a voluntary basis helps me avoid being a victim of violence and intimidation.</td>
<td>502</td>
<td>1.00</td>
<td>7.00</td>
<td>5.2331</td>
<td>1.53061</td>
<td>-1.121</td>
<td>0.109</td>
</tr>
</tbody>
</table>

In addition, there is a high score of 5.25 and 5.23 for the statements “I get a sense of security and protection during my time at the mine” and “Joining the union on voluntary basis helps me avoid being a victim of violence and intimidation”. These responses have a positive kurtosis, which indicate a mesokurtic to leptokurtic distribution.
**Behavioural beliefs**

The range of the means scores is 4.21 to 5.41 (table 10). The highest score is for the statement, “Joining a union on a voluntary basis helps me to experience protection while doing my job and to get a high wage through the union”.

**Table 10: Statistics for the behavioural beliefs**

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>502</td>
<td>1,00</td>
<td>7,00</td>
<td>4,2131</td>
<td>1,81488</td>
</tr>
<tr>
<td></td>
<td>503</td>
<td>1,00</td>
<td>7,00</td>
<td>5,4163</td>
<td>1,59964</td>
</tr>
<tr>
<td></td>
<td>503</td>
<td>1,00</td>
<td>7,00</td>
<td>5,1355</td>
<td>1,51426</td>
</tr>
<tr>
<td></td>
<td>503</td>
<td>1,00</td>
<td>7,00</td>
<td>5,5060</td>
<td>1,63851</td>
</tr>
</tbody>
</table>

**Normative beliefs**

The descriptive statistics that were done for the three items of normative belief are given in table 11. All the results were around the “somewhat” agree range in the instrument score.

**Table 11: Statistics for the normative belief**

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>492</td>
<td>1,00</td>
<td>7,00</td>
<td>5,1098</td>
<td>1,59306</td>
</tr>
<tr>
<td></td>
<td>492</td>
<td>1,00</td>
<td>7,00</td>
<td>4,8577</td>
<td>1,60830</td>
</tr>
<tr>
<td></td>
<td>491</td>
<td>1,00</td>
<td>7,00</td>
<td>5,3218</td>
<td>1,55652</td>
</tr>
<tr>
<td></td>
<td>489</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Subjective norm**

The three subjective norm items statistics are tabulated in table 12. The highest mean score was for the statement, “Intimidation and violence occur during the strike in the mine” with a mean score of 5.5. This is found in the range of “somewhat agree” to agree. In this variable there is a very high positive kurtosis coefficient of 1.501, indicating that the respondents’
views are concentrated on agree range, with the tail in the lower end (disagree), indicating negative skewness. In addition, the respondents views resulted in a very high sharp peak (leptokurtic), compared to the normal distribution height, except for question “Generally speaking, I care about what the shop steward of my union thinks I should do during the strike in the mines”, is more flatter (platokurtic).

Table 12: Statistics for the subjective norm

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>B2. Generally speaking, I care about what the shop steward of my union thinks I should do during the strike in the mine</td>
<td>600</td>
<td>1.00</td>
<td>7.00</td>
<td>4.9640</td>
<td>1.85191</td>
<td>-0.899</td>
<td>.526</td>
</tr>
<tr>
<td>B12. Intimidation and violence occurs during the strike in the mine</td>
<td>600</td>
<td>1.00</td>
<td>7.00</td>
<td>5.4980</td>
<td>1.39063</td>
<td>-1.338</td>
<td>.501</td>
</tr>
<tr>
<td>B13. Intimidation and violence during strike have an negative impact on union affiliation</td>
<td>501</td>
<td>1.00</td>
<td>7.00</td>
<td>5.2595</td>
<td>1.51939</td>
<td>-1.208</td>
<td>.885</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>494</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.4 Results as per hypotheses

There were three hypotheses that were evaluated in this study. These were: “Employees who feel intimidated are more likely to join the intimidating trade union”, “Lower level task grade employees are most likely to feel the effects of intimidation than employees on a higher task grade levels”, and “Perceptions of intimidation and violence have an impact on union affiliation among bargaining unit employees.”

5.4.1 Employees who feel intimidated are more likely to join the intimidating trade union.

To test this hypothesis relationship tests using a chi-squared test were conducted. The first was to find that the existence of the relationship between the experience of intimidation by the respondents with intimidation and violence was the reason to join the union. The outcomes of the results are given in table 13. The Cramer’s V’s test was performed and a relationship was found between the experience of intimidation by the respondents, when intimidation and violence was the reason to join the union, \( \chi^2 = 0.546, p = .000 \). There is a trend from existence of the relations at 96.8%, compared to 50.5%, which is indicating there
is a relationship between employees experiencing intimidation and violence during strikes and Intimidation and violence being the main reason I joined my union.

The second part was to evaluate the relationship between the experiences of intimidation with the perception that the respondents’ current union is intimidating (table 13).

**Table 13: The cross tabulation correlation test of the experience in intimidation and reason to join the union**

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Approx. Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal by Nominal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phi</td>
<td>0.546</td>
<td>0.000</td>
</tr>
<tr>
<td>Cramer's V</td>
<td>0.546</td>
<td>0.000</td>
</tr>
</tbody>
</table>

**Table 14: The cross tabulation chi-square test of the experience in intimidation and reason to join the union**

<table>
<thead>
<tr>
<th>Experienced intimidation and violence during strikes * Intimidation and violence was the main reason I joined my Union Crosstabulation</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Intimidation and violence was the main reason I joined my Union</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Count</td>
<td></td>
</tr>
<tr>
<td>Experienced intimidation and violence during strikes</td>
<td>Yes</td>
<td>276</td>
<td>106</td>
</tr>
<tr>
<td></td>
<td>% within Experienced intimidation and violence during strikes</td>
<td>72.3%</td>
<td>27.7%</td>
</tr>
<tr>
<td></td>
<td>% within Intimidation and violence was the main reason I joined my Union</td>
<td>96.8%</td>
<td>50.5%</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>55.8%</td>
<td>21.4%</td>
</tr>
<tr>
<td></td>
<td>No</td>
<td>9</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>% within Experienced intimidation and violence during strikes</td>
<td>8.0%</td>
<td>92.0%</td>
</tr>
<tr>
<td></td>
<td>% within Intimidation and violence was the main reason I joined my Union</td>
<td>3.2%</td>
<td>49.5%</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>1.8%</td>
<td>21.0%</td>
</tr>
<tr>
<td>Total</td>
<td>Count</td>
<td>285</td>
<td>210</td>
</tr>
<tr>
<td></td>
<td>% within Experienced intimidation and violence during strikes</td>
<td>57.6%</td>
<td>42.4%</td>
</tr>
<tr>
<td></td>
<td>% within Intimidation and violence was the main reason I joined my Union</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td></td>
<td>% of Total</td>
<td>57.6%</td>
<td>42.4%</td>
</tr>
</tbody>
</table>
Furthermore, a correlation between the employee subjected to violence and intimidation (“I have been subjected to violence and intimidation in the mine during the strike” – Vis) and perception of the current union being intimidating (“I perceive my current union as an intimidating union” – Uin). The Pearson product correlation is given in table 15. This correlation \((r = 0.375, p = 0.000)\) indicates a significant \((p \text{ significant at } 0.01)\) positive medium correlation, indicative of the existence of the relationship between Vis and Uin. It can be concluded that there is a significant positive relationship between the employee subjected to violence and intimidation (Vis) and perception of the current union being intimidating (Uin).

**Table 15: Pearson correlation of employee subjected to violence and intimidation with current union being perceived as intimidating**

<table>
<thead>
<tr>
<th></th>
<th>I have been subjected to violence and intimidation in the mine during the strike</th>
<th>I perceive my current union as an intimidating union</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have been subjected to violence and intimidation in the mine during the strike</td>
<td>Pearson Correlation 1 0.375**</td>
<td>.375**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed) .000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N 503</td>
<td>498</td>
</tr>
<tr>
<td>I perceive my current union as an intimidating union</td>
<td>Pearson Correlation .375**</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed) .000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N 498</td>
<td>500</td>
</tr>
</tbody>
</table>

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

To understand the strength of the existing relationship, a regression analysis was conducted and the results are tabulated in table 16-18. These results show that the employee being subjected to violence and intimidation in each respective mine during the strike has an impact on the perception of employees that their current union is an intimidating union. This
is evident from the Beta of 0.348, and \( p < 0.05 \), which had an impact of 14.1\% on the perception of employees that their current union is an intimidating union.

