A STUDY OF THE FACTORS IMPACTING ON THE PERFORMANCE OF SCHOOL OPERATIONAL TEAMS IN SECONDARY SCHOOLS IN NELSON MANDELA BAY

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DECLARATION

Marilyn Dawn Gibbs s185142270, hereby declare that this treatise/dissertation/thesis submitted towards partial fulfillment of the requirements for the degree Magister in Business Administration in the Faculty of Business and Economic Sciences of the Nelson Mandela Metropolitan University is my own work and that all sources used have been indicated and acknowledged. I have not previously submitted this research study for any postgraduate qualification at any other University or institution.

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ABSTRACT

It is critical in this dynamic and changing environment that both the leadership and educators of schools and organisations are well equipped with the skills and knowledge to create high performance teams (HPT). High performance teams can be defined as those highly motivated team players in the organisation or school that maximise their people integrated knowledge, skills and values to a shared purpose or vision of their stakeholders.

In this mixed method research an analysis of the whole school operational teams of some secondary schools including all educators, head of departments, administrators and principals was undertaken. Four secondary schools from two quintile groups situated in various areas of the Nelson Mandela Bay Metropolitan were the sampling units and the sample size was eighty one. Both quantitative and qualitative data was collected utilising a carefully constructed questionnaire based on a theoretical conceptual framework of enabling factors for HPT in business contexts.

The theoretical framework of the Kenexa High Performance Model was utilised in this study. A questionnaire was constructed based on the factors of the High Performance Work Index (HPW) study done by the Australian Business School. This model was adjusted to utilise factors aligned to those factors within the school operational context. Using other literature references further factors were included into the survey instrument. The School High Performance Work Index (SHPWI) was the dependent variable while the independent variables included organizational commitment, and employee engagement. These were literature based measures and the questionnaire items were taken from previous research studies, thereby allowing construct validity. The other independent variables included Communication, Leadership, Strategic Management, School Organizational Climate, Positive Practices, Conflict Management, Motivation and Trust.

A statistical analysis was undertaken on each school's team response data. Reliability and validity of the constructed questionnaire was shown by using the Kenexa employee engagement index and the Organizational Commitment measure, which were highly correlated with the SHPWI.

In literature, high performance teams (HPT) show common patterns in business and in this study it was seen that a number of common factors contributed towards a HPT in school operational teams. In this research study the main enabling factors in whole school operational teams that could lead to the formation of HPT's involved factors of leadership, communication and motivation. The SHPWI showed a high correlation with employee engagement and organizational commitment.

The HPT profile involved innovation (freedom of thinking), employee (educator) engagement, fairness, leadership, learner needs, communication, trust, conflict management, school organizational climate, positive practices, strategic management and motivation.

In the correlation between the SHPWI and the independent variables the highest correlation (statistically significant at p < 0.05 N = 81; r > 0.500) occurred between the School High Performance Index and Leadership (0.822), Communication (0.785) and Motivation (0.766).

In the multiple linear regression (MLR) of the results of this study the highest correlations with a value of $R^2 = 0.774$ was obtained with variables of Leadership, Communication, Motivation and Strategic Management factors.

Qualitative data was coded and linked with the factors in the quantitative data and the top five factors were selected and summarised for each school. Merged data showed that each school exhibited a different profile of strengths and weaknesses. Recommendations were outlined for each school operational team.

Different schools in different quintiles have different needs and gap factors that require improvement. It is therefore imperative that schools analyse their strengths and weaknesses within their school operational teams. This research study aimed therefore to start research on a human resource metric that can be further developed to allow school operational teams to examine and analyze their own HPT profile, so that specific interventions may be implemented.

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CHAPTER ONE

OVERVIEW OF THE STUDY

1.1 BACKGROUND OF THE STUDY

Within this dynamic and changing environment it is critical that organisations and school leaders are equipped with skills and knowledge to create high performance teams (HPT). Colenso (2000) describes these high performance teams as teams which show excellent interpersonal skills, participation, decision making, creativity and the ability to effectively manage the external environment. Earlier research (Irani and Sharp, 1997) demonstrated that in the fast changing education field it is imperative that whole school teams are able to be flexible and adaptable as well as utilise their full intellectual capacity in cross-functional teams, thereby improving organisational performance.

Richards and Moger (1999) suggest that seven factors contribute towards the formation of HPT. These are shared vision, creative climate and ownership of ideas, resilience, network activators, learning from experience and having a platform of understanding. In a study by the Australian School of Business the main factors were identified that contributed towards a high performing workplace across 78 different organisations. A high performance workplace index (HPWI) was then calculated utilising these constructs.

In this exploratory study an analysis of school operational teams of four high performing secondary schools in two different quintiles were examined to establish whether there are common enabling factors contributing towards effective performance of school operational teams in these secondary schools. Literature suggests that certain theories affect the development of effective teams and these are the charge and charter theory, the change theory, the performance curve theory and the synergistic relationship theory (Colenso, 2000).

In this research study on effective performance of a sample of secondary school operational teams, several theoretical frameworks applied in human resource development (HRD) were utilized to construct an integrated theoretical and practical framework of the factors that build effective school operational teams. The Kenexa High Performance Model was used and integrated with other theoretical frameworks. The Kenexa employee engagement index (Wiley, 2009) was also adapted within a school context, to an educator engagement index. In literature, HPT show common patterns in business and this study aimed to analyse the common enabling factors that contribute towards effective high performance teams in school operational management, showing alignment in purpose, partnership and process.

This empirical study therefore aimed to investigate, using a Positive Organisational Scholarship (POS) framework, the factors of positive organisational practices and courageous principled action (CPA) through leadership, communication and educator engagement that influence and promote high performance operational teams in secondary schools.

1.2 MOTIVATION FOR THE STUDY

Due to many changes in the South African education curriculum and the education climate, many uncertainties have surfaced in the minds of educators and in the school management teams. These challenges and some negative attitudes and anxieties have impacted on many of the schools performances and organisational effectiveness in the schools in the Eastern Cape.

The management dilemma is that it seems there is a lack of positive best practices in many educational organisations with the negativity causing a decrease in effective organisational performance within many schools. The motivation behind this study was to examine these factors. By utilising a sample of high performing school operational teams the researcher aimed to construct a conceptual framework and metrics that could assist in creating a pilot instrument. This could be further developed to use in secondary school profile analysis to measure effective performance in all schools. By analysing the

schools profiles one could develop interventions and skills that would improve the performance of under- performing schools.

1.3 PROBLEM STATEMENT AND HYPOTHESIS

A problem statement can be stated as some difficulty or issue that the researcher experiences in a theoretical or practical situation. They would like to define a possible solution or outline to this problem. A research hypothesis can be defined as a possible solution that can then be empirically tested in a research study (Welman, Kruger and Mitchell, 2005).

1.3.1 Main problem statement

The main problem may be identified as follows: In many schools the operational teams do not function as effectively as they could and this affects the efficient performance of the school in teaching and learning.

What factors are required to energise a secondary school operational team to function as a high performance team within the Nelson Mandela Bay secondary school environment?

The aim of this exploratory research study was to analyse the perceptions of a sample respondents at all levels of the school operational school teams with regard to critical enabling factors that affect the performance of the whole school operational teams. The samples in this study were four secondary schools in two different quintiles situated in Nelson Mandela Bay.

1.3.2 Sub-Problems

In developing a framework of critical enabling factors required for high performance of school operational teams (SOT), the following sub-problems were also identified:

Sub-problem one:

What does literature research reveal about the factors of high performance teams in both the business and school environment?

Sub-problem two:

What factors, important in creating high performance operational and management teams are emphasised in literature?

Sub-problem three:

What factors are currently identified in successful secondary schools in Nelson Mandela Bay that create high performance school operational teams?

Sub-problem four:

How can the factors emphasised in sub-problem one to three be integrated to build a framework of critical enabling factors that could be further developed in future research studies, into a diagnostic tool for secondary schools to identify the gaps of performance areas in underperforming schools, with respect to their operational team performances.

1.3.3 Hypothesis

Common enabling factors can be identified as significant in the high performing operational secondary school teams in different schools. These can be utilised to construct a framework for identifying the main enabling factors contributing towards higher school operational team performance. The school profile analysing the enabling factors will be different for SOT's within different quintiles.

1.4 PURPOSE AND RESEARCH OBJECTIVES OF THE STUDY

The overall purpose of this research was to identify and analyse the factors that enable high performance teams to operate in secondary schools, examine their significance and analyse the differences in the different school environments.

This study aimed to examine the significance of the primary factors that enable the secondary school teams to operate as a high performance team. A framework of the high performance enabling factors in operational secondary school teams was constructed from the literature review and was the basis for the design of the domains and sub-domains of the questionnaire.

In further studies, a diagnostic tool could be developed, to examine and analyse holistic school performance. In this research a SHPT tool was used to identify the weaker areas which require attention and development in the school teams. By using specific interventions aligned with the school teams' strengths and weaknesses it could energise their school team to develop into more efficient high performance teams.

The overall research objectives are:

- To identify what factors are common in secondary school operational teams that exhibit characteristics of high performance teams;
- To examine which strategies are being implemented successfully in the school environment (structural and cultural) to create high performance teams;
- To identify the factors affecting high performance of secondary school teams to be utilised as a framework for analysis in examining a secondary school's operational team performance.

The secondary objectives of this current study include:

- To analyse the effect of the enabling factors in these high performance teams within that school environment and quintile;
- To analyse the effect of the enabling factors in HPT within a city school in comparison to a township school;
- To analyse the human and system factors contributing to the school HPT;
- To analyse the synergistic relationships between the HPT enabling factors;
- To analyse the enabling factors and their effects.

1.5 DELIMITATIONS OF THE STUDY

An important part of a research study is that it is viable and practical with a clear boundary of the study. In order to achieve this study within the time limitations a narrow sample were selected.

1.5.1 Geographical location

The geographical location of the selected secondary schools was limited to the Nelson Mandela Bay Municipality (NMBM). Due to the poor performance in this region this district was selected as the researcher could then select and examine the high performance school operational teams in the high performing schools as possible models for analysis. This study selected four secondary schools in the NMBM from two quintiles with three schools situated in the city and one in the peri-urban area. By examining the enabling high performance factors that represent the interrelated effects of achieving organisational effectiveness of the operational teams in these secondary schools, a better understanding of the relationships within these HPT could be obtained from the team member's perspective.

The literature review shows many HPT models in the business area and these were utilised in the analysis of the secondary school operational teams. The researcher has utilised a combination of these with analysis of the enabling factors within a school context. Further studies on a continuum of weak to high performance schools will allow further expansion of the researcher's conceptual model for school HPT's.

1.5.2 Educator levels and personal criteria

The educators and staff occupying all levels in school operational teams were approached to answer the questionnaire within each school, irrespective of gender, race, age, level or qualification or position. Primary data was collected at the four schools from school staff at all levels of the school operational teams.

1.5.3 Sampling

Since the sample size is small (N= 81) and convenience sampling was selected, the results of this exploratory study cannot be generalised to the broader target population. However, results will shed light on the main enabling factors that arise in HPT's in secondary school operational teams.

1.6 CONCEPT CLARIFICATION

1.6.1 High Performance Teams (HPT)

Since performance and satisfaction are critically important and relevant for organisational success, it is crucial that a focus be placed on all practices that develop high performance in teams. It is critical to understand the drivers that energize and motivate your team members as this develops sustainability in organisational performance. A definition by Sharp, Hides, Bamber and Castka (2000, p. 1) of HPT is a "team of people who have unleashed their potential toward their stakeholders shared purpose".

1.6.2 High Performance Work Index (HPWI)

In this study, the researcher will utilise the HPWI (Boedker, Vidgen, Meagher, Cogin and Runnalls, 2011) as a measure of the effective leadership, culture and management practices of the operating teams in secondary schools.

This HPW Index was developed by working with 78 Australian service sector industries to identify and analyse what establishes a high performance work place. These service based industries, such as law firms, accounting and consulting firms, advertising companies and employment agencies, obtain their wealth mainly from economic returns on intangible assets. Since they have few tangible assets, a measurement of their intangibles will be an important measure of the performance of these organisations. This HPWI uses six categories namely Profit and Productivity (P), Innovation (I), Employee Experience (E), Fairness (F), Leadership (L) and Customer Orientation (C). In this study the model is adapted for the secondary school utilising Learners Orientation (LO) in place of Profit and Productivity. Results were plotted on a radar diagram. This is therefore the authors own School High Performance Work Index (SHPWI) constructed for measuring the level of high performance of school operational teams.

1.6.3 School Operational Teams and Variables

In this treatise an overall research study was done on the operational school teams of high performing schools using the conceptual framework of Dee, Henkin and Pell (2002). The school operational team was defined as the overall

school team involving all levels of the school from administrative to principals. The causes of the high performance teamwork were the independent variables. The standardized dependent variable were the organisational commitment/effectiveness of the school team and the Kenexa employee engagement index, which were established literature metrics that correlate highly with organisational effectiveness (Mowday, Porter and Steers, 1982; Wiley, 2012).

The independent variables that link with high performance and effective teams include the SHPWI, communications and connections, leadership, trust, motivation, conflict and positive practices, and school organisational climate.

Research on teams and teamwork in schools include very few studies that examine the perceptions and factors that influence how effective the individual member may be as part of the team with regard to team skills. Team skills include communication, team leadership, conflict behavior, team support and integrated behavior, as well as teacher team and organisational commitment (Park, Henkin and Egley, 2005).

1.6.4 Communication and connections

Communication refers to "the degree to which information is transmitted among the members of an organisation" (Price, 1997, pp. 305-558). Openness is an important part of communication and defined by a work climate where people feel comfortable to share their ideas and information with other team members. In organisations with open communication, there are high levels of trust and innovative thinking (Dee, Henkin and Pell, 2002). This creates high performance and effective operations within the teams resulting in an effective organisation operation.

1.6.5 Leadership and Strategic Management

Leadership is a complex social phenomenon and can be manifest in many different ways in different contexts. Forms of distributed leaderships can interact in both situational and social forms and thus influence and shape one another. Leadership styles and skills that assist organisational effectiveness in our school teams must be encouraged and developed (Werner, 2011).

It is important to realise that individuals not the teams or the organisations bring about change, learn to adapt and ultimately produce the results. By meeting often with your team and engaging in discussions, shared organisational and personal goals can be aligned. Working together to establish these goals, allowing constructive team conflict and aligning strategies thereby advances the organisational goals and increases success of higher performance (Wilder, 2011).

1.6.6 Trust

Trust has been acknowledged as an essential factor in all social interactions. Trust in teams and school teamwork are linked to interpersonal trust and social and leadership relationships, organisational effectiveness, school climate and student achievement (Bryk and Schneider, 2002). Trust can be defined, according to McAllister (1995, pp. 24-59) as "the extent to which a person is confident in and willing to act on the basis of the words, actions and decisions of another". It can be seen that trust according to Covey (2006) means to have confidence in the ability of your team and their integrity.

1.6.7 Teacher Experience

Experience can be defined as the perceptions or set of cognitions that teachers have of themselves in relation to the work environment. It is active rather than passive and encompasses the "subjective state of mind of the employee and his perceived ability to exercise effective control over meaningful work" (Spreitzer, 1995).

1.6.8 Conflict management, Positive practices and Positive Organisational Scholarship

Since negativity is prevalent in many of the schools, it is crucial to develop positive approaches and practices that focus on what "to do" rather than on the "do not do" (Caza and Caza, 2008). Using a Positive Organisational Scholarship (POS) approach (Cameron, Dutton and Quinn, 2003) it is hoped to

examine the positive educational organisational practices that lead to a dynamically high performing secondary school.

In every group or team one faces potential conflict which must be managed. If these are not addressed it leads to negativity, loss of energy, lack of commitment and poor performance. New norms and handling of these conflicts need to be established in order to handle future conflicts successfully (Marquardt, Leonard, Freeman and Hill, 2009).

1.6.9 School Organisational Climate/Culture

Many definitions of organisational culture have been developed over the years but most agree that it includes a system of shared meanings and assumptions of the members that differentiate that organisation from another (Werner, 2011). It thus includes the customs, traditions, values and attitudes, habits, languages and material artifacts that create this school organisational culture. Leaders need to define strategies that are aligned with the organisations value and visions so that these behaviors are reflected across the entire organisation. Leaders should also be modeling these desired behaviors.

1.6.10 Employee Engagement

An employee who is engaged will extend his duties beyond the normal level and share knowledge, experience and wisdom in his organization, creating a competitive advantage in the organization. As stated by Poisat (2006, p. 21), "an employee who is engaged is emotionally, cognitively and personally committed to the organization and its goals, by exceeding the basic requirements of the job".

1.6.11 Organisational Commitment

The construct organisational commitment can be defined in a number of ways and involve the attitude linking the identity of the employee with the organisation, a merging of the goals of the employee and the employer, the involvement of the employee with the organisation and the perceived costs of leaving or rewards of staying associated with continued contribution in an organisation (Mowday, Porter and Steers, 1982). According to Jaros (2007) in

the Meyer and Allen model of organisational commitment, there are three main themes: commitment reflecting an affective orientation, recognition of costs and moral obligations to stay with an organisation.

1.7 LITERATURE REVIEWED

A wide variety of literature was consulted for this study and included books, journals, articles and related websites, as well as the researchers own personal experiences in working in school operational teams.

This research study is embedded in the theory taken from the literature review of the body of knowledge in the area of high performance teams and the factors that promote effective teamwork. Many reported studies show the conditions necessary for effective teamwork and functioning and show the favourable conditions in both a structural and cultural nature are required for the effective team to flourish (Van der Mescht and Tyala, 2008). In this research study recent studies of business models analysing the factors affecting high performance teams were used as a theoretical framework.

In team development literature three dimensions are part of a multidimensional model, the individual, the task and the team (Stott and Walker, 1995). An alignment model is considered by Scholtes, Joiner and Striebel, (1996) who argue that there are three primary tasks of purpose, partnership and process. In the study of HPT's by Katzenbach and Smith (1993), a number of key conclusions have emerged. Significant performance can challenge and energise a team wherever they are in the organisation. By building a strong performance ethic rather than a team-promoting environment alone, the leaders can foster team performance. Discipline within the team and the organisation creates better conditions of organisational performance. Barriers to team development are a weak sense of direction and critical skill gaps. The external confusion and hostility or indifference and unequal commitment to the team performance, may also be obstacles to team development.

Factors affecting the successful implementation of HPT's can be summarised as either human or system factors. System factors being organisational impact, defined focus, alignment and interaction and measure of performance. Human factors are knowledge and skills and the need of the individual and group culture (Castka, Bamber and Sharp, 2001). According to the John Spence HPT Competency Model the following components were required to build a successful high performance team: shared direction, clear and measureable goals, competence, clear communication, mutual accountability, discipline, trust, respect, appreciation, strong commitment and a positive attitude. Leaders must model the way and understand their team members (Spence, 2012).

1.8 LIMITATIONS OF THE STUDY

Limitations could arise in this research study due to a number of factors. According to Welman, et al., (2005) problems could arise due to political, economic and social changes. Reluctance of schools to participate in the research study and provide full participation may limit the responsiveness of school members.

Other barriers to this research study which could affect the reliability and validity of the research are the language, culture and value systems of different schools in different contexts.

Since there were time limitations in this study a smaller sample was used and a further more extensive study could include a larger continuum of both primary and secondary schools across the low to high performance spectrum. Since this mainly positivistic study uses a convenient sample rather than a random sample mainly tentative conclusions about the broader population can be made, until further studies are concluded.

1.9 RESEARCH METHODS

Collis and Husssey (2009) define two main paradigms that exist at opposite ends of a continuum, being positivism (deductive process) and interpretivism (inductive process). In this study a positivistic approach is used where there is a

static design with causality in a deductive process. Concepts are described in a way that can be measured and hypotheses are formulated. The cause-effect is a multiple causes- one effect design which uses ten independent variables and the effect on one dependent variable. The dependent variable consists of five constructs.

In this study the researcher will make use of both a historical mixed method and case study approach. Previous studies in the field will be examined that have been conducted in the past regarding performance of school teams. This research examines certain phenomena within a particular context of high performance school teams and utilises both qualitative and quantitative data.

The researcher will be using a mixed method research design and collect both quantitative and qualitative data from questions responses, in the same phase. This means an umbrella worldview of pragmatism, correlating with the "best" worldview for mixed method research (Tashakkori and Teddlie, 2003). Since this study is utilising a POS approach, it could also be considered to come from a "community of scholars" perspective (Morgan, 2007).

1.10 STRUCTURE OF THIS RESEARCH STUDY

Outlines of the various chapters contained in this research are as follows:

Chapter 1: Outlines the scope of the study.

Chapter 2: Literature Review and Theoretical framework.

Chapter 3: Research design and methodology of the study.

Chapter 4: Research results and analysis.

Chapter 5: Conclusions, Recommendations and summary.

1.11 CONCULSION

The aim of this chapter was to introduce the rationale and background of this study including the problem statement and sub-problems. To indicate the direction of the research and the research methodology in a broad overview is imperative to show the macro viewpoint. Showing the delimitation and boundaries for this study is necessary as it is hoped to expand this research to a larger sample and continuum. Clarification of concepts eliminates ambiguity

and an outline of research methods was given, with further details being described in the chapter on research methodology.

A background and broad overview of the research have now been discussed and the following chapter (Chapter 2) will detail the literature review and theoretical framework of this research study.

CHAPTER 2

HIGH PERFORMANCE TEAMS AND SCHOOL OPERATIONAL TEAMS

2.1 INTRODUCTION

"To achieve high-performing teams, you must treat them as individual people. Individuals are engaged when they feel like their effort and opinions are valued and they are rewarded for their individual contribution." (Wilder, 2011, p.1)

In today's fast changing environment it is critical that organisations are able to be flexible, adaptable and to fully utilise their intellectual capacity in a crossfunctional highly connected way to improve organisational performance. Knowledge, skills, experience and perspectives of a diverse range of people should be integrated to achieve success (Irani and Sharp, 1997).

In this chapter an overview of the literature related to this research is outlined and presented. The starting point is a brief description of high performance team characteristics, their benefits and relevance to organisational success. Business models from literature are examined and a theoretical framework is utilised to develop this research within the high performance school operational team context. By examining, identifying and synthesizing the existing knowledge of completed research work in this field, the literature review assists as a guide to focus on the research questions and build a conceptual framework for this study in secondary schools. The aim of the chapter is to answer the research question and sub problems as stated for this study.

It seemed from the literature review on high performance teams that very little work has been done within a school environment and therefore this research study aims to address this gap of research which examines high performance operational teams in secondary schools.

2.2 HIGH PERFORMANCE TEAMS

Colenso (2000) describes high performance teams (HPT) through preconditions such as purposes, empowerment, support and objectives, with characteristics being exhibited such as interpersonal skills, participation, decision making, creativity and managing the external environment. It is argued that it is this strong sense of personal commitment which distinguishes the ordinary team from a HPT (Katzenbach and Smith, 1993). According to Richards and Moger (1999) seven factors distinguish the HPT or dream teams from ordinary teams. These are shared vision, creative climate, ownership of ideas, resilience, network activators, learning from experience and having a strong platform of understanding.

Since business performance and customer satisfaction are critically important and relevant for organisational success, it is imperative that a focus be placed on leadership practices and development of high performance teams. To drive business success results, one must understand the drivers of energised and productive leadership and organisational practices, as this will in turn energise and motivate your workforce, thereby developing a strong long term business performance in your organisation.

2.3 THEORETICAL FRAMEWORK

A vast amount of research is conclusive that teams are capable of outstanding performance and are the primary units responsible for high performance in organisations. Most of the research reviewed on high performance teams has been conducted in the business context. Research conducted by the Australian School of Business using a cross-disciplinary team of researchers has been working with 78 Australian organisations to identify and analyse the main factors that comprise a high performing workplace. Since service based organisations derive the majority of their wealth and economic returns from intangible assets, measurement of these is an important way to gain insights into their organisational performance (Boedker, Vidgen, Meagher, Cogin and Runnalls, 2011). The High Performing Workplace Index (Boedker, et al., 2011) was utilised as a theoretical framework in this research study of secondary schools' operational teams. The leadership, organisational climate, commitment

as well as management practices in the operational teams of four secondary schools situated in the Nelson Mandela Bay were investigated and the responses analysed.

2.4 ENABLING SUCCESS FACTORS OF HPT

In team development literature three dimensions form the main part of a multidimensional model; the individual, the task and the team (Stott and Walker, 1995). An alignment model is considered by Scholtes, Joiner and Striebel, (1996) who argue that there are three primary tasks of purpose, partnership and process. Key conclusions reported in the study of HPT's by Katzenbach and Smith (1993) show that significant performance can challenge and energise a team wherever they are in the organisation. By building a strong performance ethic rather than a team-promoting environment alone, the leaders can foster team performance. Discipline within the team and the organisation creates better conditions of organisational performance. Barriers to team development are a weak sense of direction and critical skill gaps. The external confusion and hostility or indifference and unequal commitment to the team performance, may also be obstacles to team development.

Enabling factors affecting the successful implementation of HPT's can be categorized as human and system factors. System factors being organisational impact, defined focus, alignment and interaction and measure of performance. Human factors are knowledge and skills, the need of the individual and group culture (Castka, et al., 2001). These are not the only organisational and human factors that need to be considered as many recent studies show a number of important enabling success factors that build a HPT.

2.5 HIGH PERFORMANCE TEAMS: BUSINESS MODELS AND STRATEGY

According to the John Spence HPT Competency Model the following components were required to build a successful high performance team: shared direction, clear and measureable goals, competence, clear communication, mutual accountability, discipline, trust, respect, appreciation, strong

commitment and a positive attitude. Leaders must model the way and understand their team members (Spence, 2012).

2.5.1 The Kenexa High Performance Model

The High Performance Model (Figure 2.1) is built on research undertaken by Kenexa on over 7,500 business units and demonstrates that there is an interdependence between leadership practices, employee results, customer results and the overall business performance (Wiley, 2009).



Figure 2.1: The High Performance Model (Source: Wiley, 2009, p. 1)

2.5.2 High Performance Engagement Model

The High Performance Model includes employee engagement and links organisational values and practices, as well as leadership behaviours to organisational outcomes and effectiveness. The model states that a high performance organization and an engaged workforce are complementary and that both are necessary for successful organisational performance (Kenexa, 2010).

2.5.3 High Performance Work Index (HPWI)

The Australian Business School study undertaken by Boedker, et al. (2011) examined the High Performance Work Index, which focuses on a number of

multiple dimensions of an organisation. It examines the following enabling success factors such as innovation, leadership, fairness, employee experiences, customer experiences and financial indicators (Boedker, et al., 2011). This HPW index distinguishes higher performing workplaces from lower performing ones and is based on data from over five thousand employees from 77 organisations. There are six categories of measurements, namely; Profitability and Productivity (P), Innovation (I), Employee Experience (E), Fairness (F), Leadership (L) and Customer Orientation (C).

2.5.4 Integrated Theoretical Model for effective teams

Other studies show an integrated relationship theoretical model for building effective teams which is constructed utilizing seven components: team building philosophy, selection criteria, team-development theory, charge and charter theory, change theory, performance theory and relationship theory (Gilley, Morris, Waite, Coates and Veliquette, 2010). According to Gilley, et al. (2010) it can be seen that to build effective teams certain competencies are required in a number of areas. These include conflict resolution, problem solving, communication, organisational understanding, decision making, goal setting and performance management, as well as planning and task co-ordination.

It seems therefore from the literature research that the enabling factors of HPT involve a number of constructs which are interlinked and include a number of areas that require certain competencies. By combining some components of the business High Performance Model and the certain factors of the integrated relationship theoretical model a number of critical enabling factors were selected for this exploratory study. These will be outlined later in Section 2.8.