Table 16: Regression analysis of the employee intimidation on the joining of intimidating union

Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.375( ^a )</td>
<td>.141</td>
<td>.139</td>
<td>1.65895</td>
</tr>
</tbody>
</table>

\( a \). Predictors: (Constant), B9. I have been subjected to violence and intimidation in the mine during the strike

Table 17: Regression analysis coefficients for Vis and Uin

Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Constant)</td>
<td></td>
</tr>
<tr>
<td>B9. I have been subjected to violence and intimidation in the mine during the strike</td>
<td>.402</td>
<td>.045</td>
</tr>
</tbody>
</table>

\( a \). Dependent Variable: B14. I perceive my current union as an intimidating union
5.4.2 Lower level task grade employees are most likely to feel the effect of intimidation

Chi-square is a statistical test that tests for the existence of a relationship between two variables. The variables of interest indicate whether the lower grade task level employees are most likely to feel the effects of the intimidation than the higher grade task level employees. A chi-square test (Phi and Cramer’s V) was performed and a relationship was found between grade task level and the frequency of effects of intimidation, \( \chi^2 (N = 503) = 0.501, p = .000 \) (Table 18).

Table 18: The chi-squared test for grade test and the effects of intimidation

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Approx. Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal by Nominal</td>
<td>Phi</td>
<td>0.501</td>
</tr>
<tr>
<td></td>
<td>Cramer’s V</td>
<td>0.501</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td></td>
<td>503</td>
</tr>
</tbody>
</table>

This means that there is 95% confidence that the relationship between the two variables is not due to chance. Considering that the chi-square is significant, the column percentages for the values of the independent variable are evaluated (table 19).
### Table 19: The chi-square cross tabulation table for grade test with the effects of intimidation

<table>
<thead>
<tr>
<th>Experienced intimidation and violence during strikes</th>
<th>Level A1-8 (Operator)</th>
<th>Level B4 - 8 (Driller or Loco driver)</th>
<th>Level C1-5 (Miner)</th>
<th>Level D1 - F (Shift Supervisor)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>156</td>
<td>139</td>
<td>72</td>
<td>16</td>
<td>383</td>
</tr>
<tr>
<td>% within Experienced intimidation and violence during strikes</td>
<td>40,7%</td>
<td>36,3%</td>
<td>18,8%</td>
<td>4,2%</td>
<td>100,0%</td>
</tr>
<tr>
<td>% within Grade level</td>
<td>91,2%</td>
<td>90,3%</td>
<td>56,5%</td>
<td>29,1%</td>
<td>76,1%</td>
</tr>
<tr>
<td>% of Total</td>
<td>31,0%</td>
<td>27,6%</td>
<td>14,3%</td>
<td>3,2%</td>
<td>76,1%</td>
</tr>
<tr>
<td>No</td>
<td>15</td>
<td>15</td>
<td>51</td>
<td>39</td>
<td>120</td>
</tr>
<tr>
<td>% within Experienced intimidation and violence during strikes</td>
<td>12,5%</td>
<td>12,5%</td>
<td>42,5%</td>
<td>32,5%</td>
<td>100,0%</td>
</tr>
<tr>
<td>% within Grade level</td>
<td>8,8%</td>
<td>9,7%</td>
<td>41,5%</td>
<td>70,9%</td>
<td>23,8%</td>
</tr>
<tr>
<td>% of Total</td>
<td>3,0%</td>
<td>3,0%</td>
<td>10,1%</td>
<td>7,8%</td>
<td>23,8%</td>
</tr>
<tr>
<td>Total</td>
<td>171</td>
<td>154</td>
<td>123</td>
<td>55</td>
<td>503</td>
</tr>
<tr>
<td>% within Experienced intimidation and violence during strikes</td>
<td>34,0%</td>
<td>30,6%</td>
<td>24,5%</td>
<td>10,9%</td>
<td>100,0%</td>
</tr>
<tr>
<td>% within Grade level</td>
<td>100,0%</td>
<td>100,0%</td>
<td>100,0%</td>
<td>100,0%</td>
<td>100,0%</td>
</tr>
<tr>
<td>% of Total</td>
<td>34,0%</td>
<td>30,6%</td>
<td>24,5%</td>
<td>10,9%</td>
<td>100,0%</td>
</tr>
</tbody>
</table>

Looking across the column of percentages for the values of the independent variable: there is a definite trend in the percentages for there is a decreasing trend within the grade 91.2% for the operator (Level A1-level 8), followed by 90.3% for the higher grade (driver or loco driver) up to 29.1% in the highest grade, which is the shift supervisor for respondents experiencing intimidation. The opposite trend is also found for those who do not experience intimidation up to the miner level.

#### 5.4.3 Employees subjected to violence and intimidation with current union being perceived as intimidating with behavioural predictors

The analysis of the regression were done by modelling the relationship between the employee being subjected to violence and intimidation in the mine during the strike has an impact on the perception of employees that their current union is an intimidating union.

Before addition of mediating variables $Snorm$, $Nbelief$ and $Bbelief$ (table 17) the equation of the current union is an intimidating union ($U_{in}$) as a function of employee being subjected to violence and intimidation in the mine during the strike ($Vis$) was:

$$U_{in} (Vis) = 0.402* (Vis) + 2.557$$
Table 20 depicts ANOVA with predicting variables, model summary and the regression analysis of Uin and Vis.

**Table 20: ANOVA for Uin as a function of Vis with the predicting variables**

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>471.631</td>
<td>4</td>
<td>117.908</td>
<td>53.247</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>1040.756</td>
<td>470</td>
<td>2.214</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1512.387</td>
<td>474</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Uin

b. Predictors: (Constant), Snorm, Vis, Nbelief, Bbelief

After the addition of the mediating predictors as reflected in the Model Summary table 20, R-square increases from 0.141 to 0.312, which is about 31.2%, therefore more variation in the perception of intimidating union can be explained after the addition of mediating variables. This shown an increase from about 14.1% to 31.2%.

Provide interpretation of the statistical analysis

**Table 21: Model summary with predicting variables**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.558a</td>
<td>.312</td>
<td>.306</td>
<td>1.48808</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Snorm, Vis, Nbelief, Bbelief

© 2014 University of Pretoria. All rights reserved. The copyright in this work vests in the University of Pretoria. 72
Table 22: Regression Coefficients of the change management as a function of employee engagement with predictors

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>-.307</td>
<td>.367</td>
<td>-.837</td>
</tr>
<tr>
<td></td>
<td>Vis</td>
<td>.341</td>
<td>.043</td>
<td>.318</td>
</tr>
<tr>
<td></td>
<td>Bbelief</td>
<td>.078</td>
<td>.014</td>
<td>.277</td>
</tr>
<tr>
<td></td>
<td>Nbelief</td>
<td>.063</td>
<td>.020</td>
<td>.146</td>
</tr>
<tr>
<td></td>
<td>Snorm</td>
<td>.016</td>
<td>.023</td>
<td>.032</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Uin

The coefficient for Uin and Vis are given in table 22. The multivariate regression equation with perception intimidating union as a dependent variable and a function of predictors from table 22 is:

\[
Uin (Vis) = -0.479 + 0.330*Vis -0.018*Snorm +0.011*Nbelief+ 0.009*Bbelief +0.082*DMAI
\]

The equation gives both the impact of the individual predictors and its impact on the perception on intimidating union. Based on this equation the relationship between the intimidation of employees during strike (Vis) is a function of joining an intimidation union (Uin), with Nbelief, Bblief and Snorm having an impact on the relationship.
5.5 Results analysis summary and conclusion

The factor analysis of the study extracted six variables and their internal consistency reliability was found to be good. Table 23 outlines the summary and decision for all the tested hypotheses.
Table 23: Summary of the results analysis

<table>
<thead>
<tr>
<th>Hypothesis number</th>
<th>Outcome</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hypothesis 1a</strong></td>
<td>76% of employees felt intimidation and violence</td>
<td>There is a significant relationship on the joining of intimidating union.</td>
</tr>
<tr>
<td>Employees who feel intimidated are more likely to join the intimidating trade union.</td>
<td>Relationship exist between experience of intimidation and joining of the union: $\chi^2 (N = 495) = 0.546$, $p = .000$</td>
<td>Decision: Accept Null hypothesis</td>
</tr>
<tr>
<td></td>
<td>$R = 0.375$, $p = .000$ ($p &lt; 0.05$); $R^2 = 0.141$ (14.1%)</td>
<td></td>
</tr>
<tr>
<td><strong>Hypothesis 1b</strong></td>
<td>There is a positive relationship between employee being subjected to intimidation and perception of the current union being intimidating with Behavioural Belief, Normative Belief and Subjective Norm as predictors.</td>
<td>There is a positive relationship between employee being subject to intimidation and perception of the current union being intimidating with Behavioural Belief, Normative Belief, Subjective Norm as predictors.</td>
</tr>
<tr>
<td>There is a positive relationship between employee being subject to intimidation and perception of the current union being intimidating with Behavioural Belief, Normative Belief and Subjective Norm as predictors.</td>
<td>Impact: $R^2 = 0.141$ (14.1%) to 0.211 (21.1%)</td>
<td>Decision: Accept Null hypothesis</td>
</tr>
<tr>
<td><strong>Hypothesis 2</strong></td>
<td>Chi squared test</td>
<td>There is a relationship that indicated that the lower level task grade employees are more likely to feel the effect of intimidation</td>
</tr>
<tr>
<td>Lower level task grade employees are most likely to feel the effect of intimidation than</td>
<td>$\chi^2 (N = 503) = 0.501$, $p = .000$</td>
<td></td>
</tr>
</tbody>
</table>

© 2014 University of Pretoria. All rights reserved. The copyright in this work vests in the University of Pretoria.
| employees on a higher task grade levels sharing | % within grade levels decreased on experience of intimidation | Decision: Accept Null hypothesis |
CHAPTER 6

DISCUSSION OF THE RESULTS

6.1 Introduction

The purpose of the chapter is to discuss the results of the findings that were presented in chapter 5, and in the process answer hypotheses of chapter 3 and research aims outlined in chapter 1, in order to:

1. Evaluate whether the employees in the mines have experienced violence and intimidation during strike actions,
2. Understand whether the occupation levels have an impact on employees joining the union,
3. Extend understanding of the relationship between employee intimidation and union membership,
4. Investigate whether the behavioural elements of the mineworkers can predict the relationship between employee intimidation and union membership.

Thus the discussion process is underpinned by an objective interpretation of chapter 5 on the basis of the literature review.

6.2 Profile of the mineworker in the platinum industry

Within this study the profiles of the sample, which were the mineworkers in the platinum industry, were presented in figure 8-12. The majority of the respondents were male (60.32%, N = 304), of 40 years old or less (65.35%, N = 330), who are permanent employees (80%, N = 412) who have being working in the mine for five years or less (62%, N = 311). These respondents were mainly operators, drillers and loco drivers (65%, N = 328).

The union membership of the respondents showed that the majority of the respondents belonged to either AMCU or NUM. The combination of these two union memberships from the respondents is about 80% (N = 406). The breakdown was about 50% and 30% for AMCU and NUM, respectively. This union membership was in line with the findings.
of Chinguno (2013) who asserted that after the 2012 strikes organised by the workers’ committee, AMCU saw an opportunity and emerged as the new force in the platinum sector. AMCU emerged strongly challenging the hegemony of NUM, the established union. From the outset, it was apparent that a new era in South African industrial relations was unfolding. The emergence of AMCU as the major force in the platinum mines was further verified by the response of the participants, where almost two-thirds (figure 15) have changed their union membership in the past three years. This was further supported by Bernstein (2013), who explained that employees felt alienated by their current union and also believed that the unions did not relay their problems, hence they deserted their traditional union, NUM, for AMCU.

More than three-quarters of the respondents experienced intimidation and violence during strike action (76%, N = 383) and have joined their union because of violence and intimidation (57.34%, N = 285). This profile on intimidation and violence was within the findings of the Department of Labour (2013), which explained that the years 2012 to 2014 saw an unprecedented number of strikes taking place in South Africa’s platinum industry. These strikes were characterised by high levels of violence, occurring on the back of rivalry between the two trade unions, NUM and AMCU, fighting for supremacy in the industry.

It can be concluded that the profile of the respondent is of far as AMCU as the majority union in platinum mine is similar to findings in the literature (Grant, 2014). Furthermore, the experiences profile during strike is also confirming the literature (Chinguno, 2013; Department of Labour, 2014)

6.3 Hypothesis 1: Employees feeling intimidated and joining the intimidating trade union

From the data in chapter 5, table 13 - 22 the Hypothesis is based on the above objectives, which emanated from the problem statement. The first hypothesis was formulated for the study as follows:

\[ H_{01}: \text{Employees who feel intimidated are more likely to join the intimidating trade union} \]

\[ H_{A1}: \text{Employees who feel intimidated are less likely to join the intimidating trade union} \]
The results indicate that 76% of employees experienced intimidation and violence during the strike, and there was a relationship between experience of intimidation and joining of the union: \( \chi^2 (N = 495) = 0.546, p = .000 \). Furthermore, there was a relationship between employees feeling intimidated and the joining of the intimidating union \((R = 0.375, p = 0.000)\). Although this is the situation, the strength of the relationship was weak at 14.1% \((R^2 = 0.141)\). For this Hypothesis, data culled from the results of the Ajzen Questionnaire demonstrates that 64.09% of the respondents have changed their union membership in the past three years, while 35.91% stayed with the same union. This means there is a three-to-two ratio for the respondents who changed their union membership, to those who kept the same union membership. The primary reason for this change was the experience of intimidation and violence during strike action influenced Behavioural Beliefs of workplace safety and security. In fact, figure 17 in chapter 5 found that 57.34% \((N = 285)\) indicated that they joined the union because of the intimidation and violence, while 42.66% \((N= 212)\), were not driven by intimidation and violence to join the union.

This accepts the hypothesis that the rebellion against the leadership of NUM was a predictor after failing to compel the union to take their grievances to their employer in the sense delineated by Davies (2013), that is, the order of whether the justice measures were completed before \((n = 49)\) or after \((n = 47)\) the retaliation and TPB measures were counterbalanced. Organisational justice variables were assessed using Colquitt’s (2001) items. In the wake of the failure of organisational justice, NUM was replaced as the majority union by AMCU in South Africa’s platinum industry (Grant, 2014).

The degree of behavioural control is such that, intimidated, employees could easily join a union to settle the score with little chance that, they might be punished. In this case, the expected utility is the satisfaction of knowing that they can bargain for higher wages, such as the AMCU demand for the R12 500 minimum wage. As a major part of retaliation, therefore, the overriding goal of joining a union in general, and AMCU in particular, was organisational justice: mine workers belonging to AMCU seeking organisational justice went on strike to compel employers to increase entry level wages to R12 500 a month (what they referred to as “a living wage”). The strike continued for a period of five months before an agreement was reached (McKay, 2014).

The living wage encodes the predictor of the satisfaction of getting even with both NUM and Rustenburg Platinum Mines, as the perceived belief is that the outcome would outweigh the risks of losing income. Also, joining the union in the quest for organisational justice underscores the perceived norms about co-workers who were intimidated by both NUM and Rustenburg Platinum Mines Management with possible job losses.
It seems apparent, therefore, that the RAO and RAS to unseat the NUM as the majority union seemed to have caused the intimidation and movement between the different union memberships. The violence that occurred was directed not only at the company property but also at fellow employees, including supervisors and managers (Chinguno, 2013).

In terms of the integrity of these TPB correlates of union joining and intimidation, the KMO measure of sampling adequacy was 0.9134, indicating that the correlations were adequate for factor analysis. Accordingly, Bartlett’s test was used to indicate sufficiency of the correlations between union joining and social justice. Therefore, simply put: the Normative Beliefs of striking workers were driven by the subjective norm of a ‘Minimum Living Wage’. The Control Beliefs were that the employers were unreasonable vis-à-vis market forces that allow for exorbitant CEO bonuses, and the Perceived Behavioural Control that striking mineworkers were retaliating against when joining AMCU was regulated by job retention at low wage.

Whilst the range of the mean scores for behavioural beliefs shows that the highest score is for the statement, “Joining a union on a voluntary basis help me to feel protection on my job and get a high wage through the union”, a prominent study shows that “the LRA did not make any provision whatsoever for any other form of worker representation for the purpose of collective bargaining outside the union structure.” (Samuel, 2013 : 242). This, is very significant, given that this study deals with freedom of association to join or not join a Union vs level of membership for collective bargaining.

The mean scores for behavioural beliefs shows that the highest score is for the statement, “Joining a union on a voluntary basis helps me to feel protection on my job and get a high wage through the union”, In the same vein, another study by Azam & Rospabé (2007) also demonstrates that the expected utility of wage increases for black male workers is translatable into a legitimate expectation, especially incumbent upon union-joining. The data analysis for Hypothesis 1 also resonates strongly with Cregan’s (2013) examination of the impact of industrial action on membership behaviour, “in the form of joining (by non-members) and leaving by members” (2013: 3363). From the aforesaid study, it becomes evident that the development of a distinct exchange relationship between unions and workers leads to union-joining behaviour.

Therefore, it is noteworthy that “more than three-quarters (76%, 14%, N = 383) of the respondents experienced intimidation and violence during the strike (figure 16), while the last quarter (23.86%, N =120) have not had the experience of intimidation and violence
during the strike”. Whereas the summary of findings in the data shows that the majority of the respondents have experienced intimidation and violence during strike action and have joined the union because of violence and intimidation—it is also the value of the exchange relationship that informs the intention to join unions in general and AMCU in particular.