2.6 SECONDARY SCHOOL OPERATIONAL TEAMS: INTEGRATED MODEL

There is strong support for management through teamwork in literature and the claims that teams can solve problems more creatively than individual leaders (Stott and Walker, 1999, p.53). A development in the South African education system over recent years has moved towards site-based management,

teamwork and distributed leadership. Decentralised management structures such as the School Management Teams (SMT), the Learners Representative Council (LRC) and the School Governing Body (SGB) are all pathways for democratic participation and the evolution of a more team and distributive leadership approach (Bauer and Bogotch, 2006). However, unless there are major shifts in thinking, little change will result and one needs to develop the conditions both structurally and culturally for effective teamwork. Structural includes the logistic arrangements, support and decisions needed to accommodate teamwork, whereas cultural refers to the ethos, values and climate of the school.

In a study undertaken by Grant and Singh (2009), it was shown that distributed leadership occurred in two domains. A dispersed form of leadership existed within the teacher domain and an authorized form within the SMT domain. The potential for teacher leadership is shown in this research to be underutilised and often restricted.

A review of the school teamwork literature of Buckley (2000) identified four main team structures: team teaching, curriculum development teams, governance and administration teams and school community relation teams. It was shown that for teachers to be involved in team teaching contributed directly and indirectly to higher levels of organisational commitment. Curriculum teamwork, governance teamwork and community relations teamwork contributed indirectly. This model focused on three independent variables, namely; teacher empowerment, school communication and work autonomy (Dee, Henkin and Singleton, 2006).

It seems that minimal research in the educational field has been undertaken in examining the associations between enabling success factors between school team organisational subsystems. One such study by Kushman (1992) examined the association between school teams and organisational commitment.

2.7 SCHOOL OPERATIONAL TEAM FRAMEWORKS

A conceptual framework that was employed in the study by Dee, Henkin and Singleton (2006) examined the intervening variables of teacher empowerment, openness in communication and teacher autonomy. The dependent variable in this study was organisational commitment. The most widely used measure of organisational commitment, a 15-item questionnaire by Mowday, Steers and Porter (1979), was utilised to obtain the strength of the person's identity with the organisation. The conclusions in this study were that team teaching and curriculum teamwork had the strongest effect on organisational commitment. Participation in site-based teams and governance teams which aligned and increased the fit between the individual and the school-wide goals and strategy also strengthened this commitment. Higher levels of commitment were reported by Mowday, et al. (1982) when personal goals were aligned to those of the organisation.

As suggested by Dee, Henkin and Singleton (2006) more extensive research is required in organisational design and the related variables that affect teachers' team commitment in organisations. Due to the effects of changing and emergent organisational school structures that shift from hierarchical and traditional management strategies to new strategies based on organisational commitment, it is critical to examine the factors that enable successful effectiveness of school operational teams (SOT) and generate a high organisational commitment.

2.8 SCHOOL OPERATIONAL TEAM: ENABLING SUCCESS FACTORS

Team structures that contributed towards enhanced organisational communication and increased open communication were associated with higher levels of school organisational commitment (Dee, Henkin and Singleton, 2006).

In many studies according to (Postmes, Tanis and DeWit, 2001; Muthusamy, Wheeler and Simmons, 2005) the increased level of team work strengthened their shared identity in a collaborative venture. This in turn intensified the

commitment to the organisation as a whole. In a study by Kirkman and Rosen (1999) it was shown that by participating in self-managed work teams and allowing the freedom to make decisions, there was an increase in team performance and commitment to the organisation as a whole.

2.8.1 School Team and Organisational Commitment

School teams can energize and invigorate the organisation and allow an interconnected cooperative decision making and commitment that transcends the conventional traditional institutional structures and praxis. The effectiveness of these teams are viewed by Berman (2001) as the fundamental building blocks of locally managed schools and the success of the school depends in some way on the collective effort, motivation and teamwork processes (Crow and Pounder, 2000; Henkin, et al., 2000; Park, Henkin and Egley, 2005).

It can be seen that there is a gap in educational research on teams and teamwork, as well as teacher commitment (Bishop and Scott, 2000; Somech and Bogler, 2002). Research on teams and teamwork include few studies that focus on skills and factors that influence how effective the performance of the individual may be in the operational school team. The model of teamwork by Dickinson and McIntyre (1992) is used in this research study as a perspective of team process factors that contribute towards the high performance of teams and include organisational commitment, communication and feedback, leadership and trust.

In many research studies organisational commitment has been shown to be negatively associated with absenteeism and turnover and positively related to high performance and organisational effectiveness (Mowday, Porter and Steers, 1982; Pierce and Dunham, 1987). Organisational commitment can be defined as a long term stable organisational attachment. Since team-based structures in schools and other organisations can be seen to be effective in delivering high performance, data driven research suggests additional benefits for schools that occur due to teamwork include a more positive climate, better communication and interaction, self-efficacy and instructional responsibility as

well as increased workplace productivity, lower level of absenteeism and reduce employee turnover (Naquin and Tynan, 2003).

A team is not simply a group of people who belong to the same group or who are working in the same environment or school. It is this understanding that is crucial in high performance teams, as there must be knowledge of the factors that will bring about effective performance of the team. McIntyre and Salas, (1995, p.23) state that teamwork is "what a team does when it behaves as a team". Teamwork can therefore be defined as the cooperative behaviour of team members to achieve the desired goals of their stakeholders.

Related behavioural indicators in the research study by Park, Henkin and Egley (2005) included team leadership and orientation, communication, feedback, back up behaviour, coordination and trust. The findings showed that teamwork was a significant predictor of commitment in teacher teams.

2.8.2 Employee Engagement Index

Numerous studies show that an engaged workforce has a large effect on the bottom line of an organisation. To assist organisations to drive their organisational performance Kenexa utilized the Employee Engagement Index (EEI) which asks employees the following four item questions and to what extent they agree (Wiley, 2009).

- I am proud to tell people I work for my organization (Pride);
- Overall, I am extremely satisfied with my organization as a place to work (Satisfaction);
- I would gladly refer a good friend or family member to my organization for employment (Advocacy);
- I rarely think about looking for a new job with another organization (Commitment).

In this research which spans the past twenty years a model called the High Performance Engagement Model was developed. Two streams of research were used in this model. A tracking of the employees' views of the products and service quality focuses on performance excellence while the other stream focuses on employee engagement which measures the employee commitment and willingness to apply discretionary effort. These constructs are measured through the Performance Excellence Index (PEI) and the Employee Engagement Index (EEI). In this research it was found that in combination these two indexes are potent leading indicators of business success (Wiley, 2010).

In a report from the Kenexa Work Trends Survey (2012) where an online survey was undertaken by approximately 33,000 employees in 28 different countries, the employee engagement index was examined. Employee responses to the four Employee Engagement Index (EEI) questions were gathered and analysed. In the Kenexa World Survey report (2012) several organisational "best practices" were identified as being crucial in improving employee engagement. These are listed as follows:

- Publish the organization's mission, vision, values and strategies.
- Sponsor training to improve quality within the organization.
- Conduct employee opinion surveys and regular performance appraisals.
- Collect customers' feedback and share the responses with the employees.
- Cross train employees to perform other jobs across disciplines within an organization.

It was reported that organisations that implemented these best practices reported more engaged employees and the Employee Engagement Index (EEI) levels were at an astonishing 82 %. When none of these practices have been implemented the EEI level is at a low of 29 %. Employees were most engaged in organisations where there was cross training (Becker and Gerhardt, 1996).

2.8.3 High Performance Workplace Index

Boedker, et al. (2011) in their recent research study assessed organisational performance utilizing five categories of intangible assets and one financial and productivity performance measure. Using 18 performance measures they calculated the High Performance Workplace Index (HPW) which identifies the higher and lower performing organisations in the sample. The two groups were

defined by identifying the HPW's as those that existed at one standard deviation above the mean and the LPW's as those at one standard deviation below the mean. The performance measures for this HPW Index include:

- Innovation Potential,
- Employee Experience/Engagement,
- Fairness,
- Leadership
- Customer Experiences.

Each of these will now be discussed with relevance to the educational context.

2.8.3.1 Innovation potential and freedom of suggestions

Recent research (Scribner, et al., 2007) on teacher teams and distributed leadership showed that consideration of the teams challenge and charge can influence the teams functioning. Being aware of the organisational structures and the social dynamics of distributive leadership must be considered. This study adds important perspectives on effectiveness of teacher teams and states that creativity and innovative divergent thinking represent positive attributes that are critical within organisations. Utilising the lens of distributive leadership within and across all levels of an organisation suggests that for improvement or organisational effectiveness, one requires clarity of purpose and levels of autonomy to allow freedom of creative innovative problem solving and problem finding skills to be developed within teacher teams.

In the High Performance Workplace index study by Boedker, et al. (2011) the data indicates that High Performance Workplaces (HPW's) have higher levels of innovation outputs across all four categories in service and products (25% higher), in operational and production services (29.3% higher), in managerial and strategies (29% higher) and in marketing (21.2% higher). This research shows that in these HPW's more new ideas are generated as they allow for spaces and opportunities to capture and implement ideas from their employees. Innovation zones and mechanisms allow for processes for systematically assessing and responding to ideas from employees. The HPW's are more

successful in transforming ideas into products and fund 46.9 % more new strategic initiatives than the Low Performing Workplaces. It is also noted that the organisational culture and leadership styles of the HPW's support innovation ambitions, creativity and problem solving and there are procedures and processes in place to manage their innovation and development activities.

2.8.3.2 Employee Experience/engagement

Recent research (Boedker, et al., 2011) examined employee experience in a study on analysing a High Performance Work Index. Results showed that employees who worked in HPW's have higher levels of job satisfaction (22.7%), employee commitment (23.2%), exert extra effort in their jobs and are more involved in their organisations. There is also a lower level of employee turnover (23.3%). Higher levels of positive emotions are experienced and 68% of the respondents in the HPW's feel proud about their workplace and 64% feel valued. This is versus the Low Performing Workplaces (LPW's) data which reports 43% and 47% respectively. Also reported in this study was that in the HPW's only one in every seven respondents experienced feelings of depression compared to one in every four respondents in the LPW's.

Employee engagement is a complex construct and can be considered to function at nine different contextual levels. Employee engagement is inherent in an employee and is influenced by the contexts such as his job, team, management, leaders, organisation, year, industry and country. It can be seen to be influenced directly and indirectly by all these multi-level layers like a reverse ripple effect (Macey and Schneider, 2008).

When employees do not feel that they belong or do not feel like part of a team, the employee is least engaged. Even a high performing employee may fail without the right team. An uncooperative toxic team environment may affect the employee engagement irrespective of how positive the other factors are. Teams provide the emotional and tactical support and it is through the team that the individual achieves far more than he/she could as an individual. Teams raise the bar by exhibiting high performance and this in turn encourages better performance within an organisation (Kenexa, 2012).

2.8.3.3 Fairness

There are two main categories of fairness: procedural fairness and distributed fairness (Brashaer, Brooks and Boles, 2004). Procedural fairness refers to the fair and equitable implementation of processes in the workplace. Distributed fairness is concerned with the extent of equitable rewards and recognition relative to a person's efforts, contributions and responsibility. In the study by Boedker, et al. (2011) the HPW's performed better than the LPW's in all twelve measures of fairness, but it was noted that the largest difference between the HPW's and the LPW's was in the distributed fairness (Difference between HPW's and LPW's: 30.3%) whereas in procedural fairness the difference was only 12%. It is clear that employees at HPW's perceive that they are less fairly rewarded for their work efforts than in LPW's. Employees' sense of fairness is seen in this study as not only to be determined by the industrial regulations but also is very much determined by the leadership, culture and management practices within the organization (Boedker, et al., 2011).

2.8.3.4 Leadership

Recent research by Boedker, et al., 2011, shows that in HPW's leaders spend more time and effort managing their people than in LPW's (29.3% higher). Leaders have clear values and future visions, welcome criticism and feedback, allow for opportunities for employees to lead work assignments (22.9% higher) and practice what they preach (25.7%). They give increased recognition and acknowledgement to employees and are innovative, encouraging employees to think in new ways (16.5% higher).

2.8.3.5 Customer Orientation

Customer orientation is defined as the employee perception of the organisation's customer orientation and satisfaction. In previous research (Boedker, et al., 2011) it was shown that HPW's exert more effort in trying to understand their customers and are better at acting on suggestions and feedback. The HPW's were 24.8% better at achieving their customer satisfaction goals than the LPW's.

In the educational context this factor could be equated with learner orientation and the needs of the learner, since the "customer" in the school environment is the learner. Learner orientation is similar to customer orientation as it involves taking the customer seriously and discovering novel ways in which to better meet the customers' needs. A noticeable trend in HPW's is that considerable effort and resources are spent in shaping its offers and activities around the needs and interests of their customers.

These five factors contribute towards the HPW Index and were used in the research by Boedker, et al. (2011). He examined HPW's and the performance factors that contributed towards the high performance of the individual team members in different teams.

In the literature study, research on HPT's showed the main factors were employee engagement and organisational commitment. These and other enabling high performance team factors in educational teams were selected for this research study. These are discussed below.

2.8.4 Communication and connections

Communication is the linking mechanism between all the other components of teamwork and involves exchange of information between the team members. The quality of the communication may also function as an antecedent of organisational commitment (Dee, et al., 2006). Research has shown that in organisations where there is open communication there is a high level of trust and collaboration which breeds innovative and high performance levels. This in turn strengthens organisational commitment (Scott, et al., 1999).

Structural design that emphasizes functional differentiation impedes openness in communication (Witziers, Sleegers and Imants, 1999). Conversely, when team based structures are interdisciplinary and not within silo's, there is a cross-departmental communication which serves as a shared knowledge base for committed, engaged and enriched communication environments (Cardno, 2002).

The five item Openness subscale of O'Reilly and Roberts's communication questionnaire was used (1976) and they had found significant, positive correlations between communication openness and self- reported frequencies between co-workers. In later research conducted by Dee, Henkin and Singleton (2006) the same communication questionnaire was used to assess the extent to which the members communicate with one another and a Cronbach's alpha coefficient of 0.94 was computed for the sample in this study. This supported O'Reilly and Roberts findings. In this study the intervening variables were organisational commitment, empowerment, communication openness and teacher autonomy. Among the three intervening variables communication openness had the largest effect in each path analysis (Dee, et al., 2006).

2.8.5 Leadership styles

Educational leadership involves complex networks of relationships and interactions throughout the whole school staff and thus involves multiple individuals and relationships (Spillane, Halverson and Diamond, 2001; Crow, Hausman and Scribner, 2002). The distributed leadership perspective assists us to understand that teams are embedded in a network of interactive and interdependent school activities and this creates leadership. In examining the model of distributed leadership of Spillane, Halverson and Diamond (2001, 2004) it is clear that to understand school leadership one needs to focus on the activities and tasks rather than the behaviour of the individuals identified formally as leaders. It is this approach that allows the researcher to identify between the officially stated school's practice and the actual praxis.

In a study of teacher team and distributed leadership, Scribner, et al. (2007), concluded that it is critical that leadership is conceptualized in terms of interaction and that distributed leadership occurs at all levels of the organisation. Teachers need to be aware of conversational dynamics which lead to high or low performance and collaboration. Principals need to establish clarity of purpose and parallel this with levels of autonomy for better team engagement and innovation.

It can be seen that leadership undoubtedly has one of the largest impacts on an employee's performance at work and level of commitment to the organisation. School leaders can empower teachers by replacing hierarchical structures with self-directed teams. In these high performance teams strong leadership skills within teams have consistently been recognized to be amongst the most important factors to be considered, providing both motivation and clarity of purpose.

2.8.6 Strategic Management

Strategic management with regard to human resources involves strategy architecture. This is where strategic leadership is required in an organisation to facilitate a strategic-alignment change by turning what needs to be done into actual practice. To sustain these goals one requires customer engagement and strategic agility. According to Ulrich, Brockbank and Johnson, (2007) strategic clarity is essential for high performance along with collaboration and teamwork. With the new dynamic workforce and processes being fluid, an emphasis will be placed on innovative thinking and adaptability (Brewster, Carey, Grobler, Holland and Warnich, 2011). Strategies need to be aligned and organisational missions, visions, values and goals need to take cognizance of individuals' goals strengths and weaknesses. Here the six value added roles in the performance model of Kesler could be used to define performance capabilities and using a HR grid one could align business strategy and competencies (Kesler, 1995; Ulrich, et al., 2007).

Wright and Snell (1998) designed a fit/flexibility model of Strategic Human Resource Management (SHRM) which includes both views. Fit is seen as an interface between an external and internal variable, while flexibility is seen as mainly focusing internally (Wright and Snell, 1998).

To create a strategy-aligned organisation means utilising an integrated approach that changes multiple levels of the organisational system so that each individual can see his or her contribution to the strategic objectives of the organisation. The strategic intent and direction developed from the vision and

mission from the Board or shareholders must cascade throughout all levels of the organisation establishing a clear line of sight and synergies (Hough, 2007).

2.8.7 Trustworthiness

Trust has been noted in many studies as being an essential element in social interaction and may strengthen relationships, cooperation, reduce conflicts and increase organisational commitment (Tschannen-Moran and Hoy, 2000). School teams require a mutual level of trust for effective performance and it is this interpersonal trust that affects the level of confidence.

In an investigation examining the relationships between teamwork, trust and team commitment, results showed that teamwork was a significant predictor of teacher team commitment (p = 0.000) and accounted for 54% of the variance in team commitment. The importance of trust as a variable was acknowledged as proximally high but not statistically significant (p = 0.063) (Dee, Henkin and Singleton, 2006).

2.8.8 Motivation

Katzenbach and Smith (1993) suggest that a team is a complementary skilled group that shares a common purpose, passion and goal for which they hold themselves mutually accountable. Performance is broadly understood as the purpose of the group and according to Stott and Walker (1995) this can be determined by three main factors: work environment, ability and motivation. Many researchers (Katzenbach and Smith, 1993; Castka, 2001) show this relationship as an equation.

This equation is shown as follows:

Performance = f (ability x motivation x environment)

Interesting research on HPT's was undertaken by Katzenbach and Smith (1993) with the following results:

• Teams were energized by significant performance challenges irrespective of where they were positioned in the organisation.

- Organisational leaders by promoting a strong performance ethic can motivate team performance ahead of merely just creating a team environment.
- Discipline within and across the organisation creates good conditions for team performance.
- Bias towards individuals exists but needs not impede team performance.

2.8.9 Conflict management

Conflict can be seen as a sign of a healthy team and is positive when focused on the task issues and considers differences of perspectives and expectations. Most teams do not handle conflict well and tend to avoid it rather than trying to handle it effectively. It is reported in many research studies that strategies of integrative agreements need to be developed to manage team conflicts but these do require the development of trust and rapport among the team members (Hosmer, 1995; Marquardt, 2009).

2.8.10 Positive Practices

The term positive practices refer to the examination of values and intentional behaviours that are orientated towards abundance and deviances above the norm. In literature there are a number of different interpretations of positive practices. In many investigations (Hess and Cameron, 2006) positive deviances are those outcomes exceeding the ordinary, showing exceptional performance (Gittell, Cameron, Lim and Rivas, 2006). Another focus emphasizes the positive energy, climate and communication in an organisation (Cameron, 2008). This includes positive energy and does not exclude the negative events but integrates them in establishing the positive outcomes (Dutton, Worline, Frost and Lilius, 2006).

In a study in the Positive Organisational Scholarship (POS) field, research was undertaken in the Financial and Health Care Industry. A positive practice instrument was used and evidence was found that linked these positive practices with organisational performance (Cameron, Mora, Leutscher and Calarco, 2011). These exploratory studies examined the following six

dimensions: caring, compassionate support, forgiveness, inspiration, meaning, respect, integrity and gratitude. These were found to be reliably reproduced and linked to positive practices.

Within the POS approach the quality of connections is pivotal in understanding organisational behaviour and it is these positive high quality connections (HQC) that enable knowledge transfer and create positive performance (Baker, Cross and Wooten, 2003).

2.8.11 School Organisational Climate

This concept has a rich history in the social sciences and educational context. Pioneers in this area (Halpin and Croft, 1963) developed the Organisational Climate Description Questionnaire (OCDQ). This is a sixty-four item Likert scale questionnaire that was developed for the assessment of staff interactions and school climate in elementary schools. A number of limitations of the early versions of the OCDQ-RE were observed and the validity of some of the subconstructs is questionable. Sub-constructs of the school organisational climate are school integrity, principal supportive behaviour and influence, resource support, morale, academic emphasis and openness (Hoy, Tarter and Kottkamp, 1991). Subsequent versions compiled by Hoy (2010) allow criteria to be measured that reflect a holistic picture of the climate or personality of the school.

2.9 TOTAL HIGH PERFORMANCE TEAM MANAGEMENT

The High Performance Model is based on a substantial body of both academic and applied research (Wiley, 1996; Wiley, 2012).

Linkage research, however, is grounded in empirical research and although many are case study research, there are later studies that show significant relationships existing between factors. These results were replicated in different work settings. These studies covered a broad range of industries and employee opinions are mostly related to both customer satisfaction and business performance. This is repeatedly demonstrated to be those factors represented

in the High Performance Model, particularly those in the Leadership practices domain (Wiley, 2012).

2.10 THEORETICAL FOUNDATION OF HYPOTHESISED MODEL

The literature study highlighted many factors that enabled the researcher to establish a framework of a conceptual model. This is based on a number of the business models of factors that affect the successful implementation of high performance teams.

Many quality papers in literature propose that you can use improved teamwork to increase organisational performance.

2.11 SELECTED ENABLING FACTORS THAT IMPROVE HPT

By selecting high performing schools and examining the respondents' feedback of their school operational team (SOT), existing enabling factors that are predominant and significant in the school operational team were examined. These responses from members of selected high performing schools allowed a framework of an integrated hypothesized model to develop. By examining the linkages and statistically analysing the data the ranking and correlation of the factors were explored and examined within the different school contexts and quintiles.

2.11.1 Construct One: School High Work Performance Index and Organisational Commitment

With reference to the work done by Boedker, et al. (2011) this SHPWI provided the theoretical foundation for determining a measure of high performance for SOT in each particular school. This theoretical foundation underpins the relationship of the formulated hypothesis.

H1: An increased School High Performance Work Index (SHPWI) of school teams, who have good leadership, high innovative potential, high employee experiences, high level of fairness and high regard for their learners as

individuals, is positively associated with increased organisational effectiveness and organisational commitment.

2.11.2 Construct Two: SHPWI and Employee Engagement

H2: An increased SHPWI is enabled by increased employee engagement. The theory that underpins this is the key theory by Boedker, et.al. (2007) and Poisat, (2006).

2.11.3 Construct Three: Communication and connections

The work by O'Reilly and Roberts (1976) and later by Hoy (1991) showed open communication had a large effect in the path analysis with organisational commitment. This theory underpins the relationship of the formulated hypothesis.

H3: Open Communication increases high performance in school operational teams.

2.11.4 Construct Four: Leadership

A large amount of research on team leadership and the work by Boedker, et al. (2011) underpins this formulated hypothesis.

H4: Good Leadership, especially distributed leadership, enabled high performance of school operational teams.

2.11.5 Construct Five: Strategic Management

Strategic management with strategic clarity, agility and aligning the team members own vision and mission with that of the organisation was shown in many research studies to improve performance (Ulrich et al., 2007; Wiley, 2012).

H5: Strategic management and knowledge of your school's vision and mission increase your organisational commitment, engagement and team performance.

2.11.6 Construct Six: Trustworthiness

Trust is known to increase the organisational commitment in a school operational team and work done in this field by Tschannen-Moran and Hoy, (2000) is the basis for formulating this hypothesis.

H6: There is a positive impact on the performance of the school operational team when the trust between team members is high.

2.11.7 Construct Seven: Motivation

Many researchers (Katzenbach and Smith, 1993; Castka, et al., 2001) show this relationship as an equation where performance is a function of motivation.

H7: There is a positive impact on the performance of school operational teams when the team members are motivated.

2.11.8 Construct Eight: Conflict Management

Most teams do not handle conflict well and strategies of integrative agreements and trust need to be developed to manage team conflict (Marquardt, et al., 2009).

H8: There is a positive impact on the performance of teams when there is a greater management of conflict by the team members.

2.11.9 Construct Nine: Positive Practices

Research shows linkages between positive practices and organisational performance (Cameron, Mora, Leutscher and Calarco, 2011). This provided the theoretical foundation for the formulated hypothesis.

H9: There is a positive linkage between the high performance of the school operational teams and the positive environment in which they operate.

2.11.10 Construct Ten: School Organisational Climate

A version of Hoy's questionnaire (2010) allows criteria that reflect a holistic picture of the climate or personality of the school to be measured. From this theoretical basis the hypothesised relationship is formulated.

H10: There is a positive impact on the high performance of your school operational team when there is a positive organisational climate.

By examining the associations of the effect of these team enabling factors (independent variables) on the School High Performance Work Index (dependent variable) as well as the effect on Organisational Commitment and Employee Engagement, (independent variables; standardised literature measurements) a proposed SOT model was constructed. This utilised a mixed method approach to merge both the quantitative and qualitative data collected from the school operational teams from the four secondray schools. This approach will be explained in more detail in Chapter three.

2.12 CONCEPTUAL FRAMEWORK

The relationships of these enabling team factors with hypotheses can be illustrated as follows (Figure 2.2).

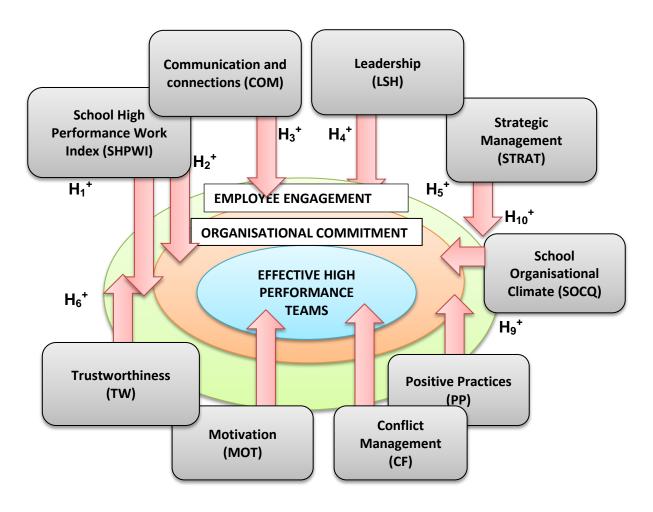


Figure 2.2: The conceptual framework (Source: Authors own construct).

2.13 CONCLUSION

Chapter two outlines the literature review and the theoretical basis underpinning the hypothesised relationships utilised in developing the conceptual framework for this study. The selected enabling factors of the independent variables were established and selected from the literature surveyed. The dependent variable utilised the School High Performance Index which was developed by the researcher for this study. This is a measure of the level of high performance of the school operational teams. The next chapter outlines the research design and methodology for this particular research study.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

The main problem statements were outlined in chapter one with the literature review in chapter two providing the framework for the study. At the end of the previous chapter the hypothesized conceptual framework was outlined. This chapter provides the research methodology and design utilized in this exploratory research study. Underpinning discussions in this chapter indicate the reasons for choosing the particular methodologies to achieve the primary and secondary objectives of this research.

3.2 PURPOSE OF THE RESEARCH

The purpose of this research study is to design a school analysis metric to assist with improving the performance of secondary school operational teams. This study investigates the enabling factors that are positively associated with high performance in school teams. Secondly, this study is a pilot to develop a HR metric for holistic school analysis so that schools can identify the areas that they need to improve to achieve a higher level of performance in their school functioning at all levels.

3.3 RESEARCH METHODOLOGY

3.3.1 Choice of paradigm for this study

3.3.1.1. Defining Paradigms

When undertaking any scientific research, one requires a philosophical framework or research paradigm. Paradigm refers to a mind-set, philosophy or way of thinking. The choices of your approach or thinking patterns dictate your research paradigm and the nature of your research will be underpinned by your philosophical viewpoint and assumptions.

The two main paradigms, positivism and interpretivism, can be seen to exist at opposite ends of a continuum and the features and assumptions of one paradigm are replaced by the next, as we move along the continuum (Collis and Hussey, 2009).