6.4 Hypothesis 2: Lower level grade employees are most likely to feel intimidation

Hereunder follows the data explicating the second hypothesis, which was investigating the relationship between the job grades and the level of intimidation.

Hypothesis 2

\( H_{02}: \text{Lower level task grade employees are most likely to feel the effects of intimidation than employees on a higher task grade levels sharing.} \)

\( H_{A2}: \text{Lower level task grade employees are less likely to feel the effects of intimidation than employees on a higher task grade levels sharing.} \)

Following a chi-square test (Phi and Cramer’s V), which was performed, and a relationship, which was found between grade task level and the frequency of effects of intimidation, \( \chi^2 (N = 503) = 0.501, p =.000 \) (Table 18), there is 95% confidence that the relationship between the two variables (task grade + effects of intimidation), is not due to chance. Different gradations of employees are, in disproportion to earnings, exposed to higher risk during strikes that are characterised by violence and intimidation at Rustenburg Platinum Mines.

Data results in Table 19 reveal that while there is a decreasing trend in experience of intimidation, as the grade of the employees increase, within grade (Level A1-A8), 91.2% for the operator, followed 90.3% for the higher grade (Level B4 – B8) driller or loco driver) up to 29.1% in the highest grade (Level D1- F) which is the shift supervisor for respondents experiencing intimidation, the opposite trend is found for those up to the miner level, who do not experience intimidation. This means that at lower levels the intimidation is much more frequent and severe. The effects of this intimidation and violence cannot, however, be evenly mapped across, in terms of grade only. The severity of the effects is determined by non-unionisation or belonging to a target union.
In practical terms the Control Beliefs, the “masses of workers” in the rhetoric of labour unions implicitly – but almost exclusively – refers to lower level task grade employees at the coalface of both labour exploitation and dispute for the minimum wage.

Owing to the NUM-AMCU rivalry at Rustenburg Platinum Mines, the lower tier employees in general are exposed to violence because of poor communication about strike action from the unions (Lamontagne 2010). As a crucial component of organisational justice, informational justice is denied to lower level task grade employees who often run into dangerous situations.

The reason why non-unionised lower level task grade employees are singled out is traceable to a lack of both solidarity and a sense of belonging (Lamontagne 2010). There is a perceived lack of fairness of outcomes (distributive justice) in favour of careerist and well-placed union members, procedures (procedural justice), and treatment by Rustenburg Platinum Mines authorities (interactional justice), where “interactional justice comprises perceptions of interpersonal justice, which refers to the extent that authorities treat employees with dignity and respect, and informational justice, which is the extent to which authorities provide adequate explanations for decisions” (Folger & Cropanzano, 1998; Colquitt, 2001; Greenberg, 1993—quoted in Jones 2003).

Caught, on the one hand, between the unions and Rustenburg Platinum Mines management, as well as between the AMCU-NUM rivalries on the other, lower level task grade employees straddle a thin line between life and death. A cursory look at Figure 12 reveals an interesting profile on the last personal variable: the employment grade of the respondents, which was divided into four levels, the operators (Level A1 – A8), drillers and loco drivers (Level B4 – B8), miners (Level C1 – C5) and then shift supervisors (Level D1 – F), whose level of security somewhat corresponds with exposure to effects of violence and intimidation.

To bear the brunt of such physical intimidation and violence is testimony to the behavioural beliefs and predictors that are associated with violence, as described by Jones (2003) in his elucidation of Ajzen’s Behaviour Planning Theory. Striking workers believe in the legitimacy of the strike action and its violent manifestation as a form of pursuit of organisational justice. It is therefore worth thinking about the implicit duty to comply with the calls to strike in terms of John Brand’s (2012; 2013) articulation of moderators, triggers and aggravators that, like retaliation, are essentially manifestations of disregard for the LRA and the personal safety of lower level task grade employees.
Fear as a result of general lawlessness is felt at lower levels because, as likely as not, employees who did not benefit from NUM careerism were not catapulted to higher positions (Webster 2013). Lack of leadership, in the normal course of events, should have led to indiscriminate targets and effects. However, there is hardly any degree of randomness associated with the predictors of violence. It is therefore important that the data analysis relating to lower level task grade employees be qualified in terms of John Brand’s conflict dynamic theory, with Maslow’s articulation of ‘security of employment’ needs within a framework of Planned Behaviour Theory. Within this paradigm, it is possible to triangulate the measurable effects of violence, intimidation and income levels as having a corresponding link to task grades and violence.

Manifestations, Causes, Triggers, Aggravators, without Moderators: The Attitude and Intentions that underpin expected utility are shown to be “excellent” with a Cronbach alpha reliability score of 0.920. However, despite the excellent attitude and intentions, the manifestations are violence and intimidation; they are also chaotic because of poor leadership. This has implications for lower level task grade employees in the sense that they are made to accept the violence as necessary and justifiable according to the normative beliefs of the pursuit of organisational justice.

In the case of lower level task grade employees, their safety needs are involuntarily tied to a sense of belonging to a union that is intimidating, such as AMCU has been since 2012. Therefore, the needs of lower level task grade employees go beyond the safety provisions of security of body, employment and resources, as well as security of health and property when their independent creativity is stifled whenever they face prejudice from intolerant striking co-workers at the mine.

If anything, the prejudicial and intolerant intimidation, over and above the violation of safety needs and the need for belonging of lower level task grade employees, attests to the observation that “a large number of cross-sectional studies showed no clear evidence for Maslow’s deprivation/domination proposition except with regard to self-actualization “(Wahda & Bridell, 2007: 212). It is important then to prioritize self-actualization, rather than victimization, in the elucidation of data. For instance, in Table 6 the Outcomes evaluations have a score of 0.915 on Cronbach’s alpha reliability coefficient. According to the Rule of thumb by George & Mallery (2003) on internal consistency reliability, the outcomes evaluation of strike action (and subsequent joining of the union) is deemed “excellent”.

© 2014 University of Pretoria. All rights reserved. The copyright in this work vests in the University of Pretoria.
Of necessity, as AMCU and NUM “seek recognition for workers through organising at work; they redistribute economic goods and benefits from management to workers through collective bargaining; and they represent workers by giving voice to their concerns in the larger political and legal arena” (Crain, 2006: 158), the cost of the excellent scoring is borne by low level task grade employees. Simply put: the expected utility is high on negotiations and collective bargaining, whilst on self-actualization of the group of employees it would rank low.

Unions, on the basis of the expected utility, have mobilized violent action to enforce a sense of unity of purpose because “Strike action is also the result of employer unilateralism and divisive tactics” (Webster 2013: 220). Cohesion by violent means and intimidation, however, targets lower level task grade employees irrespective of either NUM or AMCU affiliation at the heart of the conflict. Conversely, the other employees on higher level task grade employment hardly feel the direct threat to their security or self-actualization in raw form. Thus, both the data and the literature confirm that lower level task grade employees are most likely to feel the effects of intimidation.

Whereas Francis Teal (2011) uses a quantile regression approach to examine the effect of unionisation on wages for workers in each segment of the income distribution to demonstrate that, for African workers at the 10th percentile, unionisation is estimated to increase wages by 145%, while at the 90th percentile the effect is only 11%. Hypothesis 2 has proved that the increase in wages and task grade attests to a relationship, which was found between grade task level and the frequency of effects of intimidation, $\chi^2 (N = 503) = 0.501, p = .000$ (Table 18). What is unique about this study, to the extent that it adds value, is that it reveals victimisation trends that do not discriminate across union affiliation, but are generalisable to the lower level task grade employees.

Regression analysis with predictors was used for this data to explain the extent to which the current union is an intimidating union ($U_{in}$) as a function of employee being subjected to violence and intimidation in the mine during the strike, with Subjective Norms ($S_{norm}$), Normative Beliefs ($N_{belief}$) and Influence of Control Beliefs ($B_{belief}$) as mediating and predicting variables.

Extrapolation from the Ajzen Questionnaire (1991) allows for the unique advantage of translating Control Beliefs into Perceived Behavioural Control that constitutes the Actual Behaviour Control of employees by unions that are perceived to be intimidating. Given that the research construct of the study holds that union affiliation/membership is an Independent variable and the Perception of violence and intimidation is a Dependent
variable, it is significant that after addition of the mediating predictors as reflected in the Model Summary table 21, R-square increases from 0.141 to 0.312, which is about 31.2%. Simply put, this in an indication that there is more variation in the perception of intimidating unions. The increase after the addition of mediating variables is very significant. This is especially true, because of the increase from about 14.1% to 31.2%.

What this increase means is that the link between the normative belief of a common cause of organisational justice and the control beliefs that intimidation is necessary for both the cohesion of solidarity and collective bargaining (Author please clarify this sentence). In such a case, a rapprochement of sorts emerges between the intimidating union and employees who seek both protection from union-related violence and Rustenburg Platinum Mines-driven cheap labour exploitation. The mediating variables of Subjective Norms of self-preservation, unitary progression and the Normative Belief that joining the intimidating union will decrease the probability of victimisation all point to the behavioural intention to join the union as involuntary.