Positivism originated in the natural sciences and is underpinned by the belief that reality is independent of the researcher. It is not affected by the act of investigating it and the goal is to discover theories based on empirical research by observation and experiment. This involves a deductive process, whereby theories provide the basis of explanations and consist of establishing causal relationships between different variables. These establish causal theories and are linked to deductive or integrated theory. Since in positivism, it is assumed we can measure social constructs, this is associated with the method of quantitative analysis. In a positivist approach, the ontological assumption is that reality is objective and singular and is apart from the researcher. The epistemological assumption in positivism is that only the observable and measurable phenomena are regarded as valid knowledge. The researcher tries to maintain an independent viewpoint. Positivists believe in a value-free process of research, which is the axiological assumption of this paradigm. Concepts are described in a way that they can be measured and hypotheses are formulated. Analysis is done by examining the association between variables (Creswell, 1994). In common terms therefore, the positivist has a quantitative, objective, scientific and traditionalist approach.

At the other end of the continuum of paradigms is interpretivism. This mind-set is underpinned by the assumption that social reality is highly subjective and is shaped by our thinking and perceptions. Interpretivists see the researcher interacting with that being investigated and the research process is thus inductive. One cannot separate the social world from the researcher's viewpoint. The ontological assumption is that social reality is subjective and since each person constructs their own sense of reality, there are multiple realities. In the epistemological assumption, an interpretivist is involved in participatory enquiry and therefore the researcher interacts with that which is researched. Interprevist researchers believe that research encompasses values

and biases are present. In the methodological assumption, various perceptions are analysed and the researcher seeks patterns and trends that are repeated in other similar contexts. Theories may be developed for understanding and through verification, findings are validated. Therefore, in common terms, the interpretivist has a qualitative, subjective, humanist and phenomenological approach (Creswell, 1994; Collis and Hussey, 2009).

3.3.1.2. Choice of paradigm for this research study

The philosophical framework of this study involves a number of philosophical assumptions. In reflecting on the researcher's own philosophical perspectives, the author utilised the characteristics of the four worldviews used in research by Crotty (1998), as a general orientation for her own research philosophy. The term worldview is used by Creswell (2011) as a term synonymous with the word paradigm and was originally used by Kuhn (1970). The four worldviews have different stances in their philosophical elements of ontology, epistemology, axiology, methodology and rhetoric. The four worldviews are: Postpositivist worldview, Constructivist worldview, Participatory worldview, and Pragmatist worldview. It seems, according to Creswell (2011), that the positivistic-pragmatist's worldview provides the best foundation for mixed method research.

In this research study, the researcher will be utilising the positive organisational scholarship (POS) approach (Cameron, Dutton and Quinn, 2003). This rejects the traditional deficit model and seeks to emphasise the positive processes. The author agrees with Cameron who explained, "At its roots, POS represents a particular way of thinking, a value orientation and a posture towards organisational research" (Caza and Caza, 2008, p.21). Examining how POS is consistent with a critical theory framework, the author agrees with Caza and Caza (2008) that POS can be treated as critical theory and offers a new approach to study and understanding organisations.

The researcher feels that the stance taken in this research study is from a multiple paradigm or worldview. The philosophical framework for this study is positivistic pragmatist. The proposed research methodology is survey (Fowler,

2002) and the data collection method used will be a questionnaire. Both openended and closed-ended questions will be used to collect both qualitative and quantitative data. The sample of participants is staff and educators of school operational teams from four successfully performing secondary schools within different quintile and environmental contexts. They are therefore part of high performing school teams participating in operational, curriculum and school management teams. This study is designed to examine their experiences and perceptions of their work in their team roles in the selected secondary schools and to establish the enabling factors that create effective high performance teams in their secondary schools.

Since in this study, both qualitative and quantitative data was collected in an exploratory embedded mixed method research design, the researcher felt that the following guiding assumptions shaped the research as it progressed. The literature review was used to ascertain the main important variables and enabling team factors which were included in the quantitative and qualitative part of the study. The drafted conceptual framework was structured from the secondary data and literature. A pilot study was run utilising the drafted questionnaire before it was administered to the population of this research study.

It was felt that this study had a dominant quantitative method approach. The guiding determining theory was advanced from the POS literature and was delimited to certain variables informed from the literature study, which provided the conceptual framework. By examining qualitative data from other openended questions in the questionnaire, some further deeper multiple meaning data emerged. Triangulation of the qualitative and quantitative data allowed validation of the research study. A possible theory or model was developed and constructed from the conceptual framework.

The researcher used a mixed method research design. The questionnaire contained both qualitative and quantitative data collection questions, collecting responses in the same phase. This correlates with the "best" worldview for mixed method research (Tashakkori and Teddlie, 2003). Since this study is

utilising a POS approach, it could also be considered to be from a "community of scholars" perspective (Morgan, 2007).

The ontological elements of a pragmatism are that there are both singular and multiple realities and the researchers test hypotheses, as well as providing multiple perspectives. In this research study, the researcher statistically analysed the quantitative data and tested hypotheses. Qualitative data was coded and analysed. From the epistemological perspective, the researcher collected data and generated knowledge about the single reality that each of the participants shared, the reality of the school team participation within their school environment. From the axiological viewpoint, there are multiple stances including both biased and unbiased perspectives. The rhetorical stance is that the researcher may use both a formal and informal style of writing in the research report.

Lastly, the methodology or process of the research is a mixed method combination, whereby the researcher collects both quantitative and qualitative data concurrently. The mixed method research methodology utilises both quantitative (QUAN) and qualitative (QUAL) methods.

3.4 RESEARCH DESIGN

3.4.1. Definition of research design

Research design is the science and art of your detailed planning procedures to conduct your focused research study in such a way as to achieve valid and reliable findings (Collis and Hussey, 2009).

3.4.2. Choice of research design for this research study

In this study an exploratory research design was utilised. To examine trends one requires more than one method to capture the true in-depth explanation of complex situations (Creswell and Clark, 2011). Quantitative data is data collected in a numeric form, while "qualitative data is any data that the researcher collects that is not in numbers" (Tesch, 1990, p. 55). According to

Bonoma (1985, p. 199) all researchers desire a high level of both data integrity and results currency. In this research study, which is dominantly a quantitative approach the statistical analysis of the questionnaire yields mainly quantitative data but the qualitative data analysis allows further in-depth analysis, integration and triangulation.

The exploratory sequential research design initially involved a literature survey which allowed development of the theoretical hypothesised framework. From this the questionnaire was designed and developed as well as piloted. Both quantitative and qualitative data was collected.

The literature review was used to explore phenomena within certain contexts to obtain in-depth qualitative knowledge. This data then built onto the initial conceptual framework and added to the carefully constructed drafted questionnaire. A survey methodology, utilising the questionnaire, was used to collect the primary data quantitatively from the sample of respondents. Data triangulation was utilised to collate and analyse all the data from the qualitative and quantitative sources for this study.

The research approach of this study can be represented in a notation system used by Morse (1991) as: **qual \rightarrow QUAN+ qual = interpret findings.** This notation represents an exploratory sequential design (Figure 3.1).



Figure 3.1: The research design: exploratory sequential design Source: Creswell and Clark, (2011, p.69)

3.4.3. Sampling design

The sampling procedure involved selection of a location or site for the research, the participants, the recruitment strategy, the sampling method and the sample size (Creswell and Clark, 2011).

3.4.3.1. Demarcation of the study: Site, Population and unit of analysis

The target population for this research study were the educational operational teams in four secondary schools and included all levels of leaders, administrators and educators in improving of well-performing secondary schools in the Nelson Mandela Metropolitan Bay area (NMMB). The units of analysis were the four secondary schools in the NMMB area sampled from two different quintiles, including three city schools and one peri-urban school.

The sampling frame was a list of all secondary schools obtained from the Department of Education with percentage pass rates of Grade 12 learners in the Nelson Mandela Metropolitan Municipality region from 2010 - 2012. From this sampling frame, four high performing schools within their quintiles were selected, so that three city schools and one peri-urban school with good positive percentage improved performance in teaching and learning were selected from quintile group three and five.

3.4.3.2 Sampling method, selection of schools

Schools were selected as high performance schools within their different quintiles and contexts. Two schools within quintile five were used for a comparative.

3.4.3.3 Sample size

The determination of the sample size depended on the principals, teaching staff administrators and operational team members complement at the school, but the researcher attempted to ensure that the overall sample contained sufficient sampling of a 50% response rate, so that accuracy and reliability was maintained. Allowance was made for the non-response factor. A self-administered questionnaire was utilised for collecting the primary data. The qualitative data was also collected from the open-ended questions on the

questionnaire. The sample size was dependent on the size of the school staff at the selected schools and the response rate. The researcher achieved a total number of 81 respondents.

3.5 ETHICAL MEASURES

Permission and ethical approval was obtained from all the necessary persons prior to commencement of the research study. Application was made to the NMMU Ethical Research Committee for permission for this study, subsequent to the Department of Education's approval (Annexure 1). Letters of permission were obtained from the principals of each school prior to the study (Annexure 2). Prior to participants starting the survey instrument (Annexure 3), oral information was conveyed to them, as well as in an information letter enclosed with every questionnaire (Annexure 4). A full ethical clearance letter and number H13 BUS BS 009 was obtained from the University prior to commencement of this research study (Annexure 5) and all documentation displayed the approved ethical clearance number.

3.6 RESEARCH APPROACH AND DATA COLLECTION

In this study an inductive approach was used (Zikmund, 2000) with general propositions being established from observations and data collected. This was compared with the theoretical framework from literature and the empirical data was analysed. Primary data was collected from the school operational team members within the high performing secondary schools. Secondary data in the form of previous theories and models helped to validate and provided the theoretical framework for this research study.

This research study is embedded in the theory taken from the literature review of the body of knowledge in the area of high performance teams and the factors that promote effective teamwork. Many reported studies show the conditions necessary for effective teamwork and functioning and show that favourable conditions in both a structural and cultural nature are required for the effective team to flourish (Van der Mescht and Tyala, 2008). In this research study recent studies of both business models and school models from previous

studies analysing the factors affecting high performance teams were used as a theoretical framework.

3.7 DESIGN AND DEVELOPMENT OF THE QUESTIONNAIRE

3.7.1. Literature Review

A questionnaire was used in this research study, as a means to collect the primary data from the selected sample. Careful selection of relevant questions to ascertain and measure certain enabling factors were utilised from literature. This along with the researcher's experience in the field was utilised to plan and construct a questionnaire, so that accurate and appropriate data could be collected. According to Wegner (2001) the design of the questionnaire is crucial and the questions must be simple, relevant and request data that is pertinent and essential to the research problem (Leedy, 1993).

3.7.2 Enabling factors affecting the success of high performance teams

In constructing the questionnaire for this research study, the researcher used components from the theoretical framework of the HPT Spence Competency Model, combined with some dyads of the Kenexa High Performance Model (Kenexa, 2009) and the High performance workplace Index (Boedker, et al., 2011) adapted for the school environment. This model and index will now be discussed.

3.7.3 The Kenexa High Performance Model (KHPM)

For this research study of school operational and management teams, the KHP model was adapted to focus on measurement of the drivers in leadership practices and effective team performance within the school environment. The four schools were selected as examples of high performance schools as they are successful in performance levels of teaching and learning. Some of the other segments of the Kenexa business model were not able to be analysed in a school model as they were not applicable within a school context.

3.7.3.1. High performance workplace index

The Australian Business School study of Boedker, et al. (2011) examined the High Performance Workplace Index (HPW Index), which focuses on multiple dimensions of organisations. It examines assets such as innovation, leadership, fairness, employee experiences, customer experiences and financial indicators (Boedker, et al., 2011). This literature HPW Index was utilised in this research study as a standard reference, to comparatively analyse our school operational teams, without utilising the financial indicator and the customer experience factor. The customer orientation was replaced with a learner orientation factor and the measure was adapted as a School High Performance Work Index.

3.7.4 Organisational commitment (OC)

Employee commitment within an organisation has been defined in a number of ways and originally was described by Mowday, Steers and Porter (1979) as organisational commitment. This was characterized by a strong belief in the goals and values of the organisation, a willingness to exert extra effort for the organisation and a strong desire to remain in the organisation. There are multiple dimensions of organisational commitment such as the affective, which is the psychological attachment and identification with the organisation. The normative commitment, however, is that which arises from the employees internalisation of the values and mission of the organization. Continuance commitment arises from a compliance basis of rewards and punishment.

Organisational commitment correlated positively in literature studies with the success in an employee's work unit with coefficient alpha values ranging from 0.74 to 0.92. The shortened Organisational Commitment Questionnaire (OCQ) was shown to have this reliability in a number of studies reported by Fields (2012). The nine-item shortened version (Mowday, Steers and Porter, 1979) of the 15-item Organisation Commitment Questionnaire (OCQ) was used in this study as a measure of the School Organisational Commitment.

3.7.5 Employee Engagement Index

In the Kenexa Work Trends survey the four Employee Engagement Index (EEI) questions were used to analyse best practices in improving employee

engagement. These four questions were used in this study for measuring employee engagement in the respondents of the HPT's.

3.8 VALIDITY AND RELIABILITY

Validity and reliability are significant design variables that must be considered when undertaking any research study. Validity can be defined as whether the gathered information or data shows what it is supposed to show or measures what it is supposed to measure (Leedy, 1993). Validity is important in that it represents the extent to which the findings are accurately representing the true situation that is being studied.

Reliability on the other hand is the consistency of the measurement or accuracy. It is the extent to which we can repeat the measurement and obtain similar results (Jackson, 1995).

In this study the following strategies were utilised to ensure reliability and validity:

- The designed questionnaire was piloted with a small group of educators.
- Respondents were well briefed before the survey and clarity obtained as to any ambiguity in the meaning of any of the questions.
- The positive impact of the study was communicated orally and in written communication to the schools.
- Confidentiality was guaranteed and no school names are mentioned in this study.
- Two Factor Indices (EEI) and (OCQ) from literature were utilised within the questionnaire so that the reliability and validity of the designed questionnaire could be tested.

Reliability of the constructed questions administered to the tested sample of respondents was statistically calculated using the Cronbach's coefficient alpha. This is to see if they accurately measure the factor that they were supposed to measure. In Table 3.1 the Cronbach's alpha was recorded for each of the subfactors (DV1.1- DV1.5) and the factors. All the Cronbach's alpha coefficients for

the sub-factors, except for fairness, were above 0.70. The Cronbach's alpha for the School High Performance Work Index (SHPWI) which is a combination of DV1.1-DV1.5 was 0.84.

Variables	Cronbach's alpha
DV1.1.Innovation Potential	0.76
DV1.2.Employee Experience	0.82
DV1.3.Fairness	0.67
DV1.4.Leadership	0.85
DV1.5.Learner Orientation	0.83
DV1.School High Performance Work Index	0.84
IV1. Kenexa Employee Engagement Index	0.84
IV2. Organisational Commitment	0.93
IV3. Communication	0.87
IV4. Leadership	0.83
IV5. Strategic management	0.77
IV6. Trust	0.91
IV7. Motivation	0.86
IV8. Conflict management	0.91
IV9. Positive practices	0.86
IV10. School Organisational Climate	0.78

Table 3.1: Cronbach's alpha coefficient: School High Performance Work Index (SHPWI) and other variables

3.9 CONCEPTUAL THEORETICAL FRAMEWORK

Utilising the conceptual framework outlined within the framework of positive organisational scholarship (POS) it is stated that the control variable is the selected effective high performance school teams. By controlling this variable as effective schools with high performance teams, the enabling effect of the independent variables may be more effectively established. From the literature the main factors or key concepts that the researcher will be focusing on were chosen from the literature reviewed. The parameters of interest were the following variables.

HPW index uses six categories but for this study five of these were utilised. Innovation (IP), Employee Experience (EE), Fairness (Fa), and Leadership (Le)

and Learner Orientation (Lo). Profitability and Productivity (P) as a financial indicator will not be relevant in this particular research study. Customer Orientation is replaced with Learner Orientation (Lo) which is relevant in the school context. By purposive sampling and selection of medium to high performing schools the study will exam the factors contributing towards a high performance work index in secondary schools. In this highly productive environment all the linkages with the SHPWI will be examined. All the linkages with the teamwork factors, employee engagement (Wiley, 2012) and the organisational commitment factor (OCF) from literature (Mowday, Steers and Porter, 1979) will be analysed.

The teamwork factors selected for this study that contribute towards a successfully performing team, taken from the literature survey are:

- Communication and connections (COM)
- Leadership (LSH)
- Strategic Management (STRAT)
- Trust (TW)
- Motivation (MOT)
- Conflict (CF)
- Positive practices (PP)
- School Organisational Climate (SOC)

Other variables taken from standardised literature measurements are:

- School Kenexa Employee Engagement Index (KEN) and the
- School Organisational Commitment (OCQ) Index.

For this study the questionnaire was designed around these variables, ascertained from the literature references of previous research findings, and each variable and construct defined and discussed.

3.9.1 Survey Instrument

The quantitative measuring instrument (Annexure 3) was a questionnaire which is a list of carefully constructed closed-ended questions, which prompt the

participants from the selected groups to respond with their perspectives on a rating scale of one to five. This data was used to address the research questions and establish the main factors that contribute towards effective high performance teams in the secondary schools.

3.9.2 Conceptual Framework Model

The Hypothesised Model to examine the enabling factors for High performance school operational teams is shown in Figure 3.2.

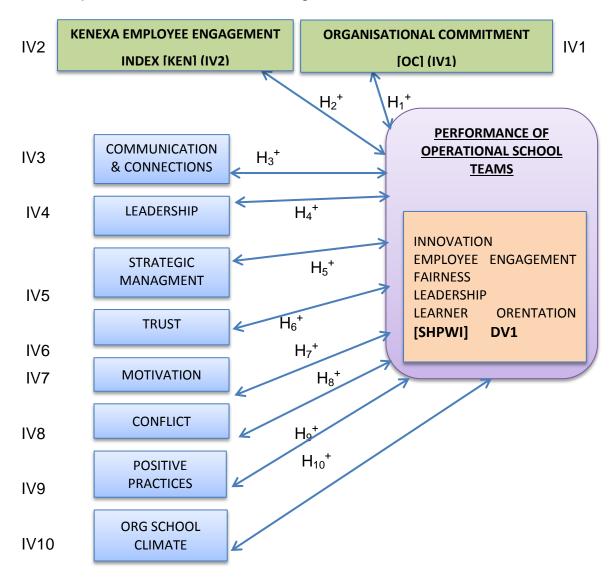


Figure 3.2: The simplified conceptual framework model with hypotheses (Source: Authors own construct)

3.9.3 Reference to literature and questionnaire construction

The questionnaire was constructed using some of the HPW Index components from a literature analysis on business organisations. The enabling factors for the SHPWI (DV1) utilised are as follows:

- Innovation (IP): Perception of the organisation's innovation outcomes and support for innovation, freedom of ideas and suggestions;
- Employee Experience (EE): Perception of level of commitment, positive emotions at work, job satisfaction, general well-being and positive practices;
- Fairness (Fa): Perceptions of equal and procedural fairness in the organisation;
- Leadership (Le): Perception of leadership;
- Learners Orientation (LO): Employee perception of the school's level of understanding of the learner and acting on suggestions and feedback (Boedker, et al., 2011).

These sub-factors contribute towards the School HPW Index (SHPWI), which is the Dependent Variable 1 (DV1). The Independent Variables 2 - 10 are School Organisational Commitment (SOCQ) IV1 and Employee Engagement (EE) IV2 with Teamwork Factors (IV3-10). All the teamwork factors measured in this research study were taken from the literature reviewed (Table 3.2).

	Factors/Construct	Code	Literature References	Items
				measuring
				the factor
DV1	School High Performance	SHPWI	(Boedker,et al., 2011).	15
	Work Index			
IV1	School Organisational	OCQ	(Mowday, Steers and	9
	Commitment		Porter, 1979)	
IV2	Kenexa Employee	KEN	(Wiley, 2010)	4
	Engagement Index	EEI		
IV3	Communication and	COM	(Hoy, 1991; O'Reilly	5
	connections		and Roberts, 1976)	
IV4	Leadership	LSH	(Boedker, et al.,2011)	6
IV5	Strategic Management	STRAT		4
IV6	Trustworthiness	TW		5
IV7	Motivation	MOT		5
IV8	Conflict management	CF	(Clarke,2009)	5
IV9	Positive practices	PP	(Baker, 2003)	7
IV10	School Organisational	SOCQ	(Clarke,2009)	4
	Climate			

Table 3.2: Enabling Factors measurements in the design of the questionnaire, the coding and number of items

Each of these factors was measured with three to five items and rated responses measured using a 5-point Likert scale. Both quantitative and qualitative data were collected on the questionnaire.

In this study the researcher utilised the High Performing Model (Wiley, 2009) and Workplace Index (Boedker, et al., 2011) as theoretical frameworks in studying the leadership, culture and management practices in the school operational teams of four secondary schools situated in the Nelson Mandela Bay Metropolitan Municipality. This study utilised a business model to analyse a whole school operational team and the enabling contributing factors that affect the success of high performance school teams. The Organisation Commitment Questionnaire, a shortened version from literature (Mowday,

Porter and Steers, 1982) was used as a measure of the success of the employee's work unit as per previous literature research studies (Fields, 2012). The Kenexa Employee Engagement Index (EEI) which is also known as a good predictor of organisational success and high performance was used as another standardised independent variable (Wiley, 2010).

3.9.4 Defining of variables

The variables can therefore be summarised in the Table below (Table 3.3).

Controlled Variable	Dependent Variables	Independent Variables
High Performance Schools	DV1:School High	IV1: School Organisational
(Selected Sample)	Performance Work Index	Commitment (SOC)
	(SHPWI)	
	DV2 for ranking:	IV2: Kenexa Employee
	Gr12 Pass Rates at the	Engagement Index
	Schools	(EEI)
	DV3 for comparative:	IV3: Communication and
	Quintiles/Government	connections (COM)
	and private schools	
		IV4:Leadership (LSH)
		IV5:Strategic Management
		(STRAT)
		IV6:Trustworthiness (TW)
		IV7:Motivation (MOT)
		IV8:Conflict management
		(CFM)
		IV9:Positive practices (PP)
		IV10:School Organisational
		Climate (SOC)

Table 3.3: Defining the variables in this research study.

3.9.5 Structure of the questionnaire

A questionnaire was compiled using literature and validated scales for

organisational research as well as compiling the school high performance index

within the secondary school context.

In general, the self-administered questionnaire was developed to collect

primary data and the questionnaire was divided into two sections with clear

instructions. The respondent was ensured of anonymity and confidentiality,

although some biographical data was collected. Each questionnaire was

numbered and tracked for each sub-group or school unit. It was important to

avoid questionnaire fatigue and non-response bias. Questions required

response on the scaled-response five-point Likert-type scale, anchored on

agree-disagree.

The coded questionnaire can be seen in Annexure 3. It contained a covering

letter explaining the research purpose and information on completing the

questionnaire. The University research Full Ethical Clearance Number was

displayed on all the documents (Annexure 5).

The questionnaire consisted of the following three sections

Section A: Biographical information

Section B: School Team Performance (69 Closed-ended questions)

Section C: School Team Performance (4 Open-ended questions)

In section A, the biographical profile of the respondent was ascertained.

Information concerning the respondents' age, gender, current school level,

years of service in the school and the educational level was obtained. Section B

consisted of 69 questions with the respondent being asked to select one option

on a five-point Likert-type scale ranging from 1 strongly disagree to 5 strongly

agree. Section C contained four open-ended questions for the respondent to

complete.

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3.9.5.1 Questionnaire pilot

A pilot study was conducted on a sample of trainee teachers to ensure clarification and understanding of the questions, as well as fill-in time and correction of ambiguity and misconceptions.

3.9.5.2 Administration of questionnaire

The questionnaire was administrated to all the staff at four secondary schools via the principal of the school. A letter of permission (Annexure 2) was obtained from each principal before starting the research study in that school.

3.9.6 Qualitative data methodology

In collection of the data the Miles and Huberman (1996) approach was used in this research study. Initially the coding frameworks were the descriptive codes. Descriptive coding can be described as focusing and identifying and labeling or coding the data thereby storing the information about the cases that are being studied at a first level coding. Components of data analysis used have three main components as shown in Figure 3.3.

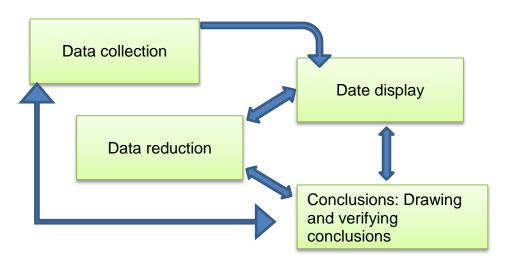


Figure 3.3: Components of data analysis: Interactive model

Source: Miles and Huberman, (1994, p.4)

3.9.6.1 Data reduction

The data was segmented and summarized, and then through memo-ing and coding associated themes and patterns were outlined. It is important when reducing the data not to strip the data from the context. Coding is the foundation

for discovering regularities in the data and descriptive (topic) coding was used at the first level and then pattern (analytic) coding at the second level.

3.9.6.2 Data display

Abstraction and comparison was used at the different levels as shown in Figure 3.4 in the data analysis by Punch (2011).

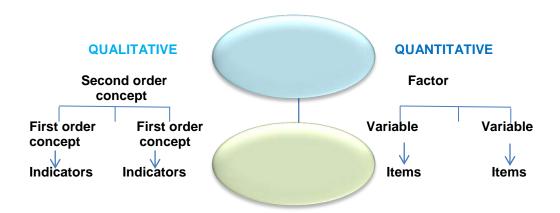


Figure 3.4: Data analysis Source: Punch, (2011, p.181)

The concrete to abstract and specific to general is used in both the quantitative and the qualitative approach in this research study. Quantitative analysis integrates items into variables to move to the first level of abstraction and then derives factors from variables to move to the second level of abstraction. The qualitative analysis shown on the tree diagrams (Richards, 2005) moves from indicators at the lowest level of abstraction, to first order concepts and then at the next level moves to second order concepts.

Open coding using the concept-indicator model (Glaser, 1978) was utilised and is based on grounded theory analysis. The data can be displayed in cognitive maps, Venn diagrams, causal models or matrices.

3.9.6.3 Drawing and verifying conclusions

Conclusions are in the form of recommendations and propositions and once drawn need to be verified. The quantitative and qualitative data were merged into a matrix diagram which allows triangulation of the data thus showing validity and verification.

3.9.7 Quantitative data methodology

Statistical analysis utilising descriptive and inferential statistics as well as a multiple regression analysis was conducted on the quantitative data by a qualified statistician in the Statistical Unit at the Nelson Mandela Metropolitan University, utilising a Microsoft Excel Statistics programme.

Validation of the data by triangulation was done, with data being examined and analysed. The qualitative and quantitative data were merged, using a mixed method research approach.

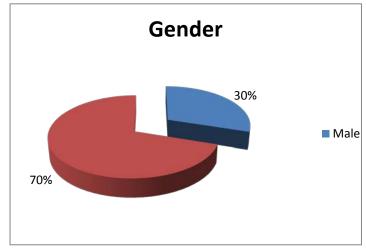
The descriptive statistics on the biographical information Section A is discussed below.

3.10 PROFILE OF RESPONDENTS: BIOGRAPHICAL INFORMATION

The demographic data from Section A of the 81 respondents who participated in this research study is reported in this section. Biographical data collected included gender, age, current level of employment, years of service and education level.

3.10.1 Gender

Figure 3.5 indicates that of the 81 respondents who participated in the study 57 were female (70%) and 24 were male (30%).

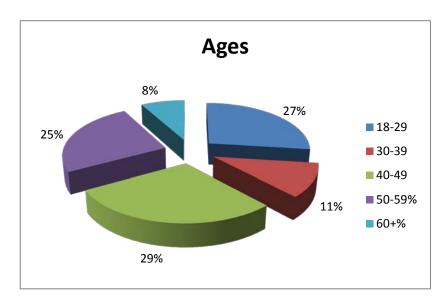


Gender	Response	%
Female	57	70
Male	24	30
Total	81	100

Figure 3.5: Responses according to gender

3.10.2 Age

As reflected in Figure 3.6 the respondents who participated in this study 27% were in the 18-29 years age group, 11% in the 30-39 years age group, 29% in the 40-49 years age group, 25% in the 50-59 years age group and 8% in the +60 years age group.

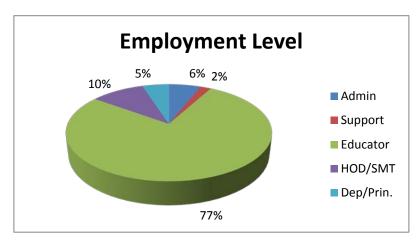


Age Groups	%
18-29 years	27
30-39 years	11
40-49 years	29
50-59 years	25
+60 years	8
Total	100

Figure 3.6: Responses according to age groups

3.10.3 Current employment level in the school

In Figure 3.7 the responses of the current employment levels in the schools are represented. 77% of the respondents were educators, 10% Head of Departments, 5% Principals or Deputy Principals, 6% Administrative and 2% support staff.

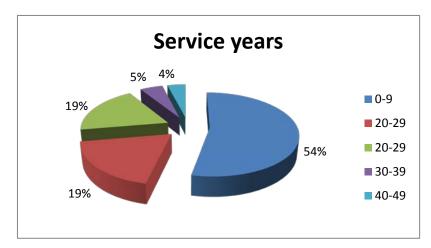


Employment level	%
Admin	6
Support	2
Educators	77
HOD/SMT	10
Deputy/Principal	5
Total	100

Figure 3.7: Responses according to employment level

3.10.4 Number of years' service at the school

Figure 3.8 shows the number of years' service at the school of the respondents.

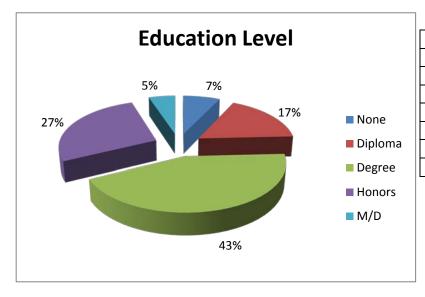


Service years	%
0-9	54
10-19	19
20-29	19
30-39	5
40-49	4
Total	100

Figure 3.8: Responses according to years' service at the school

3.10.5 Education level

In Figure 3.9 the education qualification level is represented and the respondents show 7% with no qualifications, 17% Diploma, 43% Degree, 27% Honors degree and 5% with Masters or Doctoral degrees.



Education level	%
None	7
Diploma	17
Degree	43
Honors	27
Masters/Doctoral	5
Total	100

Figure 3.9 Responses according to education level

The overall respondent frequency distribution per school and school profiles can be summarised in Table 3.3 and 3.4.

Frequency distribution of whole study (total sample respondents) Nos of respondents % of 81				Total Number of staff members	% respondents as % of school staff	Total Learner enrolment
	Quintile3	0.4	000/	4-	470/	4500
School1		21	26%	45	47%	1503
School2	Quintile 5	32	40%	35	91%	609
School3	Quintile 5	17	21%	55	31%	1009
School4	Private	11	14%	19	58%	128
Total		81	100%	154	Average 53%	-

Table 3.4 Frequency distribution of respondents per school

School	School Area		% Pass	% Pass	
			rate 2011	2012	
School 1	Peri-urban (Public school)	3	50.6	57.7	
School 2	City (Public school)	5	98.3	84.5	
School 3	City (Public school)	5	100	100	
School 4	City (Private school)	Private	100	100	

Table 3.5 Profiles of the selected sample of secondary schools

By examining this data the researcher was able to get a profile of the demographics of the sample and the context of the different schools. By examining the percentage pass rate of the Grade 12 learners (Department of Education, 2013) one can see that the school academic performance can be rated as 58% (School 1), 85% (School 2), 100% (School 3) and 100% (School 4).

School 1 is situated in a township peri-urban area and has a staff to learner ratio of 1: 33. School 2 is situated in the city and the staff to learner ration is 1:17. In School 3 which is also situated in the city, the staff to learner ratio is 1:18. The private school (School 4) situated in the city has a staff to learner ratio of 1:7.

3.11 DATA ANALYSIS

After all data were collected from the four secondary schools, the responses were entered onto a Microsoft Excel spread sheet with respondents numbered S1.C01–S4.C81 with the schools coded as School 1, 2, 3 and 4. The questions were coded with the relevant constructs that they were measuring and the data was statistically analysed for descriptive, inferential and cross contingency tabulation in an exploratory data analysis. Cronbach's alpha and Pearson Correlation coefficients were calculated. Results were compared overall as well as within and between schools. Multiple regression analysis was also performed on the overall sample.

Data were analysed by a statistician using a Microsoft Excel statistically developed program. The results are reflected in chapter four.

3.12 CONCLUSION

The research design, methodology and reasons for these choices were discussed in this chapter. The theoretical conceptual framework was shown including the linkages with the various hypotheses. Research tools, the data collection instrument, sampling and data analysis were discussed. The controlled, independent and dependent variables were identified and summarized. The profiles of the respondents of the secondary schools and the biographical and demographic data were presented in this chapter. The quantitative and qualitative empirical results of this research study are presented in the next chapter.

CHAPTER 4

RESULTS AND ANALYSIS

4.1 INTRODUCTION

In this exploratory empirical study a sample of eighty one respondents from four

secondary schools were the participants. The research investigation was

undertaken using a purposive sampling technique as only high performance

school operational teams were selected in two different quintile groups, as well

as a private school.

A Microsoft Excel software package was used by a statistician to analyse the

data and a summary of the responses is presented in both tabular and

graphical form. The data is briefly analysed in summaries at the end of each

section. The results are presented and interpreted in the same order as the

conceptual framework and the structure of the questionnaire as shown below.

Section A: Biographical profiles of the respondents. This is presented in

Chapter 3 (see Section 3.8).

Section B: Quantitative data:

Q1-Q15: School High Performance Work Index

Q16- Q56: High Performance Team Enabling Factors

Q57- Q60: Kenexa Employee Engagement Index (EEI)

Q61-Q69: Organisational Commitment (OC)

Section C: Qualitative data (C1-C4)

QUANTITATIVE DATA: EMPIRICAL ANALYSIS AND INTERPRETATION

HPT FACTORS: SECTION B

The data collected in Section B of the questionnaire is summarized in the order

of the independent variables as shown in the conceptual framework (Figure

3.2).

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Cronbach's alpha (1951) was used to test for internal reliability and consistency. Measurements are expressed on a scale ranging from 0 to 1, which shows that the higher value the more stable and consistent the results are. According to Nunnally (1978) a 0.70 is acceptable reality but a 0.5 is acceptable for basic or exploratory research. In this study all the Cronbach alpha's were higher than 0.70 except for fairness which was 0.67 (Table 3.4).

4.2 SCHOOL HIGH PERFORMANCE WORK INDEX (SHPWI)

The analysis presented below shows the respondents' answers to questions Q1-Q15 of Section B.

The questionnaire (Q1-Q15) (Annexure 3) was designed to calculate a School High Performance Work Index (SHPWI) with questions utilising five factors; Innovation Potential (DV1.1-IP), Employee Experience/engagement (DV1.2-EE), Fairness (DV1.3-Fa), Leadership (DV1.4- Le) and Learner Orientation (DV1.5-LO).

The questions are based on the theoretical conceptual framework obtained from the literature review in Chapter two. The five main factors contributing towards the High Performing work Index (HPWI) were chosen and adapted for a school context and were combined and averaged to form a School High Performing Work Index (SHPWI) (Table 4.1).

	Construct	Code	Literature	Items measuring
			References	the construct
DV1	School High Performance	SHPWI	(Boedker,et.al.,	15 (Q1-Q15)
	Work Index		2011).	

Table 4.1 School High Performance Work Index (SHPWI)

Each sub-construct of the SHPWI is presented and discussed.

4.2.1 Innovation Potential and freedom of suggestions

From the questionnaire the Innovation Potential sub-factor was measured using questions 1-3 as outlined below.

INNOVATION POTENTIAL IP								
OUE OTION								
QUESTION - CODE	Variable CODING							
Q1-IP1	DV1.1.1	We are willing to bring up new ideas.						
Q1-IP2	DV1.1-2	New ideas are listened to.						
Q1-IP3	DV1.1-3	We are encouraged to make new suggestions.						

The perception of the respondents on their Innovation Potential when working in their school operational teams is shown as a percentage of disagrees to agree and is represented in Figure 4.1.

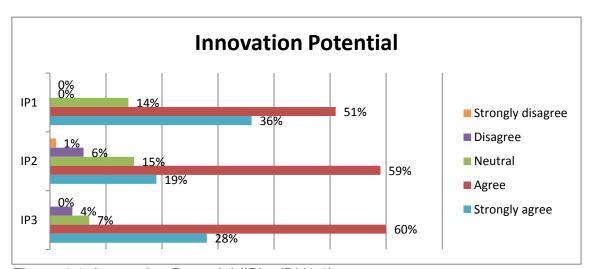


Figure 4.1: Innovation Potential (IP) - (DV1.1)

	Mean	S.D.	Minimum	Quartile 1	Median	Quartile 3	Maximum
School1 (n=21)	3.95	0.45	2.67	3.67	4.00	4.00	5.00
School2 (n=32)	2.05	0.67	0.00	0.07	4.00	4.00	5.00
	3.95	0.67	2.33	3.67	4.00	4.33	5.00
School3 (n=17)	4.12	0.60	3.00	4.00	4.00	4.33	5.00
School4 (n=11)	4.64	0.38	4.00	4.33	4.67	5.00	5.00

Table 4.2: Mean IP Values by School: Innovation Potential (IP) - (DV1.1)

Summary of the responses to the Innovation Potential (IP)

The Cronbach alpha coefficient for this factor is 0.76, with the aggregate mean 4.08 and the standard deviation 0.73. School 4 had the highest mean of 4.64 for Innovation Potential whereas School 1 and 2 both had the lowest mean of 3.95.

4.2.2 Employee experience

From the questionnaire the Employee experience sub-factor was measured using questions 4-7 as outlined below.

EMPLOYEE E	XPERIENCE	EEX
QUESTION - CODE	Variable CODING	
Q4-EEX1	DV1.2.1	4. We feel valued and proud to work in our school.
Q5-EEX2	DV1.2-2	We will gladly go the extra mile for our staff team and our school.
Q6-EEX3	DV1.2-3	We feel that our work is important.
Q7-EEX4	DV1.2-4	7. We feel positive about our school.

The response of the sampled school team members to the level of employee experience/engagement (EEX) is represented in Figure 4.2.

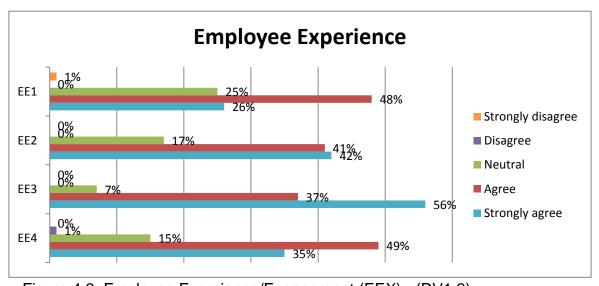


Figure 4.2: Employee Experience/Engagement (EEX) - (DV1.2)

	Mean	S.D.	Minimum	Quartile 1	Median	Quartile 3	Maximum
School1 (n=21)	4.08	0.58	3.00	3.75	4.00	4.50	5.00
School2 (n=32)	4.09	0.64	2.75	3.69	4.00	4.50	5.00
School3 (n=17)	4.41	0.47	3.50	4.00	4.50	4.75	5.00
School4 (n=11)	4.55	0.38	4.00	4.25	4.50	4.88	5.00

Table 4.3: Mean EEX Values by School: Employee Experience (EEX)-(DV1.2)

Summary of the responses to the Employee Experience (EEX)

For this construct, employee experience, the Cronbach's alpha coefficient is 0.84. This shows high internal consistency and stability in the measurement of this factor and is therefore a reliable measurement. The aggregate mean is 4.22 and the standard deviation 0.72. School 4 had the highest mean of 4.55 for Employee Experience with School 1 and 2 both having the lowest means of 4.08 and 4.09 respectively.

4.2.3 Fairness

From the questionnaire the Fairness (Fa) sub-factor was measured using questions 8-10 as outlined below.

FAIRNESS F	a	
QUESTION -CODE	Variable CODING	
Q8-Fa1	DV1.3.1	We are treated relative to our performance.
Q9-Fa2	DV1.3.2	The school policies are implemented fairly across all levels.
Q10-Fa3	DV1.3.3	Senior educators and managers treat everyone equally.

The response of the sampled school team members to the level of fairness (Fa) in their school operational teams is represented in Figure 4.3.

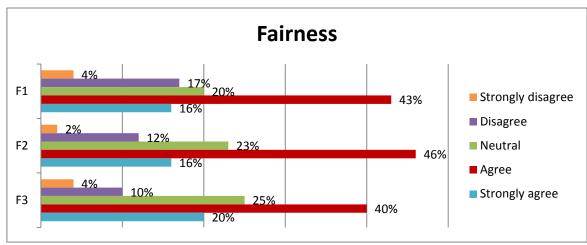


Figure 4.3: Fairness (Fa) - (DV1.3)

	Mean	S.D.	Minimum	Quartile 1	Median	Quartile 3	Maximum
School1 (n=21)	3.48	0.77	1.67	3.00	3.67	4.00	4.67
School2 (n=32)	3.43	0.86	1.00	3.00	3.33	4.00	5.00
School3 (n=17)	3.73	0.77	2.00	3.33	3.67	4.00	5.00
School4 (n=11)	4.09	0.58	3.00	3.83	4.33	4.33	5.00

Table 4.4: Mean Fa Values by School: Fairness (Fa)-(DV1.3)

Summary of the responses to the Fairness (Fa)

Results show that the Cronbach's alpha coefficient for this construct was low at 0.67. In 1978 Nunnaly showed that a Cronbach's alpha of 0.70 is an acceptable reliability but that a value of 0.5 is acceptable for exploratory research. The mean is 3.59 and the standard deviation is 1.03. The school showing the highest mean level of fairness was School 4 at 4.09 whereas the lowest mean was recorded in School 2 at 3.43.

4.2.4 Leadership

The sub-construct of Leadership (Le) was measured in the questionnaire by questions 11-13 as shown below.

LEADERSHIP	Le	
QUESTION - CODE	Variable CODING	
Q11-Le1	DV1.4.1	11. Senior educators and managers have clear values and are role models.
Q12-Le2	DV1.4.2	 Senior educators and managers allow freedom for employees to lead tasks and assignments.
Q13-Le3	DV1.4.3	 Recognition and acknowledgement is given to employees.

The response of the sampled school team members to the items in the leadership (Le) sub-factor is represented in Figure 4.4.

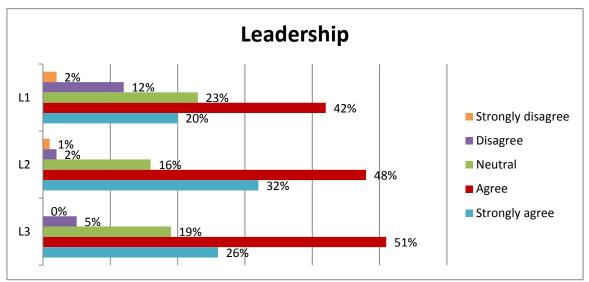


Figure 4.4: Leadership (Le) - (DV1.4)

	Mean	S.D.	Minimum	Quartile 1	Median	Quartile 3	Maximum
School1 (n=21)	3.52	0.87	1.33	3.00	3.67	4.00	5.00
School2 (n=32)	3.88	0.69	2.67	3.58	3.67	4.33	5.00
School3 (n=17)	4.12	0.80	2.00	3.67	4.00	4.67	5.00
School4 (n=11)	4.33	0.58	3.00	3.83	4.33	4.33	5.00

Table 4.5: Mean Le Values by School: Leadership (Le)-(DV1.4)

Summary of the responses to Leadership (Le)

The Cronbach's alpha coefficient for this construct is 0.85, the highest value, showing good reliability and internal consistency in measuring this construct. The aggregate mean 3.90 and the standard deviation 0.78.

The highest mean of 4.33 was recorded for School 4 whilst the lowest value of 3.52 was recorded for School 1.

4.2.5 Learner Orientations

The last sub-construct of Learner Orientations (Lo) which contributes to the construct School High Performance Index was measured in the questionnaire by questions 14-15 as shown below.

LEARNER ORIENTATIONS Lo						
QUESTION -CODE	Variable CODING					
Q14-Lo1	DV1.5.1	14. Our school team spares no effort to understand				
		our learners' needs and problems.				
Q15-Lo2	DV1.5-2	15. Our school treats each learner as an individual.				

The response of the sampled school team members to the learner orientations factor (Lo) is represented in Figure 4.5.

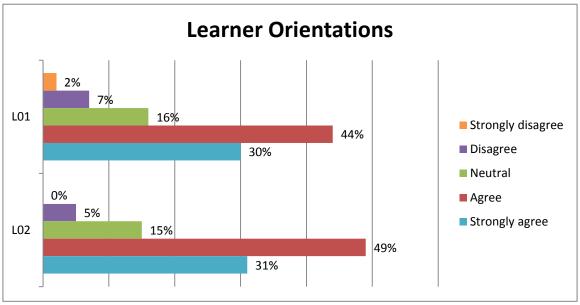


Figure 4.5: Learner Orientations (Lo) - (DV1.5)

	Mean	S.D.	Minimum	Quartile 1	Median	Quartile 3	Maximum
School1 (n=21)	3.36	0.96	1.50	3.00	3.00	4.00	5.00
School2 (n=32)	4.13	0.69	2.67	3.58	3.67	4.33	5.00
School3 (n=17)	4.12	0.63	3.00	4.00	4.00	4.50	5.00
School4 (n=11)	4.59	0.44	4.00	4.25	4.50	5.00	5.00

Table 4.6: Mean Lo Values by School: Learner Orientation (Lo)-(DV1.5)

Summary of the responses to Learner Orientation (Lo)

The Cronbach's alpha coefficient for this factor was high at 0.83 showing good reliability. The mean is 3.99 and the standard deviation is 0.84. The school showing the highest mean level of learner orientation was School 4 with a mean of 4.59 whereas the lowest mean was recorded at 3.36 in School 2.

4.2.6 School High Performance Work Index (SHPWI)

All the above five factors contributed towards the overall School High Performance Index which used the responses from questions 1- 15. The overall high performance team sample of all the schools in this study generated the following profile. (Figure 4:6)

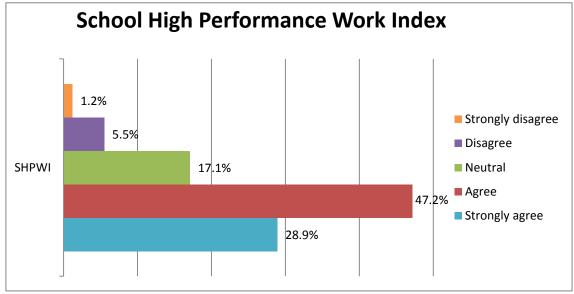


Figure 4.6: School High Performance Team Index (SHPWI) - (DV1). All schools combined: Total sample

	Mean	S.D.	Minimum	Quartile 1	Median	Quartile 3	Maximum
School1 (n=21)	3.36	0.96	1.50	3.00	3.00	4.00	5.00
School2 (n=32)	4.13	0.69	2.67	3.58	3.67	4.33	5.00
School3 (n=17)	4.12	0.63	3.00	4.00	4.00	4.50	5.00
School4 (n=11)	4.59	0.44	4.00	4.25	4.50	5.00	5.00

Table 4.7: Mean SHPWI Values by School: School High Performance Work Index (SHPWI) - (DV1)

Summary of the responses to SHPWI

The Cronbach's alpha coefficient for this index is 0.84, with the aggregate mean 3.95 and the standard deviation 0.57. School 4 had the highest mean of 4.59 for the School High Performance Work Index with the lowest mean of 3.36 recorded for School 1.

4.2.7 Spider diagram of the Average School High Performance Work Index and the SHPWI of each school

A spider diagram was constructed of the mean values recorded calculated as a percentage. For example, 3.95 of 5 equal 79%. The diagrams for the average SHPWI and all the four schools were plotted. The following key (Table 4.8) was used.

IP	Innovation Potential		Average
EEX	Employee Experience		Below Average
Fa	Fairness		On Average
Le	Leadership		Above Average
Lo	Learner Orientation] 	
SHPWI	School High Performance Work Index		SHPWI

Table 4.8: Key to Spider diagrams

In School 1 the SHPWI was 74% which was 5% below the average. The factors that had a value that are 5% less than the average, as well as those at 75% or below were shown to be Leadership, Learner Orientation and Fairness which all contributed to the lower SHPWI, as shown in the spider diagram below (Figure

4.7). The highest positive factors were Employee Experience and Innovation Potential.

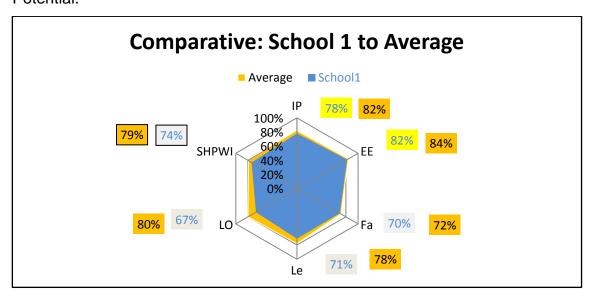


Figure 4.7: School 1: SHPWI compared to the average

In School 2 a SHPWI of 78% was recorded which is close to the average SHPWI of 79%. All the values were close to the 75% level except for the Fairness factor (Figure 4.8). The factor of Leadership was equal to the average and the Learner Orientation was above average.

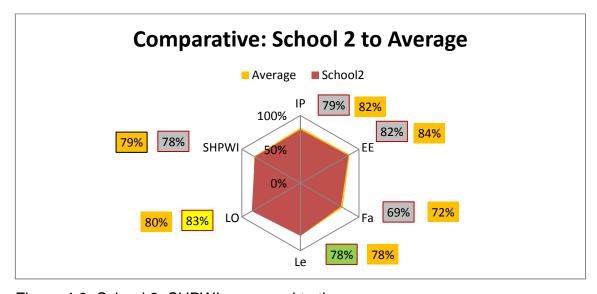


Figure 4.8: School 2: SHPWI compared to the average

In School 3 (Figure 4.9) a SHPWI of 82% was recorded which is above the average of 79%. All the values are greater than 75% and higher than the averages. The highest value was for the factor Employee Experience.

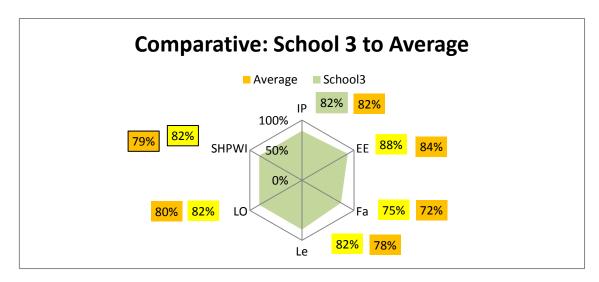


Figure 4.9: School 3: SHPWI compared to the average

In Figure 4:10, the SHPWI for School 4 can be seen to be 89% which is ten percent greater than the average of 79%. All values are in the 82-93% range showing high performance in all areas.

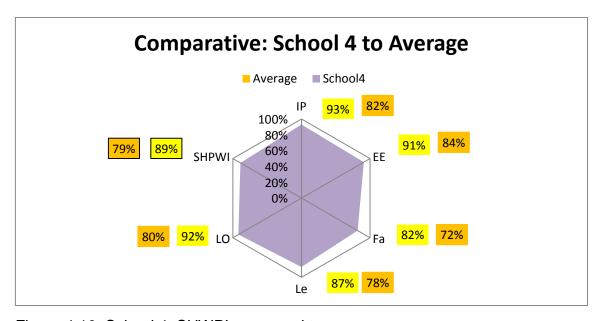


Figure 4.10: School 4: SHWPI compared to average

4.3 KENEXA EMPLOYEE ENGAGEMENT WORK INDEX (EEI-KEN)

The independent variable of the Kenexa Employee Engagement Work Index (KEN) was examined as an independent variable (IV2) using questions 57-60. The questions were adapted to analyse educator engagement within a school context. This was utilized as a literature based standardized measure (Wiley, 2012). The questions were adapted to measure employee engagement within a school context by the author.

KENEXA EMPI	KENEXA EMPLOYEE ENGAGEMENT WORK INDEX KEN IV1							
QUESTION -	Variable							
CODE	CODING							
Q57-KEN1	IV1.1	57. I am proud to work at my school.						
Q58-KEN2	IV1.2	58. Overall, I am satisfied in my job.						
Q59-KEN3	IV1.3	59. I would gladly refer a good friend to apply to work						
		at my school.						
Q60-KEN4	IV1.4	60. I rarely think about looking for a new job in another						
		school.						

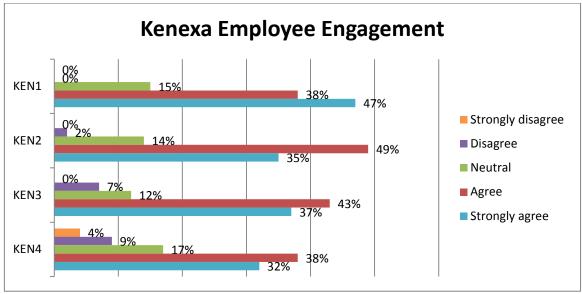


Figure 4.11: Kenexa Employee Engagement Work Index (KEN) - (IV1)

	Mean	S.D.	Minimum	Quartile 1	Median	Quartile 3	Maximum
School1 (n=21)	3.82	0.64	2.25	3.50	4.00	4.00	5.00
School2 (n=32)	3.98	0.79	2.25	3.50	4.00	4.56	5.00
School3 (n=17)	4.54	0.57	3.25	4.25	4.75	5.00	5.00
School4 (n=11)	4.39	0.48	3.75	4.00	4.25	4.88	5.00

Table 4.9: Mean KEN Values by School: Kenexa Employee Engagement Index (KEN) - (IV1)

Summary of the responses to Kenexa Employee Engagement Index

The Cronbach's alpha coefficient for this Kenexa Employee Engagement Index was high at 0.84 showing good reliability. The mean is 4.11 and the standard deviation is 0.72. The school showing the highest mean level of the Kenexa Employee Engagement Index was 4.54 of School 3 whereas the lowest mean was recorded at 3.82 in School 1.

4.4 SCHOOL ORGANISATIONAL COMMITMENT

Utilizing the OCQ questions from literature (Mowday et al., 1982) the School Organisational Commitment was used as the second independent variable. Questions were based on the nine item OCQ and are question 61-69.

SCHOOL ORGA	ANISATION	AL COMMITMENT OCQ IV2
QUESTION - CODE	Variable CODING	
Q61-OCQ1	IV2.1	61. I am willing to put in a great deal of effort beyond
		that normally expected in order to assist success
		in the school.
Q62-OCQ2	IV2.2	62. I talk about this school to my friends as a great
		school to work at.
Q63-OCQ3	IV2.3	63. I would accept almost any task in order to keep my
		job at this school.
Q64-OCQ4	IV2.4	64. I find my values and this school's values are very
		similar.

Q65-OCQ5	IV2.5	65. I am proud to tell others that I am part of this school.
Q66-OCQ6	IV2.6	66. This school inspires the very best in me in the way of job performance.
Q67-OCQ7	IV2.7	67. I am extremely glad that I chose this school to work at above other schools I was considering at the time I joined.
Q68-OCQ8	IV2.8	68. I really care about the fate of this school.
Q69-OCQ9	IV2.9	69. For me, this is the best of all possible schools for which to work.