However, from within the intimidating union, the rationalized normalisation of violence and intimidation arises where subjection to violence in the mine as part of the strike is perceived to be part of the collateral damage. In a different sense, it constitutes what Cregan (2013) frames as a trade-off that is crucial in the development of exchange relationships between unions and workers, especially where the conditions of exchange are not always benign and in the form of union bargaining. Aggressive behaviour and the weakening of exchange relationships leads to union-leaving behaviour.

It is clear that perceptions change over the role of violence during strikes, as evidenced by the variation in the perception of intimidating union can be explained after the addition of mediating variables in Table 22. A compelling study by Webster (2013) has shown that workers within Lonmin’s Marikana site are all exposed to different forms of violence, depending on whether they are the target of the rival organisation or not. With the passage of time, it becomes both blasé and a banal commonplace incident of a normal striking day.

Add to this the concern by Cregan (2013) that “the use of workplace conflict to improve membership is a risky strategy” and “may be most counter-productive to the long-term survival of unions”. Whilst violence and intimidation would increase union density, the perception of the intimidating union would also depend on the sustainability of the violent retaliation against the organisation and retaliation against union supervisors and shop stewards becoming part of the normative belief system.
In this case, violence of the intimidating union is perceived as not only necessary but “revolutionary”. Ironically, it is on the back of that violence that the indomitable spirit of unions is measured. According to Buhlungu, Brooks & Wood (2008), the South African labour movement has been a source of inspiration to unions worldwide, despite its violent history. All workers, unionised or otherwise, readily accept that the trade union movement played a dual role of fighting for improved working conditions for workers, whilst at the same time fighting for the liberation of the country against the apartheid regime alongside the (ANC) (Webster and Buhlungu 2007).

It is this legitimating factor of historical participation in struggles that makes it possible for violence to be condoned or sanctioned. In fact, according to Cregan (2013: 3365) “mechanisms exist to punish cheaters—those who disobey the call—in the form of reputation loss or damage”. This study finds that operationalizing the said mechanisms of punishment assumes an explicit perception of its legitimacy.

Finally, this conclusion articulates directly the objectives of the study on the impact of violence on union-joining and leaving, which has so far been proven to be a confirmation of:

(a) Indirect recruitment and attrition
(b) Retaliation (RAO + RAS) and bargaining
(c) Rationalisation of intimidation and revolutionizing of the discourse that informs Normative Beliefs and Control Beliefs responsible for condoning and/or glorifying violence during volatile strike action.

These three positions emerged out of data analysis and the literature to confirm that to the first Hypothesis, namely, “What are the terms of reference for workplace instability, to the extent that employees who feel intimidated are more likely to join the intimidating trade union?” the answer must reside in the Hypothesis 1 data results that show how the majority of the respondents have experienced intimidation and violence during strike action and have joined the union because of violence and intimidation. Put differently, union affiliation or joining has not been left to chance, but has intimidation and aggressors as part of the triggers to either join one union or the other. However, it is noted that the value of the exchange relationship also informs the Intention to join unions in general and AMCU in particular at Rustenburg Platinum Mines.

As for the second hypothesis, which, simply put, poses the question regarding factors in the mining crisis that are amenable to the Behaviour Planning Model at different grade
employees and are most likely to be used to allay intimidation, the answer lies squarely
in the data analysis for Hypothesis 2, which is corroborated by the Literature: what
Cregan (2013) calls “achievement of union density” by violent means and intimidation
mostly targets lower level task grade employees irrespective of either NUM or AMCU
affiliation. In addition, victimization trends do not discriminate across union affiliation but
are only generalizable to the lower level task grade employees. Ultimately, measures
and Cronbach scores provide evidence that lower level task grade employees are most
likely to feel the effects of intimidation.

In respect of the third hypothesis on the possible relationship between the impact of
perceptions of intimidating union on the levels of security associated with control beliefs
behind joining them, the answer is , on one level, ANOVA and the multivariate regression
equation with perceptions of the intimidating union as a dependent variable and a
function of predictors. On another, the data and literature support the finding that
intimidating unions operationalise violence as a means to an end, that is, unions
naturalize it as a mechanism of punishment that assumes an explicit perception of its
legitimacy and the revolutionary character of union agency.

6.6 Proposed model for the study

The results of the study as discussed above led to the emergence of new insights that
have been used to proposed framework for relationship of employee intimidation during
the strike and joining of intimidating union (Figure 18). This study provided an opportunity
to develop design a model that is unique to the platinum industry using a conceptual
framework that can explain the behaviour of the employee during the strike and their
joining of an intimidating union.
Figure 18: A conceptual model for preventive medicine using mobile technologies in LRS

The model depicts the findings that are important to explain some of the aspects related to the strike in the platinum industry. These behavioural aspects (Nbelief, Snorm and BBelief) are the important component in explaining this framework.

There are benefits of the model developed in this study. A significant number of these strikes occur continuously in the mining industry. It is in these settings where the intervention strategies are required, especially for decreasing the violence and intimidation associated with the strike. This is important when considering the mining sector remain as one of the main contributors into the country’s gross domestic product (GDP) and good labour relations that support productivity of these sectors. Understanding the patterns and behaviour associated with the “organisational justice”, which emanate from strike can assist to improve the relationship between the employer, employees and their union.

6.7 Conclusion

Based on the discussion of the study, it can be concluded that the hypotheses, which were developed, were able to explain and answer the objectives of the study. At the end it was clear that there was a relationship between the employees who felt the effects of the intimidation and joining of the intimidating union. In addition, the planned behaviour is regarded as the predictor. The employees who felt the effects of intimidation and violence during the strikes the most, were low level task grade employees.

The summary of findings shows that the majority of the respondents has experienced intimidation and violence during strike and has joined the union because of violence and
intimidation — it is also the value of the exchange relationship that also informs the Intention to join unions in general and AMCU in particular.

Also, different task grades of employees are, in disproportion to earnings, exposed to higher risk during strikes that are characterised by violence and intimidation at Rustenburg Platinum Mines. This means that at lower levels the intimidation is much more frequent and severe. The effects of this intimidation and violence cannot, however, be evenly mapped across, in terms of grade only: the severity of the effects be determined by non-unionisation or belonging to a target union. Amongst other reasons, the reason why non-unionised lower level task grade employees are singled out is traceable to a lack of both solidarity and a sense of belong. There is a perceived lack of fairness of outcomes (distributive justice) in favour of careerist and well-placed union members, procedures (procedural justice), and treatment from Rustenburg Platinum Mines authorities (interactional justice).

It is now clear that there is a link between normative belief of a common cause of organisational justice and the control beliefs that intimidation is necessary for both the cohesion of solidarity and collective bargaining. In such a case, a rapprochement of sorts emerges between the intimidating union and employees who seek both protection from union-related violence and Rustenburg Platinum Mines driven cheap labour exploitation.
CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

7.1 The highlights of this study

By way of conclusion, this Chapter discusses the nature of arguments and data analysis, with a view to demonstrating how Ajzeen’s Theory of Planned Behaviour, and its associated TBP Questionnaire, can yield profound insights into structured research into understanding union-joining behaviour in the platinum sector. In other words, instead of focusing on attrition and retention, it prioritises the dynamics of violence and intimidation as predictors of joining a union as a form of retaliation against the organisation and against supervisors. Given this framework, the study has revealed the extent to which control beliefs and normative beliefs inform intention to leave one union for another. That said, such normative beliefs about violence and intimidation reveal the startling fact that violence is perceived as justifiable.

In the context of Rustenburg Platinum Mines, the study has refined the terms of joining in terms of the ‘double-bind' exposure to the risks of collective bargaining and violence. The volatiles strikes have made it imperative for non-unionised employees to join for both protection and organisational justice. This study has also gone on to find that, as part of organisational justice, there is informational justice on the basis of which they can make informed decisions on the days there are strikes. In other words, non-unionised workers do not have an equal chance of avoiding potential dangerous and lethal situations if they are outside union structures that provide information channels about strike action. This dimension of the study has revealed the importance of access to information through which intimidation and violence can be averted.

In the light of the above, violence and intimidation on their own are not independent vectors of joining and leaving unions. Employees, however, irrespective of union membership are affected by violence and intimidation. To address this dimension, the current study has looked at control beliefs about violence in relation to Rustenburg Platinum Mines. In the introductory chapter, the study examined facts and literature that showed that the overwhelming majority of mining employees disapprove of the lucrative bonuses received by management in general and Chief Executive Officers in particular. This study has uniquely pointed to the fact of board members who benefitted from
exorbitant bonuses, having gained membership to boards through what Webster (2013) identified as union careerism.