Source: Questionnaire (OCQ Mowday, et al., 1982)

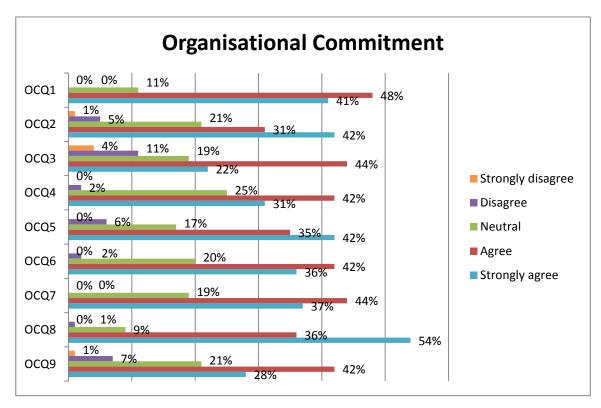


Figure 4.12: Organisational Commitment (OCQ) - (IV2)

	Mean	S.D.	Minimum	Quartile 1	Median	Quartile 3	Maximum
School1 (n=21)	3.80	0.65	2.56	3.33	4.00	4.22	4.89
School2 (n=32)	4.01	0.75	2.44	3.31	4.00	4.67	5.00
School3 (n=17)	4.51	0.51	3.22	4.44	4.56	4.89	5.00
School4 (n=11)	4.24	0.41	3.67	3.94	4.22	4.44	5.00

Table 4.10: Mean OCQ Values by School: Organisational Commitment (OCQ)-(IV2)

Summary of the responses to OCQ

The Cronbach's alpha coefficient for this construct was high at 0.93 showing good reliability. The mean is 4.09 and the standard deviation is 0.68. The school showing the highest mean level of organisational commitment was School 3 with values of 4.51 whereas the lowest mean was recorded at 3.80 in School 1.

The other team success factors (IV3-IV10) examined were taken from the literature and analysed in this research study. These are discussed below.

4.5 COMMUNICATION AND CONNECTIONS

From the questionnaire the Communication and connections (COM) factor was measured using questions 16-20 as outlined below.

COMMUNICA	COMMUNICATION AND CONNECTIONS COM IV3					
QUESTION -CODE	Variable CODING					
Q16-COM1	IV3.1	16. Communication is clear.				
Q17-COM2	IV3.2	17. Communication is open and honest.				
Q18-COM3	IV3.3	18. We all listen to each other.				
Q19-COM4	IV3.4	 Our communication in our school staff teams is always respectful. 				
Q20-COM5	IV3.5	20. Everyone feels that their voices are heard.				

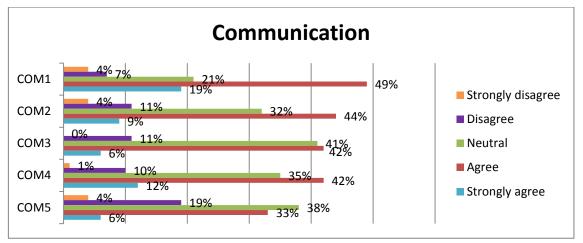


Figure 4.13: Communication and connections (Com) - (IV3)

	Mean	S.D.	Minimum	Quartile 1	Median	Quartile 3	Maximum
School1 (n=21)	3.26	0.53	2.20	2.80	3.40	3.60	4.00
School2 (n=32)	3.32	0.81	1.60	2.80	3.30	4.00	5.00
School3 (n=17)	3.68	0.74	2.00	3.40	3.80	4.00	5.00
School4 (n=11)	3.95	0.61	2.60	3.60	4.20	4.40	4.60

Table 4.11: Mean COM Values by School: Communication (COM) - (IV3)

Summary of the responses to Communication (COM)

The Cronbach's alpha coefficient for this construct was high at 0.87 showing good reliability. The mean is 3.46 and the standard deviation is 0.74. The school showing the highest mean level of communication was 3.95 in School 4 whereas the lowest mean was recorded at 3.26 in School 1.

4.6 LEADERSHIP

The factor of Leadership was examined using questions 21-26.

LEADERSHIP	LHS IV4	
QUESTION - CODE	Variable CODING	
Q21-LHS1	IV4.1	21. We are allowed freedom to lead tasks and assignments.
Q22-LHS2	IV4.2	22. I feel energized by my work.
Q23-COM3	IV4.3	23. We are encouraged to think about problems in new ways.
Q24-LHS4	IV4.4	24. We have good leaders in our school.
Q25-LHS5	IV4.5	25. We are informed regularly about school policies and processes.
Q26-LHS6	IV4.6	26. We feel that we are developing in our jobs.

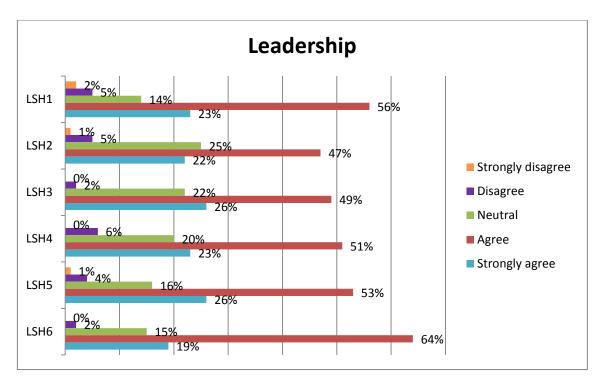


Figure 4.13: Communication and connections (Com) - (IV3)

	Mean	S.D.	Minimum	Quartile 1	Median	Quartile 3	Maximum
School1 (n=21)	3.64	0.58	2.83	3.17	3.67	4.00	4.83
School2 (n=32)	3.87	0.60	2.67	3.46	3.83	4.38	5.00
School3 (n=17)	4.20	0.58	2.83	3.67	4.33	4.50	5.00
School4 (n=11)	4.32	0.26	4.00	4.17	4.33	4.42	4.83

Table 4.12: Mean LSH Values by School: Leadership (LSH) - (IV4)

Summary of the responses to LSH

The Cronbach's alpha coefficient for this factor was high at 0.83 showing good reliability. The mean is 3.94 and the standard deviation is 0.60. The school showing the highest mean level of leadership was 4.32 in School 4 whereas the lowest mean was recorded at 3.64 in School 1.

4.7 STRATEGIC MANAGEMENT

The team enabling factor of Strategic management (STRAT) was briefly examined using questions 27-30.

STRATEGIC MA	STRATEGIC MANAGEMENT STRAT IV5					
QUESTION - CODE	Variable CODING					
Q27-STRAT1	IV5.1	27. At our school there is a clear value system and				
		code of conduct being practiced				
Q28-STRAT2	IV5.2	28. I know the vision and mission of our school.				
Q29-STRAT3	IV5.3	29. Our vision and mission is evident in our school				
		environment and ethics.				
Q30-STRAT4	IV5.4	30. Our personnel undergo continuous training and				
		development in areas where they require it.				

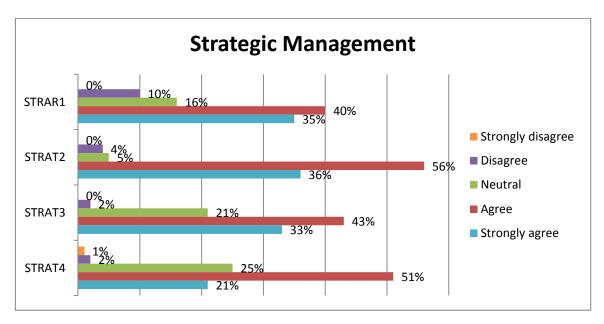


Figure 4.15: Strategic management (STRAT) - (IV5)

	Mean	S.D.	Minimum	Quartile 1	Median	Quartile 3	Maximum
School1 (n=21)	3.79	0.59	2.50	3.25	3.75	4.25	4.75
School2 (n=32)	4.03	0.71	2.25	3.75	4.00	4.75	5.00
School3 (n=17)	4.41	0.42	3.75	4.00	4.50	4.75	5.00
School4 (n=11)	4.00	0.51	3.50	3.50	4.00	4.38	5.00

Table 4.13: Mean STRAT Values by School: Strategic management (STRAT) - (IV5)

Summary of the responses to Strategic management (STRAT)

Results show that the Cronbach's alpha coefficient for this construct is 0.77 and the mean is 4.04 with a standard deviation of 0.63. The school showing the highest mean level of strategic management was School 3 at 4.41 whereas the lowest mean was recorded in School 1 at 3.79.

4.8 TRUST

From the questionnaire the factor of Trust (TW) was measured using questions 31-35 as outlined below.

TRUST TW	TRUST TW IV6					
QUESTION - CODE	Variable CODING					
Q31- TW1	IV6.1	31. We trust one another.				
Q32-TW2	IV6.2	32. We treat each other with respect.				
Q33-TW3	IV6.3	33. We listen actively to one another's ideas.				
Q34-TW4	IV6.4	34. There is a strong sense of trust within our teams.				
Q35-TW5	IV6.5	35. I feel that my colleagues trust me.				

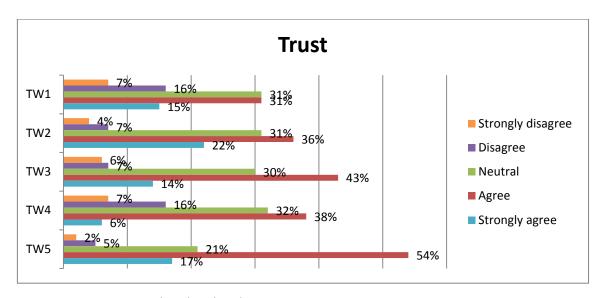


Figure 4.16: Trust (TW) – (IV6)

	Mean	S.D.	Minimum	Quartile 1	Median	Quartile 3	Maximum
School1 (n=21)	2.82	0.87	1.00	2.20	3.20	3.40	4.00
School2 (n=32)	3.51	0.77	1.80	3.00	3.40	4.00	5.00
School3 (n=17)	3.89	0.79	2.20	3.20	4.00	4.20	5.00
School4 (n=11)	4.07	0.48	3.00	4.00	4.00	4.30	5.00

Table 4.14: Mean TW Values by School: Trust (TW) - (IV6)

Summary of the responses to Trust (TW)

The Cronbach's alpha coefficient for this construct was high at 0.91 showing good reliability. The mean is 3.49 and the standard deviation is 0.88. The school showing the highest mean level of trust was 4.07 in School 4 whereas the lowest mean was recorded at 2.82 in School 1.

4.9 MOTIVATION

The team success factor of motivation (MOT) was examined utilizing questions 36-40 as shown below.

MOTIVATION	MOT IV7	
QUESTION - CODE	Variable CODING	
Q36- MOT1	IV7.1	36. We are motivated and positive about our work.
Q37-MOT2	IV7.2	37. We have hope for the future.
Q38-MOT3	IV7.3	38. We always have support.
Q39-MOT4	IV7.4	39. We are happy to put in an extra effort because we find joy in our work.
Q40-MOT5	IV7.5	40. Our leaders inspire us to do better.

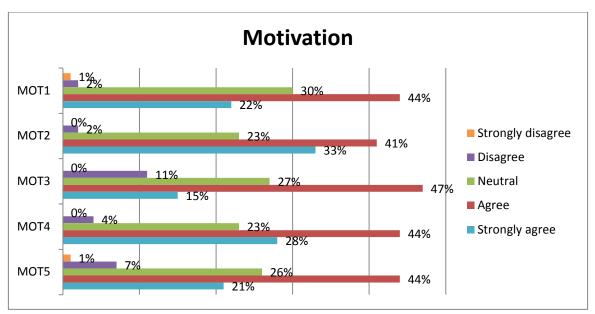


Figure 4.17: Motivation (MOT) - (IV7)

	Mean	S.D.	Minimum	Quartile 1	Median	Quartile 3	Maximum
School1 (n=21)	3.51	0.59	2.60	3.00	3.60	4.00	4.60
School2 (n=32)	3.79	0.72	2.60	3.35	3.80	4.40	5.00
School3 (n=17)	4.18	0.65	3.00	3.80	4.20	4.80	5.00
School4 (n=11)	4.22	0.38	3.60	4.00	4.20	4.40	5.00

Table 4.15: Mean MOT Values by School: Motivation (MOT) - (IV7)

Summary of the responses to Motivation (MOT)

For this factor, motivation, the Cronbach's alpha coefficient is 0.86. This shows high internal consistency and stability in the measurement of this factor and is therefore a reliable measurement. The aggregate mean is 3.86 and the standard deviation 0.68. School 4 had the highest mean of 4.22 for Motivation with School 1 having the lowest mean of 3.51.

4.10 CONFLICT MANAGEMENT

Conflict management (CF) as a team enabling factor was analysed using questions 41-45 and the responses are summarized below.

CONFLICT MANAGEMENT CF IV8					
QUESTION - CODE	Variable CODING				
Q41-CF1	IV8.1	41. Criticism is handled constructively.			
Q42-CF2	IV8.2	42. Conflict is sorted out easily.			
Q43-CF3	IV8.3	43. Our leaders have good people skills.			
Q44-CF4	IV8.4	44. Problems can be solved.			
Q45-CF5	IV8.5	45. There are few staff grievances.			

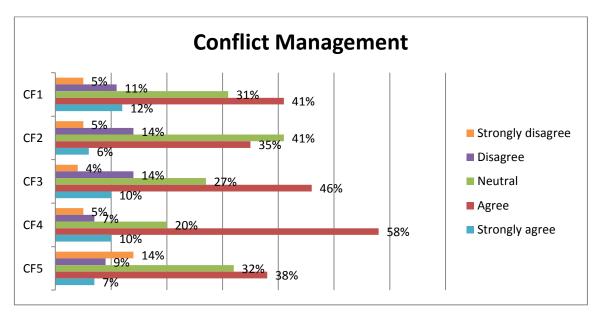


Figure 4.18: Conflict management (CF) - (IV8)

	Mean	S.D.	Minimum	Quartile 1	Median	Quartile 3	Maximum
School1 (n=21)	2.90	0.74	1.20	2.60	3.00	3.20	4.20
School2 (n=32)	3.35	0.88	1.40	2.60	3.60	4.00	5.00
School3 (n=17)	3.79	0.82	1.80	3.60	3.80	4.20	5.00
School4 (n=11)	3.76	0.61	2.60	3.50	3.80	4.10	4.80

Table 4.16: Mean CF Values by School: Conflict management (CF) - (IV8)

Summary of the responses to Conflict Management (CF)

The Cronbach's alpha coefficient for this construct was high at 0.91 showing good reliability. The mean is 3.38 and the standard deviation is 0.86. The school showing the highest mean level of conflict management was 3.79 in School 4 whereas the lowest mean was recorded at 2.90 in School 1.

4.11 POSITIVE PRACTICES

The team success factor of Positive practices (POS) was examined using questions 46-52.

POSITIVE PRA	CTICES F	POS IV9
QUESTION - CODE	Variable CODING	
Q46-POS1	IV9.1	46. Staff care for one another as friends.
Q47-POS2	IV9.2	47. Staff provide support with care and compassion.
Q48-POS3	IV9.3	48. Colleagues forgive one another when mistakes are made.
Q49-POS4	IV9.4	49. I feel inspired to do my work.
Q50-POS5	IV9.5	50. We value each other in the workplace.
Q51-POS6	IV9.6	51. I feel that my work is meaningful to the school.
Q52-POS7	IV9.7	52. In one day the positive comments exceed the negative ones.

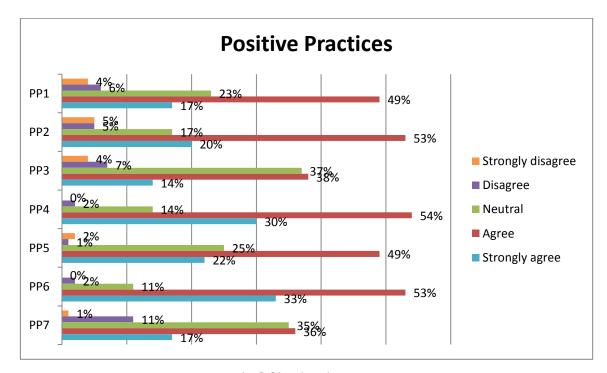


Figure 4.19: Positive practices (POS) - (IV9)

	Mean	S.D.	Minimum	Quartile 1	Median	Quartile 3	Maximum
School1 (n=21)	3.27	0.64	2.14	2.86	3.43	3.71	4.29
School2 (n=32)	3.96	0.50	3.00	3.68	3.86	4.14	5.00
School3 (n=17)	4.04	0.71	2.57	3.71	3.86	4.43	5.00
School4 (n=11)	4.10	0.38	3.29	4.00	4.29	4.43	4.43

Table 4.17: Mean POS Values by School: Positive Practices (POS) - (IV98)

Summary of the responses to Positive Practices (POS)

The Cronbach's alpha coefficient for this factor was high at 0.86 showing good reliability. The mean is 3.82 and the standard deviation is 0.65. The school showing the highest mean level of positive practices was 4.10 in School 4 whereas the lowest mean was recorded at 3.27 in School 1.

4.12 SCHOOL ORGANISATIONAL CLIMATE

School Organisational Climate (SOC) as a team enabling factor was analysed utilizing questions 53-56 and the responses are summarized below.

SCHOOL ORG	GANISATION	IAL CLIMATE SOC IV10
QUESTION - CODE	Variable CODING	
Q53-SOC1	IV10.1	53. Praise is often given.
Q54-SOC2	IV10.2	54. There is a professional attitude amongst the staff.
Q55-SOC3	IV10.3	55. Our school has adequate supply of resource support material.
Q56-SOC4	IV10.4	56. We have good support of others when we meet challenges.

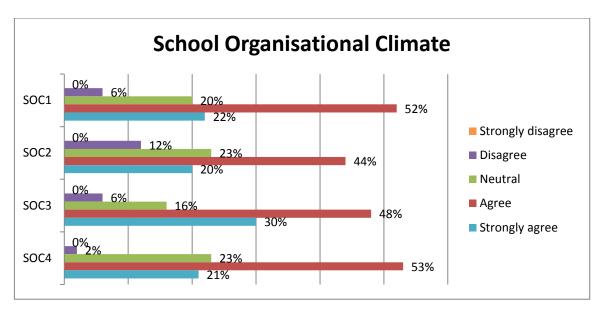


Figure 4.20: School Organisational Climate (SOC) - (IV10)

	Mean	S.D.	Minimum	Quartile 1	Median	Quartile 3	Maximum
School1 (n=21)	3.39	0.64	2.50	3.00	3.25	4.00	5.00
School2 (n=32)	3.91	0.50	3.00	3.69	3.88	4.25	5.00
School3 (n=17)	4.25	0.58	3.00	4.00	4.00	4.75	5.00
School4 (n=11)	4.23	0.60	2.75	4.00	4.50	4.50	5.00

Table 4.18: Mean SOC Values by School: School Organisational Climate (SOC) - (IV10)

Summary of the responses to School Organisational Climate

For this factor, School Organisational Climate, the Cronbach's alpha coefficient is 0.78. The aggregate mean is 3.89 and the standard deviation 0.65.

School 3 had the highest mean of 4.25 for School Organisational Climate with School 1 having the lowest mean of 3.39.

This summarizes the frequency distribution part of the descriptive statistics. An Excel spread sheet of the frequency data is shown in Annexure 6.

4.13 INFERENTIAL STATISTICS: CHI2 TEST AND CRAMER'S V

The data was processed and cross tabulation was used to conduct a Chisquare test to ascertain whether there is a statistical significant association between the pairs of variables tested. The Chi 2 test for this analysis used Cramer's V for practical significance and the interpretation intervals are summarized in Table 4.19.

	Practical Significance Interpretation Intervals									
Inferential Test:	Statistic	Small	Moderate	Large						
Chi² Test:	Cramér's V									
	$df^* = 1$ $df^* = 2$.10 < V < .30 .07 < V < .21	.30 < V < .50	V > .50						
	$df^* = 2$ $df^* \ge 3$.07 < V < .21 .06 < V < .17	.21 < V < .35 .17 < V < .29	V > .35 V > .29						
Correlation:	r	.10 < <i>r</i> < .30	.30 < r < .50	r > .50						
* $df = minimum(R)$	ows – 1, Colur	mns – 1)	ı							

Table 4.19: Chi² Test Source: Gravetter and Wallnau (2009)

All inferential cross tabulation data tables and Chi^2 are shown in Annexure 7. Examining, all the chi-square tests, the results show at df =4 that all the Cramer's V values are moderate to large, with V > .17 Any deviation from the null hypothesis makes the chi-squared value larger. An example of the contingency table of the School High Performance Work Index (DV1) and the Organisational Commitment (OCQ) IV1 variable is shown below (Table 4.20).

(Chi²(d.f. = 4, n = 81) = 41.20; p < .0005; V = 0.50 Large). (1 added to each cell to meet minimum expected frequency requirements)										
	OCQ									
SHPWI	[2.44-3.67)		[3.67-4.67]			(4.67	7-5.00]	Total		
[1.00-3.63]	12	6	0%	7		35%	1	5%	20	100%
(3.63-4.37]	9	2	2%	29		71%	3	7%	41	100%
(4.37-5.00]	0		0%	6		30%	14	70%	20	100%
Total	21	2	6%	42		52%	18	22%	81	100%

Table 4.20: Contingency Table - SHPWI and OCQ

The contingency table of the School SHPW Index and the Kenexa Employee Engagement (KEN) in Table 4.21 is shown to have a Chi^2 value of 37.33; p< .0005 with a Cramer's V = 0.48 Large. Therefore we have evidence to reject the null hypothesis of no association between these two variables. Employee Engagement is shown therefore to have an association with the School High Performance Work Index.

(Chi²(d.f. = 4, n =	$(Chi^{2}(d.f. = 4, n = 81) = 37.33; p < .0005; V = 0.48 Large). (1 added to each$									
cell to meet minimum expected frequency requirements)										
	KEN									
IV1.SHPWI	[2.25-3.7	'5]	(3.7	5-4.75]	(4.7	5-5.00]	-	Total		
[1.00-3.63]	14	70%	6	30%	0	0%	20	100%		
(3.63-4.37]	12	29%	24	59%	5	12%	41	100%		
(4.37-5.00]	1	5%	5	25%	14	70%	20	100%		
Total	27	33%	35	43%	19	23%	81	100%		

Table 4.21: Contingency Table - SHPWI and KEN

Similarly with the other cross contingency tables, the null hypothesis of no association could be rejected as the Cramer's V showed values of Moderate to Large. The largest Chi^2 value (67.87) and Cramer's V = 0.65 Large was observed in the contingency tables of leadership (LSH) and employee engagement (KEN) (Table 4.22).

$(Chi^{2}(d.f. = 4, n = 81) = 67.87; p < .0005; V = 0.65$ Large).										
	KEN									
LSH	[2.25-3.7	[2.25-3.75]		(3.75-4.75]		(4.75-5.00]		Total		
[1.00-3.50]	18	78%	5	22%	0	0%	23	100%		
(3.50-4.33]	8	27%	22	73%	0	0%	30	100%		
(4.33-5.00]	1	4%	8	29%	19	68%	28	100%		
Total	27	33%	35	43%	19	23%	81	100%		

Table 4.22: Contingency Table - LSH and KEN

A Chi^2 value (57.24) and Cramer's V = 0.59 Large was recorded for the relationship between leadership (LSH) and organisational commitment (OC) (Table 4.23).

(Chi²(d.f. = 4, n 0.59 Large).	= 81)	= 57.24;							
OCQ									
LSH	[2.44-3.67)		[3.67-4.67]		(4.67	(4.67-5.00]		Total	
[1.00-3.50]	17	74%	5	22%	1	4%	23	100%	
(3.50-4.33]	4	13%	24	80%	2	7%	30	100%	
(4.33-5.00]	0	0%	13	46%	15	54%	28	100%	
Total	21	26%	42	52%	18	22%	81	100%	

Table 4.23: Contingency Table - LSH and OCQ

The rejection of the null hypothesis, that there is no association for all the variable linkages, could be stated. The alternate hypothesis that there is an association between the variables is accepted. Therefore all the relationships in the hypothesised model H_1 - H_{10} can be stated as having an association.

4.14 PEARSON PRODUCT MOMENT CORRELATIONS

Correlation offers information regarding the association between two variables. In statistics the correlation coefficient is a measure of the linear dependence of one variable on another. The strength of the correlation is between +1 and -1 with 0 being no linear association. Care must be taken in interpreting correlation coefficients between two variables as it does not prove that there is a causal link between them. Unrelated variables may be correlated due to being related to another common variable.

Practical Significance Interpretation Intervals									
Inferential Test: Statistic	Small	Moderate	Large						
Correlation:	.10 < r < .30	.30 < r < .50	r > .50						
* $df = minimum(Rows -$	1, Columns – 1)								

To be statistically significant for n=81 at the α = .05 the r value must be > .219. For the correlation to be practically significant the r value > 0.300 In examining the correlations (Table 4.24) Annexure 8, the following was noted.

	IV3.COM	IV4.LSH	IV5.STRAT	IV6.TW	IV7.MOT	IV8.CF	IV9.PP	IV10.SOC	IV2.KEN	IV1.0CQ	DV1.SHPWI
IV3.COM		<u>.717</u>	.444	<u>.728</u>	<u>.623</u>	<u>.777</u>	.475	.493	<u>.576</u>	<u>.525</u>	<u>.785</u>
IV4.LSH	<u>.717</u>		<u>.634</u>	<u>.676</u>	<u>.810</u>	<u>.716</u>	<u>.581</u>	<u>.557</u>	.734	.742	<u>.822</u>
V5.STRAT	.444	.634		.449	<u>.565</u>	.472	.448	.426	<u>.605</u>	<u>.737</u>	<u>.610</u>
V6.TW	<u>.728</u>	<u>.676</u>	.449		<u>.647</u>	<u>.775</u>	<u>.701</u>	<u>.562</u>	<u>.513</u>	.483	<u>.679</u>
V7.MOT	.623	<u>.810</u>	<u>.565</u>	<u>.647</u>		<u>.687</u>	<u>.650</u>	<u>.629</u>	<u>.750</u>	<u>.747</u>	<u>.766</u>
V8.CF	<u>.777</u>	<u>.716</u>	.472	<u>.775</u>	<u>.687</u>		<u>.620</u>	<u>.526</u>	<u>.574</u>	<u>.565</u>	<u>.730</u>
V9.PP	.475	<u>.581</u>	.448	<u>.701</u>	<u>.650</u>	<u>.620</u>		<u>.700</u>	<u>.510</u>	<u>.545</u>	<u>.564</u>
V10.SOC	.493	<u>.557</u>	.426	<u>.562</u>	<u>.629</u>	<u>.526</u>	<u>.700</u>		<u>.635</u>	<u>.585</u>	<u>.552</u>
V2.KEN	<u>.576</u>	<u>.734</u>	<u>.605</u>	<u>.513</u>	<u>.750</u>	<u>.574</u>	<u>.510</u>	<u>.635</u>		<u>.838</u>	<u>.669</u>
V1.0CQ	<u>.525</u>	.742	<u>.737</u>	.483	<u>.747</u>	<u>.565</u>	<u>.545</u>	<u>.585</u>	.838		<u>.681</u>
DV1.SHPWI	.785	.822	.610	.679	.766	.730	.564	.552	.669	.681	

Table 4.24: Pearson Correlation Coefficients Underlined correlations are significant p < .05000 N = 81 Yellow highlighted Correlations r > .700

The highest correlation of 0.838 is between Organisational Commitment and the Kenexa Employee Engagement Index. The more engaged ones employees are, the more committed they are to their organization. This is noted as all the interlinked factors enable an engaged employee, enable commitment to the organization and enable a high performance team member. These can therefore be described as the primary enabling factors.

In examining the SHPWI, it can be seen the r > 0.5 for all the enabling factors correlated to it. The highest correlations occur in Leadership (0.822), Communication (0.785), Motivation (0.766) and Conflict Management (0.730). All high correlation values are highlighted in yellow.

Taking each factor and extracting the correlations above 0.7 the following observations were made, with the variables in order from highest to lowest correlations.

- **Communication** factor was linked with School High Performance Work Index (0.785), Conflict Management (0.777), Trust (0.728) and Leadership (0.717).
- Leadership was highly correlated with the School High Performance Work Index (0.822), Organisational Commitment (0.742), Kenexa Employee Engagement (0.734), Communication (0.717) and Conflict Management (0,716).
- **Strategic Management** was linked to Organisational Commitment (0.737).
- **Trust** was highly correlated with Conflict Management (0.775), Communication (0.728) and Positive Practices (0.701).
- Motivation was linked to School High Performance Work Index (0.766),
 Kenexa Employee Engagement (0.750) and Organisational Commitment (0.747).
- Conflict Management was associated with Communication (0.777),
 Trust (0.775) School High Performance Work Index (0.730) and Leadership (0.716).
- **Positive Practices** showed a correlation with Trust (0.701) and **School Organisational Climate** (0.700).
- Kenexa Employee Engagement is significantly correlated with all the factors with the highest correlations being with Organisational Commitment (0.838), Motivation (0.747) and Leadership (0.742).
- Organisational Commitment is significantly correlated with all the factors except trust (0.483) with the highest factors being Employee Engagement (0.838), Motivation (0.747), Leadership (0.742) and Strategic Management (0.737).
- School High Performance Work Index is significantly correlated with all the factors analysed. The highest correlations were recorded for Leadership (0.822), Communication (0.785), Motivation (0.766) and Conflict Management (0.730).

It was noted that the independent variables (IV3-IV10) also closely correlated with the other two literature chosen measurements (IV1 and IV2) the Kenexa

Employee Engagement Index (EEI) and the Mowday Organisational Commitment (OCQ) measurement. There was therefore a measure of criterion-related validity and construct validity (Zeller, 1996).

4.15 ONE WAY ANOVA

In the one way Anova there is a comparison of groups on some dependent variable. This analysis of variance can occur from two possible sources. There can be variance of scores in between the groups and then there can be variance of scores within the group. If the variance between the groups is larger than the variance within the group, we can conclude the groups differ but if not then the groups do not differ (Table 4.25).

Summary of One-way Al	NOVA all School	results			
	SS	df	MS	F	<i>p</i> -value
IV1.SHPWI	4.654	3	1.551	5.556	.002
IV2.COM	4.934	3	1.645	3.276	.025
IV3.LSH	4.700	3	1.567	5.006	.003
IV4.STRAT	3.727	3	1.242	3.386	.022
IV5.TW	15.981	3	5.327	8.898	<.005
IV6.MOT	5.791	3	1.930	4.754	.004
IV7.CF	9.416	3	3.139	4.897	.004
IV8.PP	9.416	3	3.139	4.897	.004
IV9.SOC	8.653	3	2.884	8.938	<.005
DV1.KEN	6.362	3	2.121	4.698	.005
DV2.OCQ	5.187	3	1.729	4.226	.008

Table 4.25: Summary of One-way ANOVA all School results

When the F is large, the variance between groups is greater than the within groups variance, and then there are significant differences between the groups. The Cohens's d was calculated per school and the values that were of practical significance were reported. If the Cohen's d value is moderate or large then the groups differ significantly. The details of the practical significance interpretation intervals are summarized below.

Practical Significance Interpretation Intervals					
Inferential Test:Statistic Small Moderate Large					
t-Test: Cohen's d	0.2 < d < 0.5	0.5 < d < 0.8	d > 0.8		

4.15.1 Cohen's d Value Summary

From the statistical analysis completed on Anova (Annexure 10) the Cohen's d that were large and of practical significance were summarized in Table 4.26.

School 1	School 2	Diff. M ₁ -M ₂	Scheffé p	Cohen's d
SHPWI				
School1	School4	-0.76	.003	1.67 Large
School2	School4	-0.55	.040	1.04 Large
СОМ	NONE			
LSH				
School1	School3	-0.55	.033	0.95 Large
School1	School4	-0.68	.019	1.35 Large
STRAT				
School1	School3	-0.63	.023	1.20 Large
TW				
School1	School2	-0.69	.022	0.85 Large
School1	School3	-1.08	.001	1.28 Large
School1	School4	-1.25	.001	1.64 Large
MOT				
School1	School3	-0.66	.022	1.08 Large
School1	School4	-0.70	.039	1.33 Large
CF				
School1	School3	-0.89	.012	1.15 Large
School1	School4	-0.87	.044	1.24 Large
PP				
School1	School3	-0.89	.012	1.15 Large
School1	School4	-0.87	.044	1.24 Large
SOC				
School1	School2	-0.51	.021	0.92 Large
School1	School3	-0.86	<.0005	1.40 Large
School1	School4	-0.83	.003	1.33 Large
KEN				
School1	School3	-0.72	.017	1.19 Large
OCQ				
School1	School3	-0.71	.013	1.19 Large

Table 4.26: Cohen's d values

The highest Cohen's d values are highlighted in blue and one observes that the largest differences between School 4 and School 1 occur in the following enabling factors:

- Trust
- Motivation

- School Organisational Climate
- Positive Practices and
- Conflict management.

4.16 INFERENTIAL RANKING

4.16.1 All the schools data overall

Utilizing the inferential data of all the schools data (Table 4.27) an inferential ranking was done of all the sub-factors in the School High Performance Work Index (SHPWI) variables. Overall the ranking order was in the following order:

- 1. Employee Experience/Engagement (Mean 4.22)
- 2. Innovation Potential (Mean 4.08)
- 3. Learner Orientation (Mean 3.99)
- 4. Leadership (Mean 3.90)
- 5. Fairness (Mean 3.59)

Examining the other variables the ranking can be shown as follows:

- 1. Employee Engagement (Mean 4.11)
 - Organisational Commitment (Mean 4.09)
 - Strategic Management (Mean 4.04)
- 2. School High Performance Work Index (Mean 3.95)
 - Leadership (Mean 3.94)
 - School Organisational Climate (Mean 3.89)
- 3. Motivation (Mean 3.86)
 - Positive Practices (Mean 3.82)
- 4. Trust (Mean 3.49)
 - Communication (Mean 3.46)
 - Conflict Management (Mean 3.38)

All

Table: Inferential Ranking of IV1.SHPWI variables (n = 81)

					Low	High
Variable	Rank	Signif. Group	Mean	SD	95% Inte	Conf. rval
IV1.2.EE	1	1	4.22	0.58	4.09	4.35
IV1.1.IP	2	2	4.08	0.61	3.95	4.21
IV1.5.LO	3	3	3.99	0.84	3.81	4.17
IV1.4.Le	4	4	3.90	0.78	3.73	4.07
IV1.3.Fa	5	5	3.59	0.80	3.42	3.77

Table: Inferential Ranking of IVs variables (n = 81)

						High
Variable	Rank	Signif. Group	Mean	SD	95% Conf. Interval	
IV4.STRAT	1	1	4.04	0.63	3.91	4.18
IV1.SHPWI	2	2	3.95	0.57	3.83	4.08
IV3.LSH	2	2	3.94	0.60	3.81	4.07
IV9.SOC	2	2	3.89	0.65	3.75	4.03
IV6.MOT	5	3	3.86	0.68	3.71	4.01
IV8.PP	5	3	3.82	0.65	3.67	3.96
IV5.TW	7	4	3.49	0.88	3.30	3.68
IV2.COM	7	4	3.46	0.74	3.30	3.62
IV7.CF	7	4	3.38	0.86	3.19	3.57

Table: Inferential Ranking of DVs variables (n = 81)

_						
Variable	Rank	Signif. Group	Mean	SD	95% Conf. Interval	
DV1.KEN	1	1	4.11	0.72	3.95	4.27
DV2.OCQ	1	1	4.09	0.68	3.94	4.24

Table 4.27: All schools

4.16.2 Ranking of variables in school operational teams per school

All the inferential data and ranking of variables are in Annexure 11.

All the rankings from the individual schools are summarised below so that one can see which of the factors are enablers and which are weak or gap factors in each school operational team.

SCHOOL 1:

The rankings (High to Low) for the SHPWI showed the following:

- 1. Employee Experience/Engagement (Mean 4.08) and Innovation Potential (Mean 3.95)
- 2. Leadership (Mean 3.52), Fairness (Mean 3.48) and Learner Orientation (3.36)

With regard to the other variables, the ranking showed the following trends for School 1:

- Employee Engagement (Mean 3.82) Organisational Commitment (Mean 3.80) Strategic Management (Mean 3.79) School High Performance Work Index (Mean 3.68) and Leadership (Mean 3.64)
- 2. Motivation (Mean 3.51)
- 3. School Organisational Climate (Mean 3.39) Positive Practices (Mean 3.27) Communication (Mean 3.26)
- 4. Conflict Management (Mean 2.90) Trust (Mean 2.82)

SCHOOL 2:

The rankings for the SHPWI variables for School 2 are as follows:

- 1. Learner Orientation (Mean 4.13) and Employee Experience/Engagement (Mean 4.09)
- 2. Innovation Potential (Mean 3.95) and Leadership (Mean 3.88)
- 3. Fairness (3.43)

Other variables show the following ranking (High to Low) for School 2:

Strategic Management (Mean 4.03) Organisational Commitment (Mean 4.01) Employee Engagement (Mean 3.98) Positive practices (Mean 3.96) School Organisational Climate (Mean 3.91) School High Performance Work Index (Mean 3.89) Leadership (Mean 3.87)

- 2. Trust (Mean 3.51)
- 3. Conflict Management (Mean 3.35) Communication (Mean 3.32)

SCHOOL 3:

The rankings for the SHPWI for School 3 from highest to lowest are as follows:

- 1. Employee Experience (Mean 4.41)
- 2. Innovation Potential (Mean 4.12) Leadership (Mean 4.12) Learner Orientation (Mean 4.12)
- 3. Fairness (Mean 3.73)

The other variables for School 3 show the following ranking:

- Employee Engagement (Mean 4.54) Organisational Commitment (Mean 4.51) Strategic Management (Mean 4.41)
- 2. School Organisational Climate (Mean 4.25) Leadership (Mean 4.20) Motivation (Mean 4.18)
- 3. School High Performance Work Index (Mean 4.10)
- 4. Positive Practices (Mean 4.04)
- 5. Trust (Mean 3.89)
- 6. Conflict Management (Mean 3.79)
- 7. Communication (Mean 3.68)

SCHOOL 4:

Rankings for the variables in SHPWI for School 4 are shown highest to lowest:

Innovation Potential (Mean 4.64) Learner Orientation (Mean 4.59)
 Employee Experience (Mean 4.55) Leadership (Mean 4.33) Fairness (Mean 4.09)

The other variables show the following trends from highest to lowest:

1. School High Performance Work Index (Mean 4.44) Employee Engagement (4.39) and Leadership (Mean 4.32)

- Organisational Commitment (Mean 4.24) School Organisational Climate (Mean 4.23) Motivation (Mean 4.22) Positive Practices (Mean 4.10) Trust (Mean 4.07)
- 3. Strategic Management (Mean 4.00) Communication (Mean 3.95) Conflict Management (Mean 3.76)

In examining the different spider diagrams for each school and the rankings of the enabling factors that contribute towards the school operational teams, it showed that each school has a different profile and that there are different enabling factors as enablers and some as gap factors which are required in the SOT. School 4 with the highest performing school SHPWI had the top profile for high performance teams along with School 3.Compared to the other schools; School 1 had the lowest SHPWI. This was the same trend as exhibited in the teaching and learning performance results for the Grade 12 pass rates.

These trends and observations for each school will be summarized in the recommendations.

4.17 MULTIPLE REGRESSION ANALYSIS

Multiple linear regression (MLR) is a statistical technique for analysis of data and design strategy for conceptualizing quantitative research data. This is to ascertain the associations between the independent variables (factors) in the simplified conceptual framework model (Figure 3.2) originally proposed. As the null hypothesis of no associations was rejected the alternate hypothesis holds that there is an association between these variables in H1- H10.

The advantages of using MLR are that it is flexible in allowing accommodation of different conceptual arrangements among the independent variables, including joint effects on the dependent variable. Covariance analysis can be done to examine further relationships.

The general objective is to account for the variance in the dependent variable and to observe how the different independent variables, separately or in

combination, contribute towards the variance. For the MLR of this research study which studied the enabling factors contributing to the HPT's in four secondary schools the following framework (Figure 4.21) was chosen aligned with the original simplified conceptual theoretical framework (Fig 3.2).

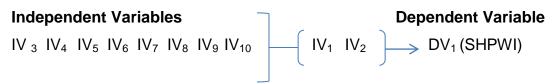


Figure 4.21: Conceptual framework for MLR (Source: Authors own construction)

In the table below (Table 4.28) the correlations between the dependant variable of the School High Performance Index and the other variables are summarised.

DV1.SHPWI	
IV1.OCQ	.681
IV2.KEN_EEI	.669
IV3.COM	.785
IV4.LSH	.822
IV5.STRAT	.610
IV6.TW	.679
IV7.MOT	.766
IV8.CF	.730
IV9.PP	.564
IV10.SOC	.552

Table 4.28: Correlations between SHPWI and Independent Variables (IV1-10)

All correlations can be described as strong because they are statistically significant at p < .0500 N = 81 and r > .500.

Marked MLR correlations are significant and the largest correlations were observed between the School High Performance Workplace Index and Leadership (0.822). The second most significant correlation was between

SHPWI and Communication at 0.785, whilst Motivation exhibited a 0.766 correlation with the SHPWI. These could therefore be seen to be the major team enabling factors contributing towards a HPT as observed in this research study. It is also noted that there was a high correlation between the SHPWI and the Kenexa Employee Engagement as well the Organisational Commitment as these are interrelated to the SHPWI.

Multicollinearity or correlated independent variables are the reason why not all of the independent variables are in the regression model. Multicollinearity can make it hard to identify the separate effects of the independent variables (Kervin, 1992).

All the multiple regression data is shown in Annexure 12.

In the first MLR analysis of the DV1 (SHPWI) $R^2 = 0.756$ and the independent variables of significance were Leadership and Communication. In the second analysis using only four variables of LSH, MOT, COM and STRAT a value of $R^2 = 0.774$ was obtained with significant linear regression between the SHPWI and Leadership, Communication and Motivation factors.

In the last analysis Leadership, Communication and Motivation were selected as the independent variables that are the most important in accounting for the variance in the dependent variable of School High Performance Workplace Teams and a R^2 value of 0.766 was recorded. These factors are all significant with p values < 0.05 as shown in Table 4.29.

Regression Summary for Dependent Variable: IV1.SHPWI								
	880,	$R^2 = .774$	-	· , · · · · ·	R ² =	.766		
F(3,//)=88	3.08 p<.00	05, Std.Error of	estimate	: .2768				
		Std.Err of		Std.Err of		p-		
	b*	b*	b	b	t(77)	value		
Intercept			0.8248	0.2064	4.00	.000		
IV2.COM	0.3820	0.0781	0.2959	0.0605	4.89	.000		
IV3.LSH	0.3500	0.1043	0.3335	0.0994	3.35	.001		
IV6.MOT	0.2441	0.0929	0.2051	0.0780	2.63	.010		
Multicollin	Multicollinearity (correlated IVs) is the reason why not all are IV's in the regression model							

Table 4.29: MLR Analysis: SHPWI versus COM, LSH and MOT

(Source: Authors data collected and analyzed)

Further discussion of these results linked to the literature, previous research

and the conceptual model will be outlined in the next chapter.

QUALITATIVE DATA: ANALYSIS AND INTERPRETATION OPEN- ENDED

QUESTIONS: SECTION C

Case-orientated analysis in qualitative research is good at establishing specific,

concrete and historically grounded patterns common to small sets. As Ragin

(1987) suggests a case orientated approach looks at each entity, teases out

each configuration within each case and subjects them to a comparative study.

Underlying similarities and systematic associations are found with regard to the

main outcome variable.

4.18 QUALITATIVE DATA ANALYSIS

The questionnaires from each school were memo-ed and all ideas and

concepts recorded as accurately as possible. An outside reader was asked to

examine the transcribing and check that accuracy was maintained. Some of the

original comments are included in Annexure 13.

Coding was done utilizing first order main concepts in educator, learner, school

and community and then theme coding was used based on the main concepts

from the literature review. The qualitative data was first transcribed in the order

that the questions were asked in the questionnaire. Data was kept in the

respondents' school so that the context was maintained for data validity.

4.18.1 Summary of qualitative data from each school

The data captured is summarized below, firstly for each school and then and

overall summary as the main team enabling factor affecting the high

performance of operational school teams. It was realized that the context in

which the school operated played an important part in this analysis. Therefore

further studies that cover a wider range of the continuum of schools in different

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quintiles and areas would be necessary to ensure reliability of the testing

instrument, framework and preliminary causal model.

By selecting a range of low, medium and high performing schools in different

quintiles and examining their responses, a better range of school dynamics

would be ascertained and profiles of schools within different contexts could be

examined for similarities and differences.

In Section C of the questionnaire four open ended questions were asked and

the respondent was allowed to write freely with any response that he wished.

Question 1: What do you feel needs to be done to increase performance in

your school/team?

Question 2: Do you feel that you work in a high performance team? If so, give

reasons.

Question 3: The factors that have a positive influence or assist me in

performing well at my school are...

Question 4: The factors that stop or hinder us as a staff team to perform at our

most effective level are...

Each school's qualitative data is summarized in the questions in three diagrams

and an overall summary of high performance teams in schools is outlined.

Recommendations are given for each school in Chapter 5 using the analytics

from both the qualitative and the quantitative data. By merging the quantitative

and qualitative data in a mixed method approach with triangulation of results,

validity of the research was shown.

4.19 SCHOOL 1: QUALITATIVE DATA

4.19.1 Question 1: Needs

The question that was asked was:

What do you feel needs to be done to increase performance in your

school/team?

105

Once the original data was captured into four groups Educators, Learners, School and Community, the responses were numbered per similar themes and captured. Some of the original comments are summarized in Annexure 13.

SCHOOL 1 The data was captured for School 1 in Figure 4.22 below.

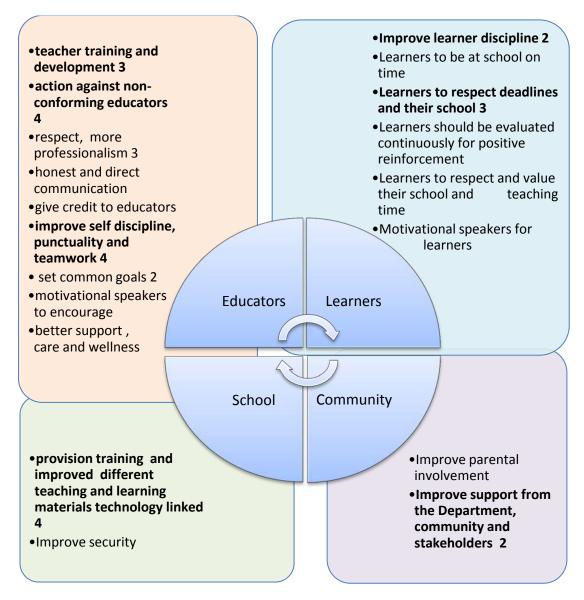


Figure 4.22: Question 1 Qualitative Responses: School 1

4.19.2 Question 2: School Operational Team members' perceptions

The question that was asked was: **Do you feel that you work in a HPT? Why?** The responses on the questionnaire were summarized in Table 4.30.

YES response	SOMETIMES	NO response	No comment
	response		
12	1	5	3
Deadlines always met	Some teachers not	Minimum effort by	
	doing their part	some teachers	
Colleagues dedicated		Back stabbing	
and willing to help			
Positive support		Not committed to	
		punctuality and	
		being in class	
Commitment		Some are self-	
		centered	
Aspire to high standards			
Good pass rate			
Development program			
Support and assistance			
encouraging principal			
Motivated			
All trying their best			

Table 4.30: Question 2: School 1

4.19.3 Questions 3 and 4: FACTORS HAVING A POSITIVE or NEGATIVE INFLUENCE ON PERFORMANCE (SUMMARY OF ACTUAL COMMENTS)

Principal support, encourages and Lack of complete trust and support listens to our problems 7 of one another, not all committed 5 Positive attitudes, committment and Gossiping support from management 4 Teachers that are burnt out Teamwork and respect 3 Lack of self discipline Support from other staff members mutual respect 3 Not working together as a team Communication directly addressed to Lack of resources 3 area of concern Lack of support from all involved: Opportunities to develop communities and stakeholders 2 Being told you are a role model **Educators concentrate on negatives** and not prepared for lessons or don't Increased pass rate meet deadlines 2 **Encouraged and motivated** Lack of professionalism Learners engaged and positive Bad HR practices Unfair Resources that assist us to improve practices, favouritism lessons Better remuneration Discouraging when not recognized Negative attitude of educators and learners sometimes Absenteeism of teachers 2

Figure 4.23: Questions 3 and 4: School 1

4.20 SCHOOL 2: QUALITATIVE DATA

4.20.1 Question 1: Needs

Once the original data was captured into these four groups, the responses were numbered per similar themes. Some of the original comments are summarized in Annexure 13. Responses are captured in Figure 4.24.

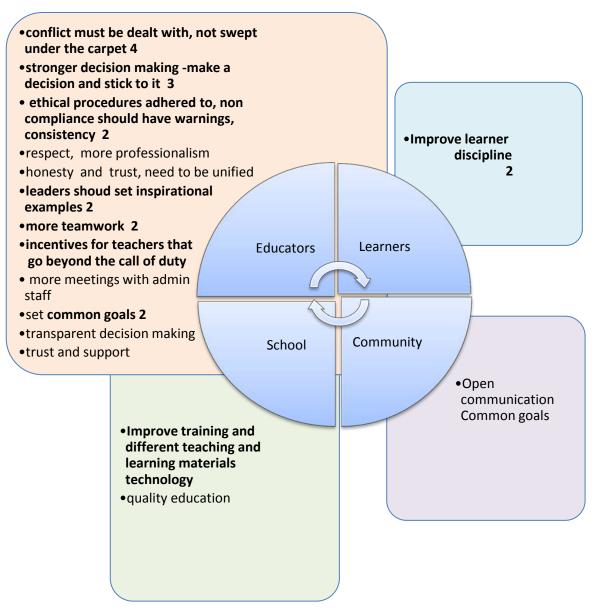


Figure 4.24: Question 1 Qualitative Responses: School 2

4.20.2 Question 2: School Operational Team members' perceptions Do you feel that you work in a HPT? Why?

The responses on the questionnaire were summarized in Table 4.31.

YES response	SOMETIMES	NO response	No
	response		comment
22	2	2	6
Despite changes	Some teachers not	Undermined by some staff	
meet challenges with	working all the time	with personal agendas	
excellence			
Positive principal and	Unfair work allocations	Not professional ethics and	
grade heads giving	Not working	integrity	
positive support	professionally and with		
	integrity sometimes		
Caring and dedicated			
teams			
Motivated staff			
academically strong			
Common goals and			
good administrative			
teamwork			
Academically strong			
but holistically no			
clear ground rules			
Good teamwork in			
subject fields			
Dignity and respect, a			
clear school vision			
and mission			
Communication of all			
problems is good			

Table 4.31: Question 2: School 2

4.20.3 Questions 3 and 4: FACTORS HAVING A POSITIVE or NEGATIVE INFLUENCE ON PERFORMANCE (SUMMARY OF ACTUAL COMMENTS)

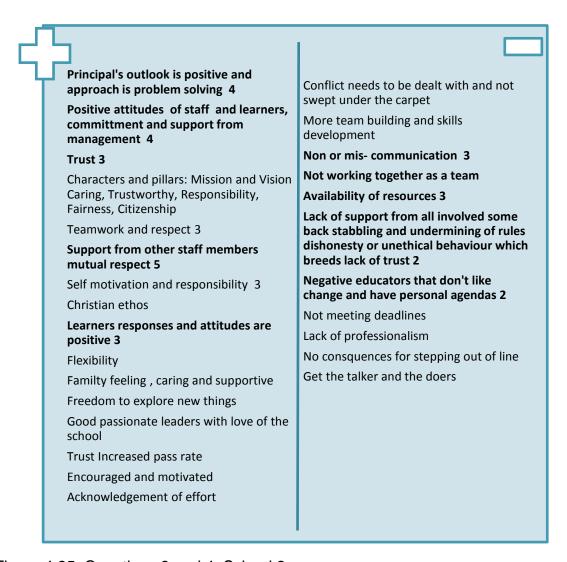


Figure 4.25: Questions 3 and 4: School 2

4.21 SCHOOL 3: QUALITATIVE DATA

4.21.1 Question 1: Needs

Once the original data was captured into these four groups, the responses were numbered per similar themes. Some of the original comments are summarized in Annexure 13. Responses are captured in Figure 4.26.

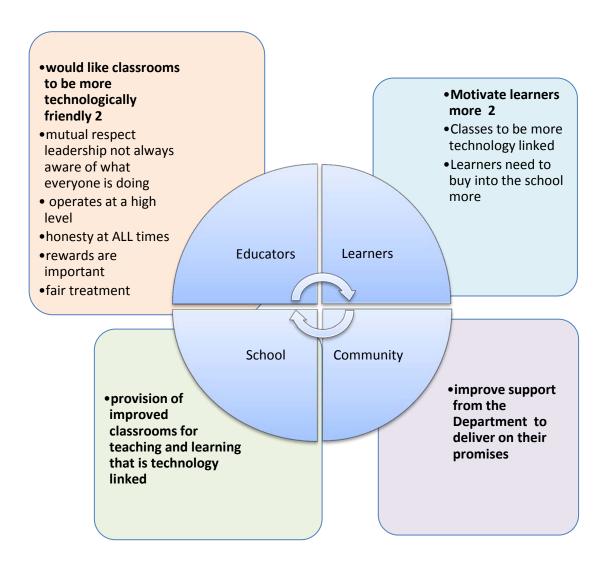


Figure 4.26: Question 1 Qualitative Response: School 3

4.21.2 Question 2: School Operational Team members' perceptions Do you feel that you work in a HPT? Why?

The responses on the questionnaire were summarized in Table 4.32.

YES response	SOMETIMES	NO response	No
	response		comment
12	1	1	3
Motto is excellence	Some teachers not	Do my own work mostly	
and feel part of the	doing their part and		
team	have hidden agendas		
Driven, motivated and			
good ethos			
Projects and new			
ideas are developed			
Co-operative and			
equitable sharing of			
ideas and resources			
Growth of the school			
and good results			
Assessing reflecting			
and improving			
Fast moving, well			
organized and good			
communication			
Always strive to			
deliver our best			

Table 4.32: Question 2: School 3

4.21.3 Questions 3 and 4: FACTORS HAVING A POSITIVE or NEGATIVE INFLUENCE ON PERFORMANCE (SUMMARY OF ACTUAL COMMENTS)

Good management support and Negativity and criticism that brings discipline Positive encouragement and people down, sarcasm that breaks spirits motivation 4 fault finding 4 Working in an environment of excellence Bad planning and negativity from the Department 2 Fairness friendliness honesty and transparency Time constraints and pressure 5 Motivated colleagues with the same Too busy, don't get to know each other goals 2 personally Clear set goals Technology needed in the classroom to make subject more interesting and Passion for education and feel valued motivate the learner Sense of pride in the school and its None tradition and reputation 3 Learners and parents give positive feedabck Professionalism and good work ethic and good role models Teamwork and respect Support from other staff members mutual respect Sometimes rewarded for good work

Figure 4.27: Questions 3 and 4: School 3

4.22 SCHOOL 4: QUALITATIVE DATA

4.22.1 Question 1: Needs

Once the data was captured into these four groups, the responses were numbered per similar themes. Original comments were captured and some of these are summarized in Annexure 13. Responses are captured in Figure 4.28.