In the main, Chapter one has shown that, as retaliation against this widening remuneration gap between rank-and-file employees and upper-level managers, destructive and violent behaviour ensued since 2012 and was inconsistent with the mining company’s value system. In terms of Ajzen’s theory applied in this study, therefore, this tidal wave of violence during strikes was retaliation against not only the Rustenburg Platinum Mines mining houses but also retaliation (RAS) against National Union of Mineworkers supervisors. This study, demonstrated that the strong motive to unseat the NUM as the majority union seemed to have caused the intimidation and movement between the different Union memberships. The violence that occurred was directed not only at the company property but also at fellow employees including supervisors and managers (Chinguno, 2013).

Over and above this, Chapter One provides a good background to facts surrounding the rise of the alternative to National Union of Mineworkers. It provides details of how, in 2012, a number of Rustenburg Platinum Mines employees who were members of the National Union of Mine Workers (NUM), rebelled against the leadership of the union after failing to compel the union to take their grievances to their employer. The period following this rebellion led to a non-recognised strike which is considered unprotected as legislated processes before taking such an action were not taken. In addition to the strike, union members involved also embarked on violence and destruction of property. Subsequently, a total of 44 people were killed in the process, 34 of which were shot by police on the Marikana hill. Following the aftermath of the Marikana tragedy, the NUM was replaced as the majority union by the Association of Mine and Construction Workers Union (AMCU) in South Africa’s platinum industry (Grant, 2014). This study’s union-joining dynamic, therefore, is not strictly framed as non-unionised members joining a union for the first time; rather, it has focused on the dynamic of NUM members joining AMCU. In strict terms, then, by tying up union-joining with retaliation, Chapter One showed the validity of the notion of behavioural control to union-joining:

As applied to retaliation, behavioural control refers to beliefs about the existence of safe opportunities to “get back”. Support for behavioural control as a predictor of retaliation comes from studies showing that employees who perceived a low, rather than high, chance of punishment were more likely to model co-workers’ anti-social behaviour (Robinson & O’Leary-Kelly, 1998—quoted in Jones, 2013)
Chapter One's crowning achievement, in terms of scientific merit, was its ability to provide a set of five premises through which to stabilize the randomness of triggers of violence and intimidation. It posited, as per *caeteris paribus* rule, the assumption that there is no instability or overwhelming environmental threat in the context of John Brand's triggers (also read as Predictors within Ajzen's PBT). Thus, the study predicates conditions of rational and objective measurement to the point where all things are equal meant:

a) All labour relations in Rustenburg Platinum Mines being sound and articulating to stability;

b) All Rustenburg Platinum Mines employees being fairly represented by their Union of choice;

c) All union-led interventions and bargaining processes being constitutive of planned behaviour in relation to the working environment;

d) All union employees being in a secure environment; and

e) All bona fides being in order in the part of all parties involved in a Rustenburg Platinum Mines labour strike

These assumptions were necessary for testing the hypotheses of the study.

It was therefore possible to objectively range assumptions about intimidation and violence against the expansive Literature Review in Chapter Two. It is here that it becomes clear why, on the one hand, unions have three essential roles to fulfil: “they seek recognition for workers through organising at work; they redistribute economic goods and benefits from management to workers through collective bargaining; and they represent workers by giving voice to their concerns in the larger political and legal arena” (Crain, 2006: 158) and still become counterproductive, on the other. In this Literature Review chapter, counterproductive behaviour occurs in response to unfair treatment often represents an attempt to restore justice by “getting even” with a person or organisation, and is referred to as retaliation by Skarlicki & Folger (1997—quoted in Jones, 2003). In the same vein, Bies and Trip (2001) find that individuals calculate the costs and benefits of retaliation and may be more likely to retaliate if such an action is deemed worthwhile, which shows the obvious downside of union intimidation and violence. At a more subtle level, the counterproductive actions has tested the limits of the agent-system model (Masterson, Lewis, Goldman, & Taylor, 2000), which suggests that the source of procedural justice is typically the organisation, whereas the source of interactional justice is often a supervisor. Jones (2003) argues that “(according to) social...
exchange principles, procedural justice should predict retaliation against organisations (RAO), and interactional justice should be related to retaliation against supervisors (RAS).”

It has however since become clear that the exchange value can add to the framing of a trade-off that is crucial in the development of exchange relationships between unions and workers, especially where the conditions of exchange are not always benign and in the form of union bargaining (Cregan, 2013). This has cast doubt on the received wisdom that only acknowledges that trade unions have had a significant impact recently in terms of promoting fair treatment at work and advancing the interests of disadvantaged workers (Bacon & Hoque, 2012). It is this kind of critical intervention that makes a Literature Review useful for any study of trade unions in the platinum industry.

For one thing, it has now emerged from the Literature Review that workers cannot be generalized into one stable category. Some are battling on the fringe with untenable contracts which, had it been otherwise, would have prompted recourse from both the labour legislative framework and the labour union. What we discover, for instance, is the development of what Standing (2012) calls the precariat: a growing class of the ‘precariat’ who are stuck in a cycle of short-term and strict jobs. In view of the precariat’s conditions, the role of the unions is made all the more substantive. How else would this class have access to of fairness of outcomes (distributive justice), procedures (procedural justice), and treatment from authorities (interactional justice)?

For another, the Literature Review reveals the extent to which unions have exhibited an ambivalence towards vulnerable workers, tending to see them as a threat to the conditions of core employees or acquiescing to management’s use of contingent workers to manage fluctuations in demand for labour. Whilst this was experienced with in the platinum mines in Rustenburg during the 2012 wild cat strikes which resulted in the workers deciding to form a workers committee to represent them instead of their traditional unions (Bernstein, 2013), it also had an influence on the swelling of the ranks of the newly formed AMCU. It is in this sense that the Literature Review reveals the blind spots, as it were, of union joining behaviour.

It is in this context that we find a finer distillation of ideas around inclusivism—which would take the precariat class on board—and majoritarianism in Rustenburg Platinum Mines. According to Paton (2014), Rustenburg Platinum Mines tried after the Marikana strike to re-craft its relationship with its workforce by lowering thresholds of organisational rights to include more unions, and to make allowance for specific occupational or interest
groups. This was not tolerated as it was divisive. This resulted in shutting down of most workplaces and the unintended consequence of the propensity to use violence to boost recruitment in an environment where, generally speaking, workers have broad interests, and those interests extend beyond the shop floor into the political arena, and that unions can enhance their credibility as representative institutions by assuming primary responsibility for advancing these interests (Bezuidenhout and Buhlungu, 2008).

This propensity has had major implications for the hypothesis of the study as outlined in Chapter Three. For instance, whereas Masiloane (2010) defines violence as any action or behaviour that is directed at influencing another person’s behaviour, thus limiting such person’s freedom of choice, Chapter Three has credibly demonstrated that the control beliefs of the value of exchange with the union are more important to the joining a union. Thus, the Hypothesis that “Employees who feel intimidated are more likely to join the intimidating trade union” is conditional upon other decisive affective factors made manifest through elements of the Theory of Planned Behaviour.

In a similar fashion, Chapter Three problematizes the first hypothesis by choosing to see if task grades are tied to the impact of violence and intimidation. Predicated on Webster’s (2013) study that shows that workers within the Rustenburg Platinum Mines’ Marikana site are all exposed to different forms of violence, depending on whether they are the target of the rival organisation or not, Chapter Three arrived at the observation that being a member of either NUM or AMCU renders the risk of exposure to violence and intimidation inordinately high, and that joining either union distributes risk evenly across rival unions. However, NUM shop stewards in higher task grade positions as a result of deployment were perceived to be legitimate targets of violence. For the same reason, non-unionized employees in general and FEDUSA-aligned employees in particular in higher task grades, are perceived to be apolitical and therefore not legitimate targets.

The most startling and worrisome finding of Chapter Three, with regard to Hypothesis 2, was that non-unionised lower task grade employees do not have access to communication about impending industrial action, which renders them vulnerable to punishment for failure to comply with the calls to strike at Rustenburg Platinum Mines. Owing to this lack of access to communication, they become random targets who feel the greatest effects of intimidation and violence by default. As in any case, however, there is an exception: it has been observed that lower task grade employees aligned to AMCU were less exposed to the effects of intimidation and violence in the first instance because they were not legitimate targets.
In the final analysis, Chapter Three finds that Normative Beliefs held by bargaining unit employees’ practices readily translate violence and intimidation as a necessary evil. Here the Subjective Norm renders union-affiliation within bargaining unit employees an intentional behaviour which rewards union-joining behaviour with substantially higher wages. On the obverse side, non-joining behaviour is punished with intimidation and violence.