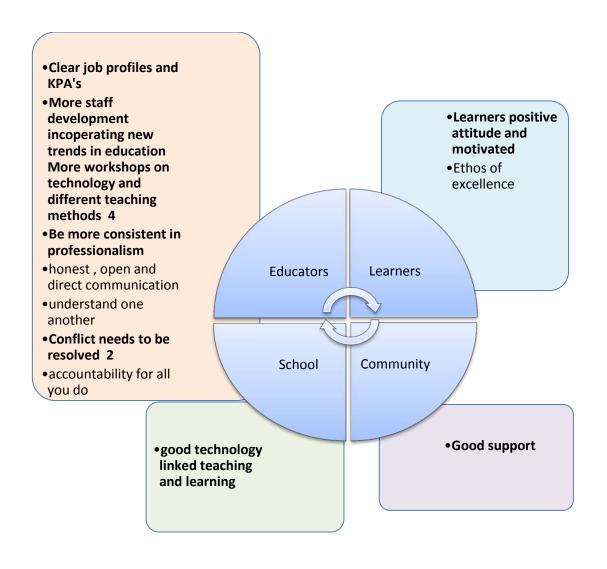


Figure 4.28: Question 1 Qualitative Response: School 4

4.22.2 Question 2: School Operational Team members' perceptions Do you feel that you work in a HPT? Why?

The responses on the questionnaire were summarized in Table 4.33.

YES response	SOMETIMES	NO response	No
	response		comment
8	1	-	2
Each teacher wants to	Varies at times yes at	-	
do their best as the	times no		
environment and			
ethos is of striving for			
excellence			
Each teacher and			
staff member values			
his input			
Professionalism			
Feel valued			
Take initiative to get			
things done			
Pass rate 100%			
testimony to our			
success			

Table 4.33: Question 2: School 4

4.22.3 Questions 3 and 4: FACTORS HAVING A POSITIVE or NEGATIVE INFLUENCE ON PERFORMANCE (SUMMARY OF ACTUAL COMMENTS)

Positive and friendly ethos passion and Sometimes resistance to change caring 2 Not being accountable Goals to succeed Discipline problems sometimes Strive for excellence **Punctuality** New ways of teaching with Learners respect for teachers and not technology 2 completing homework Openness to change, adaptability and Taking things personally instead of flexibility seeing the bigger picture Feeling valued and appreciated Staff conflict must be handled better All contributing towards doing their as staff behaviour and attitude sets best to get things done the ethos of the school Taking initiative without waiting to be asked Freedom and trust to take on new challenges Positive feedback from parents and learners Learners want to work hard and are committed

Figure 4.29: Questions 3 and 4: School 4

4.23 SUMMARY AND CODING

Coding was done on the final summary of each school which linked with the factors in the quantitative data. For each school the top five main enabling factors or those that were required to enable high performance in their school from the qualitative data that the respondents stated as contributing towards the high performance teamwork are grouped, coded and highlighted in the summarized table below.

SCHOOL	QUINTILE	COMMENTS (5)	CODING
SCHOOL 1	3	 Principal support, encourages and listens to our problems 7 Positive attitudes, commitment and support from management 4 Lack of complete trust and support of one another, not all committed, not working as a team 5 Lack of resources, motivating educators and learners 3 Bad HR practices, Absenteeism Punctuality Fairness and Conflict management, HR Strategic management 	PP OC TW SHPWI MOT LO Fa STRAT
SCHOOL 2	5	 Principal's outlook is positive and approach is problem solving, positive attitudes, commitment and management support 4+4 Characters and pillars: Mission and Vision Caring, Trustworthy, Responsibility, Fairness, Citizenship Ethical procedures adhered to Teamwork and respect, support and mutual respect 3+5 Learners responses and attitudes are positive 3 Technology in the classroom 	LSH STRAT Fa CF SHPWI LO MOT
SCHOOL 3	5	 Motivated colleagues with the same clear set goals 2 Passion commitment for education and feel valued sense of pride in the school and its tradition and reputation 3 Improve support from the Department to deliver on its promises Would like classrooms to be more technologically friendly 2 Mutual respect leadership not always aware of what everyone is doing. Fair treatment 	MOT STRAT LSH EE OC COM

SCHOOL 4	Private	 Clear job profiles and KPA's More staff development incorporating new trends in education STRAT
		More workshops on technology and different teaching methods 4 • Be more consistent in
		professionalism Conflict needs to be resolved 2 Learners positive and motivated CF COM LO EE OC

Table 4.34: Summary of Qualitative Data in each school

4.24 CONCLUSIONS OF QUALITATIVE DATA: OVERALL ALL SCHOOLS

It can be seen from Table 4.34 that there are different profiles for each school and their operational teams. However, there are also a number of common factors that are enablers for the high performance of the school operational teams across all the secondary schools.

In this chapter the quantitative and qualitative data were presented and summarized. Discussion and recommendations of these results will be outlined in Chapter five.

CHAPTER 5

DISCUSSIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

In the previous chapter the quantitative and qualitative results of this research study were outlined with regard to the enabling factors of high performance school operational teams of the sampled schools that were selected for this analysis.

The literature study and the empirical study with both the quantitative and qualitative data was reviewed and analysed to address the research question as re-stated below.

What factors are required to energise a secondary school operational team to function as a high performance team within the Nelson Mandela Bay secondary school environment?

This chapter focuses on providing the answers to this research problem as well as the sub-problem statements stated in chapter one of this research study. Since all the factors are inter-connected, it is crucial to examine the schools within the context and quintile, as well as within the school's own specific situation and environment. The design of the questionnaire was critical and by utilizing the literature review to examine the critical factors that had previously been researched as important in high performing teams, mainly in a business context, the factors were carefully selected in the hypothetical model. These were carefully adapted for a school situation.

The selected sample was chosen so that the study examined top performing schools from two different quintiles. The school in quintile 3 was situated in a township area and two city schools in quintile 5 were selected. A top performing private school was also selected in this comparative study. The problems and

limitations of the study and the main findings as well as recommendations are presented in this chapter.

5.2 PROBLEMS AND LIMITATIONS

Major problems were not experienced in this research study except for the data collection process. Some schools stated they were too busy or were not prepared to participate in the study, so different schools had to be approached.

The study was limited to secondary schools in the Nelson Mandela Bay area and therefore the results may not reflect the same HPT profiles as in other areas and contexts. The sample was also purposively selected only as the higher performing schools in their quintiles, so as to allow for the analysis of the enabling factors prescriptive for these teams.

The sample for this research study was also not a continuum of low, medium and high performance schools, with regard to their Grade 12 pass percentages. This was a limitation as by sampling a wider sampling frame a wider variance and profile could have been obtained across a broader population group. However, due to the limited time constraints and budget this larger sample was unfortunately not possible.

5.3 CONCLUDING ANALYSIS AND INTERPRETATION OF IMPORTANCE OF THESE HPT FACTORS IN DIFFERENT QUINTILE SCHOOLS

In this study it was clear that the alignment model as proposed by Scholtes et al., (1996) was necessary. HPT in schools exist in a multidimensional model that considers not only the task, the individual and the team but requires a team promoting environment. As stated by Katzenbach and Smith (1993) and shown in this research study, the leadership is significant in promoting a strong performance ethic. As shown by the multiple regression analysis of the data in this study, the main factors enabling HPT to operate are leadership, communication and motivation. These conclusions were aligned with the studies undertaken by Spence in 2012 and are components in the John Spence HPT Competency Model (Spence, 2012).

In this research study, the secondary school in each quintile has different context, so each school must be analysed within its environment and specific situation.

5.3.1 SCHOOL 1: QUINTILE 3

The quantitative data is summarized for School 1

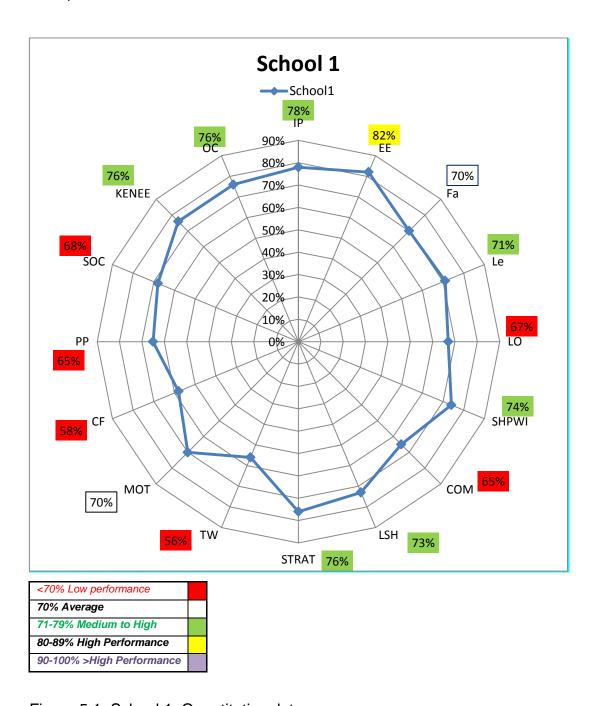


Figure 5.1: School 1: Quantitative data

5.3.1.1 School 1: QUANTITATIVE DATA

This school showed some low factors (red) and these are Trust (56%), Conflict Management (58%), Positive Practices (65%), Communication (65%), Learner Orientation (67%) and School Organisational Climate (68%). These relatively low positive practices and attitudes within both the team and the learners seem to reflect in the low school organisational climate and cause a lower performance of the school operational team. This school has a good leadership factor as well as high employee engagement (82%), organisational commitment and innovation potential. It seems the HPT has the potential to achieve much higher performance levels. Communication and Conflict Management may be key factors in improving the high performance of this school operational team.

The overall SHPWI was 74% which was below the average (79%) of the sampled school HPT's.

5.3.1.2 School 1: QUALITATIVE DATA

The qualitative data summarized in Table 5.1 was used to list the important positive factors that were exhibited, which are shown highlighted in green. The "gap" factors that were lacking in this team are highlighted in red.

SCHOOL	QUINTILE	COMMENTS (5)	CODING
SCHOOL 1	3	 Principal support, encourages and listens to our problems 7 Positive attitudes, commitment and support from management 4 Lack of complete trust and support of one another, not all committed, not working completely as a team 5 Lack of resources, motivating educators and learners 3 Bad HR practices, Absenteeism Punctuality Fairness and Conflict management, HR Strategic management 	PP OC TW SHPWI MOT LO Fa STRAT

Table 5.1: School 1: Summary of Qualitative data

Recommendations for School 1 are summarized in the table below (Table 5.2). It can be seen that this school situated in a township area, has good leadership and management skills but lacks in positive motivation and team dynamics at the lower levels. Trust is low amongst colleagues and it would be wise to send staff on a conflict management program, since conflict is not being handled in the correct manner. Learner orientation is negative and learners need to be motivated to align with the school strategies. Lack of resources and fairness of HR strategies are noticeable in the analysis. This operational team is performing at a reasonably high level but has the potential to improve to higher levels. Team building and communication training will be beneficial. Increasing teacher skills development and especially technology integrated learning with the necessary resources, may increase positive practices, motivation and improve school organisational climate. A good alignment of strategy that promotes the mission and vision of the school as well as some clear values might bring common goals to the school and create a more unified strategy. This could all have a positive impact on the holistic school operational team and improve the school's team dynamic to operate at a higher level.

Sch	ool 1 High Performance	Team Quintile 3	
	Repeating idea	Theme	Recommendations
•	Leadership and management good but lack of complete support and trust of one another	School High Performance operational team could perform better as a team.	 Improve teamwork and teambuilding to increase trust Increase technology and
•	Low commitment Negative attitude of staff and learners	Positive practices	resources for teaching and learning
•	Absenteeism of teachers and no action against non-conforming teachers	Fairness Support from communities and stakeholders	 Utilise staff development training to motivate and encourage a positive attitude and school organisational climate
•	Lack of support from communities and stakeholders Lack of resources		Improve control on absenteeism and fairness policies
	Laux of resources		 Improve community department and other stakeholders involvement

Table 5.2: School 1: Recommendations

Both the quantitative and qualitative data have similar trends and factors highlighted as positives and gaps with regard to school high performance teams in the context of School 1. The triangulation design was used (Jenkins, 2001; Creswell and Plano Clark, 2007) to merge and triangulate the data.

5.3.2 SCHOOL 2: QUINTILE 5

The quantitative data is summarized for School 2 in Figure 5.2.

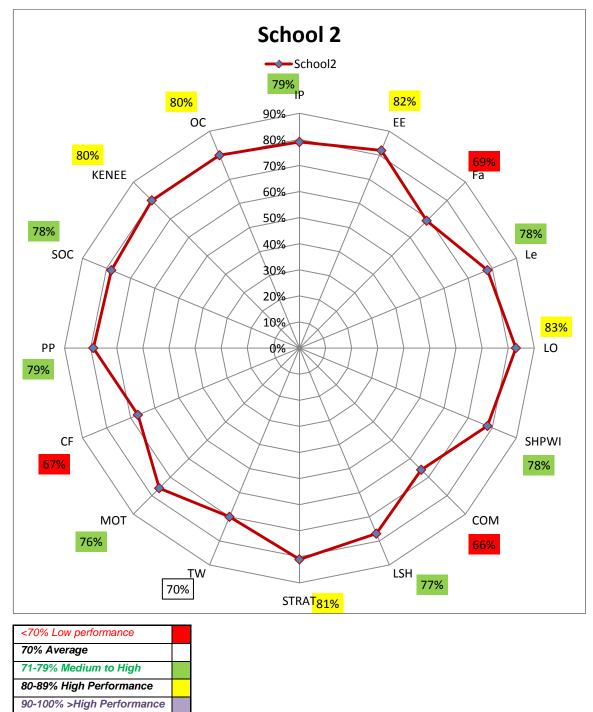


Figure 5.2: School 2: Quantitative data

5.3.2.1 SCHOOL 2: QUANTITATIVE DATA

This school exhibited low ratings in Communication 66% Conflict Management 67% Fairness 69% and Trust 70%. Although being very close to the average 79% SHPW Index, with School 2 recording 78% for this index, the school HPT seemed that the communication and conflict management were an area that needed to be improved. High values were achieved in Employee Engagement (80%), and Organisational Commitment (80%) as well as Strategic Management (81%) and Leadership (77%).

5.3.2.2 SCHOOL 2: QUALITATIVE DATA

The qualitative data is presented in a coded form with the positive coded factors highlighted in green and the gaps that are required for this HPT highlighted in red.

SCHOOL 2	5	 Principal's outlook is positive and approach is problem solving, positive attitudes, commitment and management support 4+4 Characters and pillars: Mission and Vision Caring, Trustworthy, Responsibility, Fairness, Citizenship Ethical procedures adhered to 	
		 Teamwork and respect, support and mutual respect 3 +5 Learners responses and attitudes are positive 3 Technology in the classroom SHPWI COMM LO MOT	

Table 5.3: School 2: Summary of Qualitative data

Recommendations for School 2 are summarized in the table below (Table 5.4). It can be seen that this school situated in the city has good leadership and management skills within their operational team. Employee engagement and organisational commitment is high but lower rating is achieved in communication and trust. Conflict management seems to be a problem and fairness of procedures seems to be noted as an area that could be improved upon. Learner Orientation is a high rating and shows the school's commitment to maintaining the importance of the needs of the learners. Communication is

an area that could also be enhanced. It seems that using technology in the classroom is an area that the staff would like to utilize and this could assist in both staff development, positive practices and motivation for both staff and the learners in teaching and learning.

The strong Employee Engagement and School Organisational Commitment are also paralleled as shown on the high school HPT Index, positive practices, motivation, innovation potential and leadership factors. This shows that this HPT has the potential to extend its performance to a far greater level than currently, if the school operational team improves its teamwork.

School 2 High Performanc	e Team Quintile 5	
Repeating idea	Theme	Recommendations
 Communication needs to improve and be more decisive Trust is low and must be improved by hearing all 	 School High Performance operational team could perform better as a team. Positive practices 	 Improve teamwork and teambuilding to increase trust and performance Improve on fairness policies
 the voices Conflict must be handled Lack of resources technology classrooms 	• Fairness	 Increase technology and resources for teaching and learning Staff development courses in handling conflict and better communication
		Utilise staff development training and use of technology teaching strategies to motivate and encourage a positive attitude and school organisational climate

Table 5.4: School 2: Recommendations

It can be seen that the quantitative and qualitative data have similar trends. The enabling factors and the factors that are required in this HPT of School 2 are highlighted in both sets of the analysed data. These HPT factors are different to the set that are required in the previous School 1 of quintile 3.

5.3.3 SCHOOL 3: QUINTILE 5

The quantitative data is summarized for School 3 in Figure 5.3.

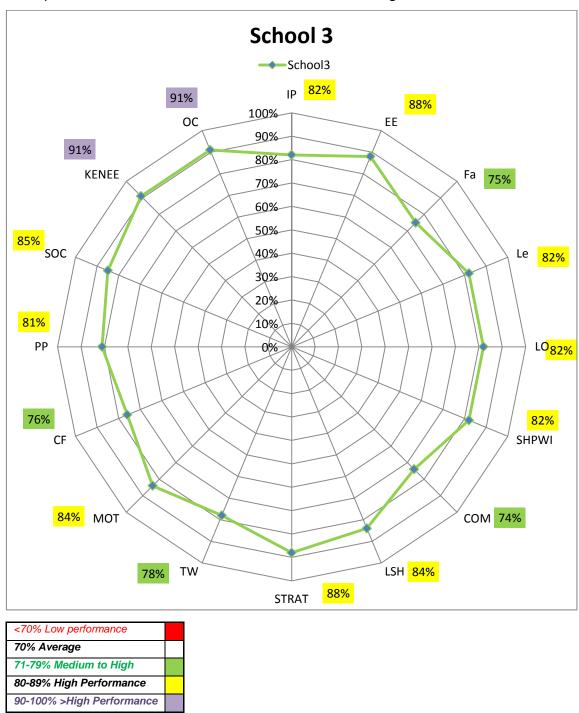


Figure 5.3: School 3: Quantitative data

5.3.3.1 SCHOOL 3: QUANTITATIVE DATA

The low HPT factors are Communication, Fairness with Conflict management and Trust also showing lower values. However, this school shows HPT

characteristics as the SHPWI is 82% with high values of 91% for both Employee Engagement and Organisational Commitment.

5.3.3.2 SCHOOL 3: QUALITATIVE DATA

Qualitative data is summarized in a coded form with the positive coded factors highlighted in green and the gaps that are required for this HPT highlighted in red.

5	 Motivated colleagues with the same clear set goals 2 Passion commitment for education and feel valued sense of pride in the school and its tradition and reputation 3 	
	 Improve support from the Department to deliver on their promises Would like classrooms to be more 	
	Mutual respect, leadership not always aware of what everyone is doing. Fair treatment	
	5	clear set goals 2 Passion commitment for education and feel valued sense of pride in the school and its tradition and reputation 3 Improve support from the Department to deliver on their promises Would like classrooms to be more technologically friendly 2 Mutual respect, leadership not always aware of what everyone is

Table 5.5: School 3: Summary of Qualitative data

Recommendations for School 3 are summarized in the table below (Table 5.6). School 3 is situated in the city in quintile five. It has excellent employee engagement and organisational commitment. This follows the trend that is stated in literature that the higher the employee engagement the higher the organisational commitment (Kirkman and Rosen, 1999). The recommendations include better communication and that greater involvement of the senior management at the ground level should be noted. Fair treatment is stated by the members as being important in HP teams and that the learners would be even more motivated with more technologically friendly classrooms. Conflict management courses should be implemented to assist the team to resolve differences positively and build the team performance. Motivation and Learner orientation is already high in this school but with more staff development, greater trust and high performance teamwork will develop.

School 3 High Performance Tea	m Quintile 5	
Repeating idea	Theme	Recommendations
 Lack of complete support and trust of one another build teamwork Fairness and standard procedures Lack of support from communities and stakeholders Lack of technology friendly classrooms 	School High Performance operational team could perform better as a team. Positive practices Fairness Support from communities and stakeholders	 Improve teamwork and teambuilding to increase trust Improve control on fairness policies Improve community department and other stakeholders involvement Increase technology and resources for teaching and learning Utilise staff development in technology training to motivate and encourage

Table 5.6: School 3: Recommendations

The low HPT factors are Communication, Fairness with Conflict management and Trust also showing lower values. These are similar to the School 2 also in quintile 5. However, this school shows high HPT characteristics as the SHPWI is 82%. This School 3, also situated in quintile 5, has high employee engagement and organisational commitment (91%). It has high leadership, motivation and strategic management factors.

5.3.4 SCHOOL 4: PRIVATE

The quantitative data is summarized for School 4 in Figure 5.4.

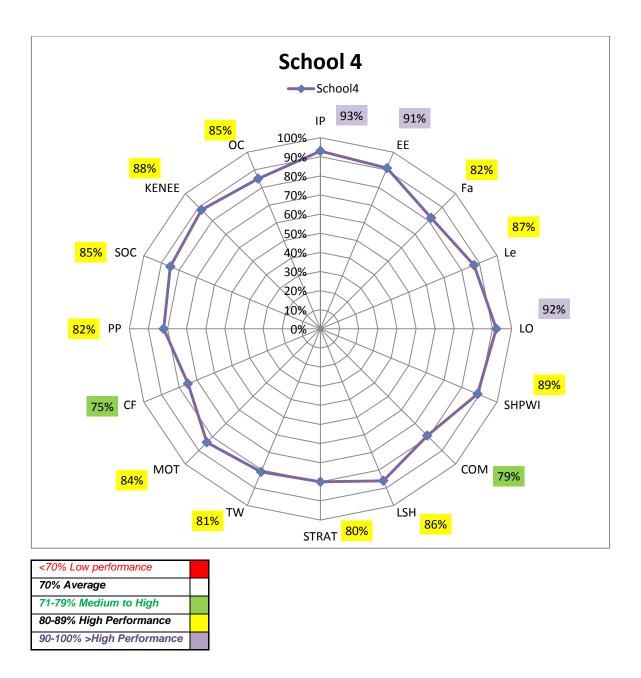


Figure 5.4: School 4: Quantitative data

5.3.4.1 SCHOOL 4: QUANTITATIVE DATA

This school showed the highest operational school HTP characteristics with a SHPWI of 89% and high values recorded for Innovation Potential (93%), Employee Engagement (91%) and Learner Orientation (92%). There was also a higher trend in the Trust factor (81%). Communication and Conflict management were the lowest values for this HPT.

5.3.4.1 SCHOOL 4: QUALITATIVE DATA

Qualitative data is summarized in a coded form with the positive coded factors highlighted in green and the gaps that are required for this HPT highlighted in red.

SCHOOL 4 Priv	 More staff development incorporating new trends in education More workshops on technology and different teaching methods 4 Be more consistent in professionalism 	LSH STRAT MOT IP CF COM LO EE OC
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Table 5.7: School 4: Summary of Qualitative data

Recommendations for School 4 are summarized in the table below (Table 5.8). School 4 is situated in the city and is a private school with low pupil to teacher ratio. It has excellent employee engagement and organisational commitment.

It can be seen that this school situated in the city has good leadership and management skills within their operational team and produces a strong HPT.

It is noted that there is high innovation potential, employee engagement and learner orientation. The school ethos of excellence is cascaded throughout the school organisational climate with high organisational commitment. The areas where improvements can be made were prevalent in the responses by the team members showing a good reflective practice in the HPT.

School 4 High Performance	e Team Private	
Repeating idea	Theme	Recommendations
 High values recorded for Innovation Potential, Employee Engagement and Learner Orientation Communication and conflict management to be improved 	School High Performance operational team operating at high level. Communication and Conflict management	 New training workshops in technology integrated learning Conflict management training Job profiles and KPA detailed

Table 5.8: School 3: Recommendations

It can be seen that the results of this research study is aligned with literature, as in the research by Mowday et al. (1982) and Dee, et al., (2006), high levels of organisational commitment are reported when personal goals are aligned with those of the organisation. This was noted in School 4, where a positive climate, self-efficacy and instructional responsibility increased teamwork and workplace productivity. This agreed with the research done in 2003 by Naquin and Tynan.

The areas requiring attention in School 4 are communication and conflict management.

5.4 OVERALL AVERAGE SCHOOL FACTOR ANALYSIS

All the data for the four schools was averaged and the following diagram was drawn showing the average school factors for a HPT (Figure 5.5).

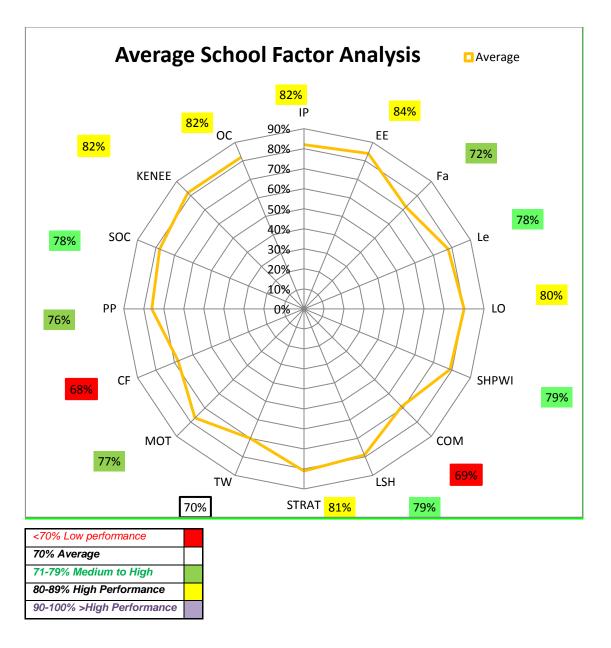


Figure 5.5: Average HPT

In Business literature on HPT the definition stated that the HPT existed as one standard deviation above the mean (Boedker, et al., 2011). Business research recorded around 82% as a High Performance Team and around 29% as a Low Performance Team. Further studies need to be undertaken in the school and educational field to ascertain these ranges of values in different school quintiles and contexts.

5.5 ALL FOUR SCHOOLS HPT: SPIDER DIAGRAMS

All the HPT data of the schools (1-4) were plotted on one spider diagram and are shown below (Figure 5.6).

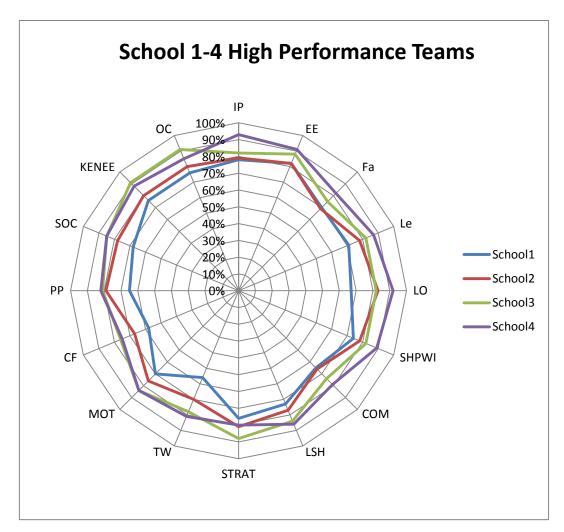


Figure 5.6: School 1- 4 HPT

The strengths of each school HPT showed a different profile and even the HPT factors of School 2 and School 3 within the same quintile, although similar, showed some differences. It was observed that in most schools the weaknesses were in the communication and conflict management areas. An interesting observation was that where there was a higher learner orientation and the needs of the learners were prioritized, there was the availability of resources. Many respondents also expressed interest and desire for more technology integrated learning in better equipped classrooms, as well as training in these new teaching strategies.

5.6 MERGING QUANTITATIVE AND QUALITATIVE DATA

Using a triangulation design the quantitative and qualitative data were merged in a matrix diagram to illustrate the relationship between the HPT factors in the different schools per quintile level (Figure 5.7).