With the hypotheses framed in the above fashion, the next logical thing to do was to flesh out the Methodology with which the data was to be analysed in respect of each of the hypotheses. The research design was quantitative, hinged on a primarily cross-sectional survey design and concomitant convenience sampling for the purpose of establishing an approximation of reality. It is in this sense that the researcher intended to test a model developed by John Brand on Marikana conflict dynamics which looks at causes, triggers and manifestations of violence and intimidation in strikes and whether union membership is impacted. Notably, the test elements were drawn from Azjen’s Theory of Planned Behaviour on the basis of which it was possible to scale attitudes, subjective norms, and perceived behaviour control as factors that influence behavioural intentions for Union-joining behaviour.

Chapter Five presented the data results that quantify all the elements described in Chapter 4 — based on the test element of TPB as presented in a bespoke Questionnaire for investigating the impact of violence and intimidation in strike actions and their effect on union membership in the Platinum Mining Industry. On a scale of one to seven, indicating “Extremely Good” and “Extremely Bad”, Outcome Evaluations were assessed with the same rigour and validity that Direct Measures of Perceived Behavioural Control, Subjective Norm, Attitude, and Intention were scored.

Over and above this, for reliability, the motivation to comply with union-joining was distributed as a follow-up to the Self-Report on Past Behaviour. In doing so, it was sensitive to the demands of the hypothesis, thus adding into the profile of each employee the task grade level as an independent variable. There are unique benefits to this. One of them is that by adding the last personal variable of the employment grade of the respondents, which was divided into four levels, the operators (Level A1 – A8), drillers and loco drivers (Level B4 – B8), miners (Level C1 – C5) and then shift supervisors (Level D1 – F), it was possible to fully explore hypothesis 2.

Significantly, the majority of the respondents belong to either AMCU or NUM. While the actual combination of these two union membership from the respondents is about 80%
(N = 406), of these two main unions AMCU constituted of 48.8% (N = 247) of the respondents, while NUM was 31.4 (N = 159). For the purposes of this study, the numerically dominating Union was AMCU. The question the begged to be asked was whether the dominant union is necessarily the intimidating union, in terms of reality and perception. The perception was that the dominant AMCU was retaliating using intimidation and violence; yet the reality was that AMCU members are former NUM members who joined AMCU because of disenchantment with NUM’s acquiescence in further worker disempowerment.

In the same breath, given that 57.34% (N = 285) indicated that they joined the union because of the intimidation and violence, while the 42.66% (N= 212), were not driven by intimidation and violence to join the union, it should suffice to conclude that the majority of the respondents have experienced intimidation and violence during strike action and have joined the union because of this. This is not a significant majority. In order to check the integrity of this majority result, Chapter Five deployed the Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity for factor analysis. The factors involved were Power of Control (factor 1), Outcome Evaluation (factor 2), Attitude and Intention (factor 3), Behavioural Beliefs (factor 4), Normative Beliefs (factor 5), Subjective Norm (factor 6), and Repetition of Behavioural Beliefs (factor 7).

Similarly, a chi-square test (Phi and Cramer’s V) was performed and a relationship was found between grade task level and the frequency of effects of intimidation, $\chi^2$ (N = 503) = 0.501, p = .000, the result being a definite decreasing trend in the percentages, namely 91.2% for the operator grade (Level A1-level 8), followed by 90.3% for (driller or loco driver) followed by 58.5% (Miner) and last 29.1% in the highest grade, which is the shift supervisor for respondents experiencing intimidation.

Graded on the seven factors, the responses are complex yet yield this simple truth: non-unionised lower level task grade employees and, ironically, unionised higher level task employees feel the greatest effects of intimidation and violence. This is consistent with the results of the multivariate regression equation with perception of the intimidating union as a dependent variable and a function of predictors; for perceptions of AMCU as intimidating has not at any stage delegitimized its organisational justice agenda, nor has the number of new joining members dropped.

This has made it easier in Chapter 6 to chart trends and answer hypotheses of the study and research aims concerning the dynamics of union joining in the Platinum mining sector, with specific reference to Rustenburg Platinum Mines and Lonmin.
7.2 The value of this study

In electing a quantitative approach with strict measures of reliability, this study is amenable to enquiries in relation to the dynamics of union-joining and leaving at Rustenburg Platinum Mines. In particular, it approximates quantifiable factors that are responsible for union joining behaviour, taking into account the rivalry between NUM and AMCU. However much these may change over the course of time, this study has yielded profound insights with regard to the value of the exchange relationship between employees and unions.

Seen in this light, the violence and intimidation are formulaically expressed as the surplus value of that exchange relationship, not exactly in the fashion of collateral damage because, unlike lost working hours in downtime, human lives are irrecoverable. The study has uniquely provided not only a synthesis of Azjens’s Behaviour Planning Theory and Maslow’s hierarchy of needs to explain the lack of ontological securities that inform control beliefs that inform the intention to join unions; it has also provided two models that explain the phenomenon of union joining and leaving at Rustenburg Platinum Mines.

7.3 Main findings

Department of Labour’s (2013) report that non-unionized and/or non-affiliated low-income mining employee’s bore the brunt of violence on account of defying strike calls either by default or for lack of information. Similarly, another paradox lies in the fact that higher-income category employees were not insulated from violence or intimidation but were on the worst receiving end because of their strong NUM credentials and prominence gained through what Webster (2013) calls union careerism. In short, these higher-income category employees, more than any other, were the object of what the Theory of Planned Behaviour (Azjen, 1991; Jones 2012) has described as Retaliation against Supervisors (RAS). In this unique scenario, however, the normative belief and subjective norm were that their (NUM) interests merged with those of Rustenburg Platinum Mines, in which case they were also objects of Retaliation against the Organisation (RAO). This scenario is represented as a Paradox Line Graph and warrants further testing of the second hypothesis (H2) against further empirical data measurement.
Normative Beliefs held by bargaining unit employees about effective bargaining practices readily translate violence and intimidation as a necessary evil. Yet, according to Behaviour Planning Theory (Ajzen, 1991; Ajzen, 2006), it is the Control Beliefs that bargaining unit employees hold about violence as the simultaneous Perceived Behavioural Control of both Rustenburg Platinum Mines and the rival NUM’s supervisors that qualifies the intention to specifically produce AMCU-aligned union-joining behaviour.

The findings, simply put, are:

(a) The failure of institutionalized dispute mechanisms through the CCMA, as indicated by the statistical increase in strikes in the Platinum belt and Rustenburg Platinum Mines in particular;

(b) The propensity to join unions is as much prompted by an urgent sense of threat to job security and personal safety as it is by the need to leverage organisational justice;

(c) The behavioural beliefs and predictors that are associated with violence, as described by Jones (2003) in his elucidation of Ajzen’s Behaviour Planning Theory, strike an analytical resonance with John Brand’s articulation of moderators, triggers and aggravators that, like retaliation, are essentially manifestations of disregard for the Labour Relations Act;

(d) Retaliation in the form of intimidation and violence that exhibit retaliation against the organisation (RO) and retaliation against supervisors (RS) of NUM has had the unintended consequences of eroding the human capital of mineworkers as well as the value chain of mining in the mainstream economy; and

(e) Violence and intimidation, as Webster (2013) confirms, is also a function of the breakdown of the compact between business, labour and power that was initiated by the New Growth Path which, in turn, has charged the volatile strikes with a sense of non-compromise, on the one hand, and entitlement on the other.

7.3.1 Practical recommendations

- This study recommends that Human Resource practitioners structure their communication with striking employees at Angloplatinum and Lonmin without compromising the provisions of the Labour Relations Act or compromising
the bargaining structures on the basis of ideological bias or favour against any union;

- Secondly, the recognition of the precariat class identified by Standing (2012) must be seen as a not just a convenient stop-gap measure during wildcat strikes but a serious liability;

- Third, union members are not necessarily affiliated because of domination of the dispute space but also as a result of intimidation;

- Fourth, union density is not a threat but an opportunity to regularize employment practices across the board for all employees;

- Fifth, and finally, union-joining allows for interactional justice and informational justice which, without unions, would be hardly possible.

### 7.3.2 For academics in future research

It is worth pondering over interrogating the assumptions about loyalty to unions as bona fide or convenient. Would it be helpful in future studies to track the improvement in wages through bargaining and see how it impacts on the possibility of shop stewards to refuse to vacate their positions owing to careerist interests?

In what ways, if any, can there be a spectrum of subtle and overt form of intimidation that results in either joining or leaving a union?

The aforementioned questions may cast light on certain types of sub-behaviours, ranging from that of legitimate outcry to that of the exaggerating agent provocateur in the midst of miners.

It would also be recommended that a researcher test and validate the conceptual model that was developed in this study.

### 7.4 Concluding remarks

In conclusion, it can be deducted that the objectives of this study were met and contributed to the limited body of literature on violence and intimidation during strike in the mining industry. This study has demonstrated that central to the behaviour of the employee and union behaviour and relationship is the perceived organisational justice. Therefore, there is a need to invest in improvement of the relationship of all stakeholders in the mining industry so as to ensure that the employees and union improve their interaction during strike in the platinum industry.
REFERENCES


Given, L.S. (2008), The Sage Encyclopaedia of Qualitative methods. (2nd ed). Sage Publication Inc. Australia


APPENDIX - 1

Introduction

I am an MBA student at the Gordon Institute of Business Science (GIBS); the research I am conducting is on what makes people use violence and intimidation during strikes. To that end, we request your assistance in completing the attached questionnaire by providing information about your union affiliation, fear and violence, and your experience of intimidation. The questionnaire will take no more than 20 minutes to complete. Your participation is voluntary and you can withdraw at any time. Do not write your name on the questionnaire. This is completely anonymous.

Please answer the questions:

- by ticking the relevant box
- as honestly as possible and
- knowing there are no right or wrong answers

By completing the survey, you indicate that you voluntarily participate in this research. Should you have any concerns, please do not hesitate to contact myself, Lusanda Sam or my research supervisor Dr. Annelie Gildenhuys on the contact details provided below:

Researcher: Lusanda Sam - Cell phone number – Email: Lusanda.sam@angloplat.com

Research supervisor: Dr Annelie Gildenhuys - Cell phone number: 083 251 1326
Email: Annelie.Gildenhuys@Standardbank.co.za
### SECTION 1: Biographical Details

#### What is your Gender?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td></td>
</tr>
</tbody>
</table>

#### What is your age?

<table>
<thead>
<tr>
<th>Age Range</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>30 years or less</td>
<td></td>
</tr>
<tr>
<td>31 – 40 years</td>
<td></td>
</tr>
<tr>
<td>41 – 50 years</td>
<td></td>
</tr>
<tr>
<td>More than 50 years</td>
<td></td>
</tr>
</tbody>
</table>

#### How many years of services in the company?

<table>
<thead>
<tr>
<th>Years Range</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2 years or less</td>
<td></td>
</tr>
<tr>
<td>3 – 5 years</td>
<td></td>
</tr>
<tr>
<td>6 – 10 years</td>
<td></td>
</tr>
<tr>
<td>More than 10 years</td>
<td></td>
</tr>
<tr>
<td>What is your type of Employment</td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td></td>
</tr>
<tr>
<td>Permanent</td>
<td></td>
</tr>
<tr>
<td>Fixed Term Contract</td>
<td></td>
</tr>
<tr>
<td>Labour Hire</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indicate your grade level?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level A1-8 (Operator)</td>
</tr>
<tr>
<td>Level B4-8 (Driller or Loco driver)</td>
</tr>
<tr>
<td>Level C1-5 (Miner)</td>
</tr>
<tr>
<td>Level D1-F (Shift Supervisor)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Current Union membership?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUM</td>
</tr>
<tr>
<td>AMCU</td>
</tr>
<tr>
<td>UASA</td>
</tr>
<tr>
<td>Solidarity</td>
</tr>
<tr>
<td>Other (please state)</td>
</tr>
<tr>
<td>Don't want to say</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of years of union membership?</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 years or less</td>
</tr>
<tr>
<td>3 to 5 years</td>
</tr>
<tr>
<td>6 – 10 years</td>
</tr>
<tr>
<td>More than 10 years</td>
</tr>
</tbody>
</table>
### Have you changed your unions in the last 3 years?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

### Have you experienced intimidation and violence during strikes?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

### Intimidation and violence was the main reason I joined my Union?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Section B</td>
<td></td>
</tr>
<tr>
<td>-----------</td>
<td></td>
</tr>
<tr>
<td><strong>Instruction on how to complete the questionnaire:</strong></td>
<td></td>
</tr>
<tr>
<td>Please read the statement carefully, and rate them make use of rating scales with 7 places; you are to circle the number that best describes your opinion.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Outcome Evaluations</strong></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Somewhat disagree</th>
<th>Neither disagree nor agree</th>
<th>Somewhat agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Union membership is important for me to stand a better chance of security and protection from intimidation in this mine:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>2. I get a deeper sense of protection from violence and intimidation since I joined the Union in this mine:</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>3. Being a member of the union gives me an opportunity to interact with Management, Shop stewards and other employees in this mine</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>4. I do not miss union meetings</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>5. I keep up my union affiliates in this mine</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>6. It is important for me to develop a ‘good standing’ membership profile, self-discipline, and a feeling of collective belonging in the union</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>7. I do not miss out on union activities that are outside the mine</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>8. I get information and explanations regarding strategies to be adopted during strikes in the mine</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>9. I have been subjected to violence and intimidation in the mine during the strike</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>10. I get a sense of security and protection during my time at the mine</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Direct Measures of Perceived Behavioral Control, Subjective Norm, Attitude, and Intention</strong></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Somewhat disagree</th>
<th>Neither disagree nor agree</th>
<th>Somewhat agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. I joined the Union on a voluntary basis</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>12. Intimidation and violence occurs during the strike in the mine</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>13. Intimidation and violence during strikes have an negative impact on union affiliation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>14. I perceive my current union as an intimidating union</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>15. Most of the mining employees in a Union with whom I am acquainted with, joined a Union on a voluntary basis</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>16. I join or leave a Union on a voluntary basis without fear of intimidation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>17. I join a Union without being compelled by acts of violence and intimidation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>18. Most people whose opinions I value would approve of my Joining a Union on a voluntary basis</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>19. I think unions other than my own threaten people to join them</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
### Motivation to Comply

<table>
<thead>
<tr>
<th>Number</th>
<th>Question</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Somewhat disagree</th>
<th>Neither disagree nor agree</th>
<th>Somewhat agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>Generally speaking, I care about what the shop steward of my Union thinks I should do during the strike in the mine</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>21</td>
<td>Generally speaking, I care about what my Managers think I should do during the strike in the mine</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>22</td>
<td>Generally speaking, I care about what my unionized friends think I should do during the strike in the mine</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>23</td>
<td>Generally speaking, I care about what my fellow employees at the mine think I should do during the strike</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

### Behavioural Beliefs

<table>
<thead>
<tr>
<th>Number</th>
<th>Question</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Somewhat disagree</th>
<th>Neither disagree nor agree</th>
<th>Somewhat agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>Joining a Union on a voluntary basis helps me to gain a better sense of security in the Rustenburg Platinum Mine environment</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>25</td>
<td>Joining a Union on a voluntary basis helps me to feel protection of my job and get a high wage through the Union</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>26</td>
<td>Joining a Union on a voluntary basis gives me an opportunity to peacefully interact with the Union shop stewards and other employees in the mine</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>27</td>
<td>Joining a Union on a voluntary basis helps me avoid being a victim of violence and intimidation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>28</td>
<td>Joining a Union makes me miss out on Rustenburg Platinum Mine employee activities outside of the Union activities</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>29</td>
<td>Joining a Union on a strict basis subjects me to the tedious and tiresome political speeches and sloganeering</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>30</td>
<td>Joining a Union on a strict basis helps me to enhance security and protection during my time at Rustenburg Platinum Mine</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

### Control Beliefs

<table>
<thead>
<tr>
<th>Number</th>
<th>Question</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Somewhat disagree</th>
<th>Neither disagree nor agree</th>
<th>Somewhat agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>When I encounter unanticipated events that place demands on my time, it would make it more difficult for me to join a Union on a voluntary basis</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>32</td>
<td>When I feel threatened, vulnerable or targeted during strike</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>33</td>
<td>The mining activities at the Rustenburg Platinum Mine place heavy demands on my time</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

### Power of Control Factors

<table>
<thead>
<tr>
<th>Number</th>
<th>Question</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Somewhat disagree</th>
<th>Neither disagree nor agree</th>
<th>Somewhat agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>34</td>
<td>When I encounter unanticipated events that place demands on my time, it would make it more difficult for me to join a Union on a voluntary basis</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>35</td>
<td>When I feel threatened, vulnerable or targeted, it would make it more difficult for me to join a Union on a voluntary basis</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>36</td>
<td>When work or employment placed unanticipated risks on my personal safety, it makes it more difficult for me to join a Union on a voluntary basis</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>37</td>
<td>If higher income categories at Rustenburg Platinum Mine provided security, it would make it more difficult for me to join a Union on a voluntary basis</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

### Normative Beliefs

<table>
<thead>
<tr>
<th>Number</th>
<th>Question</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Somewhat disagree</th>
<th>Neither disagree nor agree</th>
<th>Somewhat agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>38</td>
<td>The shop steward of a Union thinks I should join the union on a voluntary basis</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>39</td>
<td>My Managers think I should join a Union on a voluntary basis</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>40</td>
<td>My close colleagues think I should join a Union on a voluntary basis</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>