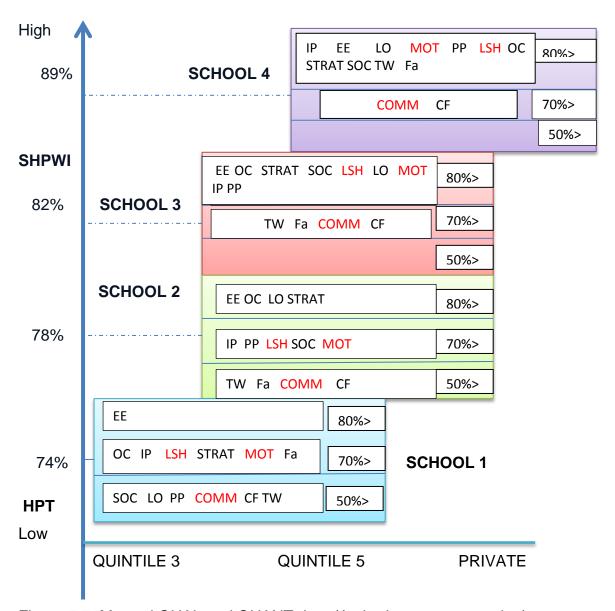


Figure 5.7: Merged QUAL and QUANT data (Author's own construction)

Barriers to team development are shown to be linked to unequal commitment and group culture, as shown in the research by Castka, et al., (2001). This is reflected in the results of this research as communication, conflict management as well as organisational commitment are strongly linked with the school high performance work index. In the John Spence Model, it was also shown that clear communication, trust, respect, strong commitment and a positive attitude,

as well as measurable goals and mutual accountability were components required for effective HPT's (Spence, 2012). This was in agreement with the results of this study.

The hypothesised framework was adjusted to reflect the research study results and is shown below (Figure 5.8).

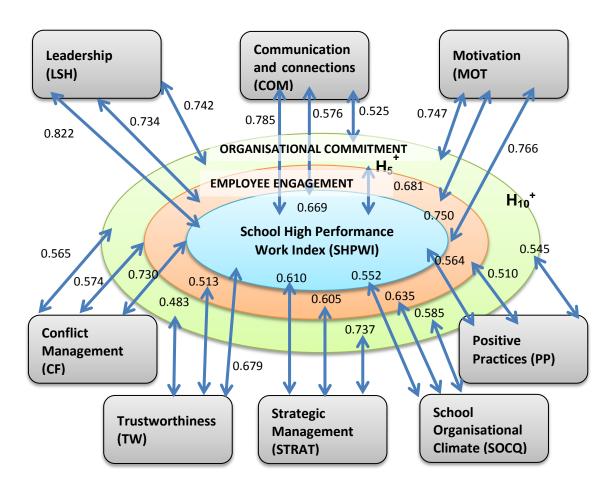


Figure 5.8: The revised conceptual framework (Source: Authors own construction)

5.7 RECOMMENDATIONS FOR FURTHER STUDY

This study was confined to four selected high performing secondary schools due to time constraints. It would be beneficial to expand this study by examining a continuum of low, medium and high performing schools with-in their contexts and different quintiles. Data collection would then generate a larger sample size allowing structural equation modelling. The research methodology could be

expanded to include focus groups in each school. This would allow for an intervention approach to be utilised which would be structured specifically from that school's HPT profile.

5.8 CONCLUSIONS

The findings of this study indicated that the main enabling factors for secondary school operational HPT's were interlinked. The main factors linked to enabling this effective performance in the school context were Leadership, Communication and Motivation. The factors that were the lowest developed were Communication and Conflict Management. It was shown that the SHPWI showed a number of significant associations with factors, especially Employee Engagement and Organisational Commitment. A revised conceptual framework was constructed showing the correlations between these independent variables and the dependent variable of SHPWI.

In the quantitative analysis the multiple regression analysis showed the largest correlations observed between the SHPWI and Leadership, Communication and Motivation. These factors were prevalent in the qualitative data collected from these schools as well and this allowed triangulation for reliability and validity. In the MLR analysis a R² value of 0.774 was obtained when the four variables of Leadership, Motivation, Communication and Strategic Management were used. The importance of aligning your vision and mission of your school to be infused and cascaded into all levels of the team was an important observation. There was also a high correlation between the SHPWI and the Employee Engagement (Kenexa) as well as the Organisational Commitment, which are strongly connected to the high performance in the school operational teams.

In answering the research questions posed at the start of this exploratory study, the following conclusions could be stated:

 The factors enabling high performance teams in secondary schools are closely interlinked. The main enabling factors in this research study were observed to be Leadership, Communication and Motivation.

- These factors were in line with the John Spence HPT Competency Model (2012) but certain other observations were made within a school context.
- The HPT profile of enabling factors for each school team was different for schools in different quintiles and contexts, although a number of trends were observed.
- The SHPWI and profile of the schools showed an increase in line with the trend of increased Grade 12 pass rate performance.
- The gap factors of conflict management and trust, as well as communication were analysed as being necessary in some HPT school profiles.

Different schools in different quintiles have different needs and gap factors that require improvement. It is therefore imperative that schools analyse their strengths and weaknesses within their school operational teams. This research study aimed therefore to start research and development on a human resource metric that can be further researched and developed to allow school operational teams to examine and analyze their HPT profile. This may allow effective relevant interventions specifically aligned with the needs of that particular school operational team, leading to the enabling of a successful high performance team. By creating effective leadership, motivation and communication within the operational HP school teams, the teaching and learning may yield a more successful pass rate for the learners.

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ANNEXURES

ANNEXURE 1: DEPARTMENT OF EDUCATION APPROVAL LETTER



Port Elizabeth District

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Private Bag X3931 · North End · Port Elizabeth · 6059 · REPUBLIC OF SOUTH AFRICA
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Ms M. Gibbs Researcher c/o Prof Paul Poisat Business School Nelson Mandela Metropolitan University

E-mail: paul.poisat@nmmu.ac.za // Marilyn.gibbs@nmmu.ac.za

Dear Ms Gibbs

REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN DEPARTMENTAL SCHOOLS: PORT ELIZABETH

I refer to your letter dated 10 April 2013.

Permission is hereby granted for you to conduct your research on the following conditions:

- Your research must be conducted on a voluntary basis.
- All ethical issues relating to research must be honoured.
- Your research is subject to the internal rules of the school, including its curricular programme and its code of conduct and must not interfere in the day-to-day routine of the school.

Kindly present a copy of this letter to the principal as proof of permission.

I wish you good luck in your research.

Yours faithfully

DR NYATHI NTSIKO

DISTRICT DIRECTOR: PORT ELIZABETH

/ab

16 April 2013

building blocks for growth

ANNEXURE 2: SAMPLE OF PRINCIPAL'S CONSENT FORM

School Principal Consent Form

I give consent for you to approach educators and staff at this school to participate in this study.

I have read the Project Information Statement explaining the purpose of the research project and understand that:

- The role of the school is voluntary
- I may decide to withdraw the school's participation at any time without penalty
- Only educators who consent will participate in the project
- All information obtained will be treated in strictest confidence.
- The educators' names will not be used and individual respondents will not be identifiable in any written reports about the study.
- The school will not be identifiable in any written reports about the study.
- Participants may withdraw from the study at any time without penalty.
- A report of the findings will be made available to the school.
- I may seek further information on the project from Marilyn Gibbs on 041 5042701 or Prof Paul Poisat 041 504 3750

Principal		Signa	ture
Date			
Please return to:	Marilyn Gibbs	Marilyn.gibbs@nmmu.ac.za	on an official school letterhead

Many thanks for your time and valuable support in this research study. It is greatly appreciated.

ANNEXURE 3: QUESTIONNAIRE



This questionnaire has been ethically cleared by the Research Ethics Committee of the Nelson Mandela Metropolitan University Clearance Number H13 BISS 6099 QUESTIONNAIRE

Many thanks for your participation in this survey, it is greatly appreciated.

Please take a few moments to complete this questionnaire

Please be honest and constructive in your answers.
 Please complete Sections A, B and C.
 Please mark the relevant block with an X or tick.
 Choose only one block.1-Strongly disagree to 5 - Strongly agree.
 Please note that all information supplied will be treated with confidentiality.

SECTION A

18-29 30-39 40-49 50-59 >60 MALE FEMALE			AGE IN	AGE IN YEARS			GEI	GENDER
JRRENT LEVEL IN YOUR SCHOOL OR SUPPORT EDUCATOR HODISMT EXEC		18 - 29	30 - 39	40 - 49		09<	MALE	FEMALE
SUPPORT EDUCATOR EXEC	EMPI (Optie	LOYERS onal)	NAME					
SUPPORT EDUCATOR HOD/SMT SERVICES		CUR	RENT LEVI	EL IN YO	UR SCHOO	7(
	ADMI	NISTRATOR	E 12		EDUCATOR	HOD/SMT EXEC	PR DE	PUTY/ INCIPAL

NUMBER OF YEARS SERVICE AT YOUR SCHOOL	40 - 49		Honours Master's degree degree degree	
AT YOU	30 - 39	EVEL	Honours	
RS SERVICE	20 - 29	EDUCATION LEVEL	Bachelor's Degree	
ER OF YEA	10 - 19	8	National Diploma	
NUMBE	6-0		No qualifications	

NMMU Research Clearance No: H13 BUS BS 009

Nelson Mandela Menopoutak ukwesiry Business School SECTION B

HIGH PERFORMANCE WORK INDEX	1. Strongly disagree	2. Disagree	3. Neutral	4. Agree	Strongly Agree
 We are willing to bring up new ideas. 					
2. New ideas are listened to.					
3. We are encouraged to make new suggestions.					
 We feel valued and proud to work in our school. 					
We will gladly go the extra mile for our staff team and our school.					
6. We feel that our work is important.					
7. We feel positive about our school.					-
We are treated relative to our performance.					
The school policies are implemented fairly across all levels.					
 Senior educators and managers treat everyone equally. 					
 Senior educators and managers have clear values and are role models. 					
12. Senior educators and managers allow freedom for employees to lead tasks and assignments.					
13. Recognition and acknowledgement is given to employees.					
 Our school team spares no effort to understand our learners' needs and problems. 					
 Our school treats each learner as an individual. 					
16. Communication is clear.					

NMMU Research Clearance No: H13 BUS BS 009

34. There is a strong sense of trust within

35. I feel that my colleagues trust me.

Nelson Mandela Mengobulah university Business School



Strongly Agree

Strongly

39 We are happy to put in extra effort because we find joy in our work. 40. Our leaders inspire us to do better.

38. We always have support.

43. Our leaders have good people skills.

42. Conflict is sorted out easily.

45. There are few staff grievances.

POSITIVE PRACTICES

44. Problems can be solved.

41. Criticism is handled constructively.

CONFLICT

Strongly 2. 3. disagree Disagree Neutral

36. We are motivated and positive about our

MOTIVATION

37. We have hope for the future.

work.

Strongly Agree

Strongly

46. Staff care for one another as friends.
47. Staff provide support with care and compassion.
48. Colleagues forgive one another when mistakes are made.

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We value each other in the workplace.
 I feel that my work is meaningful to the school.

49. I feel inspired to do my work.

S



Nelson Mandela Menopouan university Business School

Please complete the following questions in the space below. Many thanks for your time and enthusiasm in completing this survey.

SECTION C

 What do <u>you</u> feel needs to be done to increase performance in your team/school?

52	 In one day, the positive comments exceed the negative ones. 					
OR	ORGANISATIONAL/SCHOOL CLIMATE	Strongly disagree	1		1	Strongly Agree
53.	Praise is often given.					
54.	There is a professional attitude amongst the staff.					
55.	Our school has adequate supply of resource support material					
56.						
		1. Strongly disagree	2. Disagree.	3. Neutral	4. Agree	5. Strongly Agree
27	I am proud to work at my school.					
28	58. Overall, I am satisfied in my job.					
29	 1 would gladly refer a good friend to apply to work at my school. 					
.09	I rarely think about looking for a new job in another school.					
eff.	61. I am willing to put in a great deal of effort beyond that normally expected in order to assist success in the school.					
82 a	62. I talk about this school to my friends as a great school to work at.					
683	 I would accept almost any task in order to keep my job at this school. 					
84 are	64. I find my values and this school's values are very similar.					
85 this	65. I am proud to tell others that I am part of this school.					
99	66. This school inspires the very best in me in the way of job performance.					
Sch Sch	67.1 am extremely glad that I chose this school to work at above other schools I was considering at the time I joined.					
89	68. I really care about the fate of this school.					
69 Sct	69. For me, this is the best of all possible schools for which to work.					

2. Do you feel that you work in a high performance team? If so, give

reasons

3. The factors that have a positive influence or assist me in performing well at my school are...

Please complete the following sentences:

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Nelson Mandela METROPOUTAN UNIVERSITY	Business school	teaders for tomorrow	
	1		

4. The factors that stop or hinder us as a staff team to perform at our most effective level are...

THANK YOU VERY MUCH FOR YOUR KIND CO-OPERATION.

Nelson Mandela Menopoura, uswessiry Business School

Dear Respondent

I am studying towards my MBA (Masters in Business Administration) degree at the

Nelson Mandela Metropolitan University Business School. I am conducting research on believe that my study will make an important contribution to the improvement of high the factors that affect the operational teams' performance in secondary schools. performance operational teams in schools.

mentioned matter. We would therefore appreciate it if you could answer a few questions. It should not take more than fifteen minutes of your time and we would like to You are part of our selected sample of respondents whose views we seek on the abovethank you in advance for your co-operation and time.

and honestly as possible. For each statement, tick the number which best describes There are no correct or incorrect answers. Please answer the questions as accurately your experience or perception. For example, if you strongly agree with the statement, tick the number 5. If you strongly disagree with the statement, tick the number 1.

Please tick only one answer for each statement and answer all the questions.

Please note also that your participation in this study is entirely voluntary and that you have the right to withdraw from the study at any stage without any penalization.

Thank you very much for your valuable contribution.

Contact details:

Researcher: Marilyn Gibbs 041 504 2701 marilyn.gibbs@nmmu.ac.za

To verify the authenticity of the study, please contact

Prof Paul Poisat at 041-504 3750 paul.poisat@nmmu.ac.za.

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ANNEXURE 4: INFORMATION LETTER

INFORMATION LETTER TO PARTICPANTS

Faculty of Business Economics

NMMU

E-mail Faculty Chairperson: xxxx@nmmu.ac.za

Date 17th May 2013

Ref: H13 BUS BS009 Contact person: Prof Paul Poisat /Mrs M. Gibbs

Dear Valued Respondent

You are being asked to participate in a research study. We will provide you with the necessary information to assist you to understand the study and explain what would be expected of you the participant. These guidelines would include the outline, benefits, and your rights as a study subject. Please feel free to ask the researcher to clarify anything that is not clear to you.

To participate, it will be required of you to provide a written consent that will include your signature, date and initials to verify that you understand and agree to the conditions. Information regarding the study is summarised on the informed consent form. (Appendix 2). You have the right to query concerns regarding the study at any time. Please contact the researcher for any queries or problems during the study. Telephone numbers of the researcher are provided. Please feel free to call these numbers.

Furthermore, it is important that you are aware of the fact that the ethical integrity of the study has been approved by the Research Ethics Committee (Human) of the university. The REC-H consists of a group of independent experts that has the responsibility to ensure that the rights and welfare of participants in research are protected and that studies are conducted in an ethical manner. Studies cannot be conducted without REC-H's approval. Queries with regard to your rights as a research subject can be directed to the Research Ethics Committee (Human), Department of Research Capacity Development, PO Box 77000, Nelson Mandela Metropolitan University, Port Elizabeth, 6031. If they are unable to assist you, you may write to: The Chairperson of the Research, Technology and Innovation Committee, PO Box 77000, Nelson Mandela Metropolitan University, Port Elizabeth, 6031.

Participation in this research is completely voluntary and you will in no way be penalised if you choose not to take part in this study. If you do complete the survey you do not necessarily need to partake and volunteer for a focus group. The focus group would require only one meeting in a group interview and is voluntary. You have the right to not complete the survey or withdraw at any given time. The study may be terminated at any time by the researcher, the sponsor or the Research Ethics Committee (Human).

Although your identity will at all times remain confidential, the results of the research study may be presented at scientific conferences or in specialist publications, but both individuals and schools will not be identified with complete confidentiality being maintained. The informed consent statement has been prepared in compliance with current statutory guidelines.

Thank you in advance for your participation and time.

Yours sincerely
M. GIBBS

RESEARCHER Cell 084 583 1958 (W) 041 504 2701

COLLECTION DATE: TUESDAY 17th JUNE 2013

ANNEXURE 5: UNIVERSITY ETHICAL CLEARANCE LETTER



Copies to:

Supervisor: Prof P Poisat

Summerstrand South Faculty of Business and Economics Sciences Tel. +27 (0)41 504 2504 Fax. +27 (0)41 504 2826 lindie@nmmu.ac.za

M Gibbs

1 August 2013

PROJECT PROPOSAL: (MBA)

Please be advised that your final ethics from (REC-H) has been approved by the Faculty RTI and NMMU REC-H committee, in accordance with the NMMU ethics approval policy.

Your ethics number is: H 13 BUS BS 009

Kind regards

Dr C Rootman

Faculty of Business and Economic Sciences

ANNEXURE 6: FREQUENCY DISTRIBUTION DATA (DESCRIPTIVE STATISTICS)

IP2	Table	x: Freq	uency l	Distribution	ons: IP1 to	SOC	4 (n = 8	31)					
P2 3.88 0.83 1 1% 5 6% 12 15% 48 59% 15 18 18 19 3 4.14 0.70 0 0% 3 3 4% 6 7% 49 60% 23 2 2 2 2 2 2 2 2		Mean	S.D.	Strongly	/ disagree	Disa	agree	Net	utral	Agı	ree	Strong	ly agree
P3	IP1	4.22	0.67	0	0%	0	0%	11	14%	41	51%	29	36%
EE1 3.98 0.79 1 1 1% 0 0% 20 25% 39 48% 21 2 EE2 4.25 0.73 0 0% 0 0% 14 17% 33 41% 34 4 EE3 4.48 0.63 0 0% 0 0% 6 7% 30 37% 45 5 EE4 4.17 0.72 0 0% 1 1% 12 15% 40 49% 28 3 F1 3.51 1.07 3 4% 14 17% 16 20% 35 43% 13 1 F2 3.60 0.98 2 2% 10 12% 19 23% 37 46% 13 1 F3 3.67 1.05 3 4% 8 10% 20 25% 32 40% 18 2 L1 3.64 1.02 2 2% 10 12% 19 23% 34 42% 16 2 L2 4.07 0.83 1 1% 2 2% 13 16% 39 48% 26 3 L3 3.98 0.81 0 0% 4 5% 15 19% 41 51% 21 2 LO1 3.91 0.99 2 2% 6 7% 13 16% 36 44% 24 3 LO2 4.06 0.81 0 0% 4 5% 12 15% 40 49% 25 3 COM4 3.43 0.93 3 4% 9 11% 26 32% 36 44% 7 COM5 3.43 0.93 3 4% 9 11% 26 32% 36 44% 7 COM6 3.54 0.88 1 1 1% 8 10% 28 35% 34 42% 10 1 COM6 3.20 0.94 3 4% 15 19% 31 38% 27 33% 5 1 LSH1 3.93 0.89 0.77 0 0% 9 11% 33 41% 34 42% 15 12 LSH1 3.93 0.89 1 1 1% 4 5% 20 25% 38 47% 18 2 LSH1 3.99 0.77 0 0% 2 2% 18 10 26 32% 36 44% 7 COM6 3.20 0.94 3 4% 15 19% 31 38% 27 33% 5 1 LSH1 3.93 0.89 1 1 1% 4 5% 20 25% 38 47% 18 2 LSH3 3.99 0.77 0 0% 2 2% 18 22% 40 49% 21 2 LSH4 3.91 0.82 0 0% 5 6% 16 20% 41 51% 19 23 LSH3 3.99 0.77 0 0% 2 2% 18 22% 40 49% 21 2 LSH4 3.91 0.82 0 0% 5 6% 16 20% 41 51% 19 15 15 15 15 15 15 15 15 15 15 15 15 15	IP2	3.88	0.83	1	1%	5	6%	12	15%	48	59%	15	19%
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EE3	EE1	3.98	0.79	1	1%	0	0%	20	25%	39	48%	21	26%
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F1	EE3	4.48	0.63	0	0%	0	0%	6	7%	30	37%	45	56%
F2	EE4	4.17	0.72	0	0%	1	1%	12	15%	40	49%	28	35%
F3	F1	3.51	1.07	3	4%	14	17%	16	20%	35	43%	13	16%
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L2	F3	3.67	1.05	3	4%	8	10%	20	25%	32	40%	18	22%
L2	L1	3.64	1.02	2	2%	10	12%	19	23%	34	42%	16	20%
L3	L2	4.07	0.83	1	1%	2	2%	13		39	48%	26	32%
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LSH4 3.91 0.82 0 0% 5 6% 16 20% 41 51% 19 2 LSH5 3.99 0.83 1 1% 3 4% 13 16% 43 53% 21 2 LSH6 3.99 0.66 0 0% 2 2% 12 15% 52 64% 15 1 STRA 3.99 0.96 0 0% 8 10% 13 16% 32 40% 28 3 STRA 4.23 0.71 0 0% 3 4% 4 5% 45 56% 29 3 STRA 4.07 0.80 0 0% 2 2% 17 21% 35 43% 27 3 STRA 3.88 0.81 1 1% 2 2% 20 25% 41 51% 17 2 TW1 3.30 1.13 6 7% 13 16% 25 31% 25 31% 12 1 TW2 3.65 1.03 3 4% 6 7% 25 31% 29 36% 18 2 TW3 3.51 1.03 5 6% 6 7% 24 30% 35 43% 11 1 TW4 3.20 1.03 6 7% 13 16% 26 32% 31 38% 5 TW5 3.79 0.88 2 2% 4 5% 17 21% 44 54% 14 1 MOT1 3.84 0.84 1 1% 2 2% 24 30% 36 44% 18 2 MOT2 4.05 0.82 0 0% 2 2% 19 23% 33 41% 27 3 MOT3 3.65 0.87 0 0% 9 11% 22 27% 38 47% 12 1 MOT4 3.98 0.82 0 0% 3 4% 19 23% 36 44% 17 2 MOT5 3.77 0.91 1 1% 6 7% 21 26% 36 44% 17 2 MOT5 3.77 0.91 1 1% 6 7% 21 26% 36 44% 17 2				0		2							26%
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LSH6 3.99 0.66 0 0% 2 2% 12 15% 52 64% 15 1 STRA 3.99 0.96 0 0% 8 10% 13 16% 32 40% 28 3 STRA 4.23 0.71 0 0% 3 4% 4 5% 45 56% 29 3 STRA 4.07 0.80 0 0% 2 2% 17 21% 35 43% 27 3 STRA 3.88 0.81 1 1% 2 2% 20 25% 41 51% 17 2 TW1 3.30 1.13 6 7% 13 16% 25 31% 25 31% 12 1 TW2 3.65 1.03 3 4% 6 7% 25 31% 29 36% 18 2 TW3 3.51 1.03 5 6% 6 7% 24 30% 35 43% 11 1 TW4 3.20 1.03 6 7% 13 16% 26 32% 31 38% 5 TW5 3.79 0.88 2 2% 4 5% 17 21% 44 54% 14 1 MOT1 3.84 0.84 1 1% 2 2% 24 30% 36 44% 18 2 MOT2 4.05 0.82 0 0% 2 2% 19 23% 33 41% 27 3 MOT3 3.65 0.87 0 0% 9 11% 22 27% 38 47% 12 1 MOT4 3.98 0.82 0 0% 3 4% 19 23% 36 44% 17 2 MOT5 3.77 0.91 1 1% 6 7% 21 26% 36 44% 17 2 CF1 3.44 1.01 4 5% 9 11% 25 31% 33 41% 10 1						3							26%
STRA 3.99 0.96 0 0% 8 10% 13 16% 32 40% 28 33 STRA 4.23 0.71 0 0% 3 4% 4 5% 45 56% 29 3 STRA 4.07 0.80 0 0% 2 2% 17 21% 35 43% 27 3 STRA 3.88 0.81 1 1% 2 2% 20 25% 41 51% 17 2 STRA 3.88 0.81 1 1% 2 2% 20 25% 41 51% 17 2 STRA 3.88 0.81 1 1% 2 2% 20 25% 41 51% 17 21% TW1 3.30 1.13 6 7% 13 16% 25 31% 29 36% 18 22 TW2 3.51				0						52		15	19%
STRA 4.23 0.71 0 0% 3 4% 4 5% 45 56% 29 3 STRA 4.07 0.80 0 0% 2 2% 17 21% 35 43% 27 3 STRA 3.88 0.81 1 1% 2 2% 20 25% 41 51% 17 2 TW1 3.30 1.13 6 7% 13 16% 25 31% 25 31% 12 1 TW2 3.65 1.03 3 4% 6 7% 25 31% 29 36% 18 2 TW3 3.51 1.03 5 6% 6 7% 24 30% 35 43% 11 1 TW4 3.20 1.03 6 7% 13 16% 26 32% 31 38% 5 TW5 3.79 0.88	\vdash											 	35%
STRA 4.07 0.80 0 0% 2 2% 17 21% 35 43% 27 3 STRA 3.88 0.81 1 1% 2 2% 20 25% 41 51% 17 2 TW1 3.30 1.13 6 7% 13 16% 25 31% 25 31% 12 1 TW2 3.65 1.03 3 4% 6 7% 25 31% 29 36% 18 2 TW3 3.51 1.03 5 6% 6 7% 24 30% 35 43% 11 1 TW4 3.20 1.03 6 7% 13 16% 26 32% 31 38% 5 TW5 3.79 0.88 2 2% 4 5% 17 21% 44 54% 14 1 MOT2 4.05 0.82	STRA			0		3		4		45		29	36%
STRA 3.88 0.81 1 1% 2 2% 20 25% 41 51% 17 2 TW1 3.30 1.13 6 7% 13 16% 25 31% 25 31% 12 1 TW2 3.65 1.03 3 4% 6 7% 25 31% 29 36% 18 2 TW3 3.51 1.03 5 6% 6 7% 24 30% 35 43% 11 1 TW4 3.20 1.03 6 7% 13 16% 26 32% 31 38% 5 TW5 3.79 0.88 2 2% 4 5% 17 21% 44 54% 14 1 MOT1 3.84 0.84 1 1% 2 2% 24 30% 36 44% 18 2 MOT3 3.65 0.87						2							33%
TW1 3.30 1.13 6 7% 13 16% 25 31% 25 31% 12 1 TW2 3.65 1.03 3 4% 6 7% 25 31% 29 36% 18 2 TW3 3.51 1.03 5 6% 6 7% 24 30% 35 43% 11 1 TW4 3.20 1.03 6 7% 13 16% 26 32% 31 38% 5 TW5 3.79 0.88 2 2% 4 5% 17 21% 44 54% 14 1 MOT1 3.84 0.84 1 1% 2 2% 24 30% 36 44% 18 2 MOT2 4.05 0.82 0 0% 2 2% 19 23% 33 41% 27 3 MOT3 3.65 0.87				1		2		20				17	21%
TW2 3.65 1.03 3 4% 6 7% 25 31% 29 36% 18 2 TW3 3.51 1.03 5 6% 6 7% 24 30% 35 43% 11 1 TW4 3.20 1.03 6 7% 13 16% 26 32% 31 38% 5 TW5 3.79 0.88 2 2% 4 5% 17 21% 44 54% 14 1 MOT1 3.84 0.84 1 1% 2 2% 24 30% 36 44% 18 2 MOT2 4.05 0.82 0 0% 2 2% 19 23% 33 41% 27 33 MOT3 3.65 0.87 0 0% 9 11% 22 27% 38 47% 12 1 MOT4 3.98 0.82	-			6		13							15%
TW3													22%
TW4 3.20 1.03 6 7% 13 16% 26 32% 31 38% 5 TW5 3.79 0.88 2 2% 4 5% 17 21% 44 54% 14 1 MOT1 3.84 0.84 1 1% 2 2% 24 30% 36 44% 18 2 MOT2 4.05 0.82 0 0% 2 2% 19 23% 33 41% 27 3 MOT3 3.65 0.87 0 0% 9 11% 22 27% 38 47% 12 1 MOT4 3.98 0.82 0 0% 3 4% 19 23% 36 44% 23 2 MOT5 3.77 0.91 1 1% 6 7% 21 26% 36 44% 17 2 CF1 3.44 1.01													14%
TW5 3.79 0.88 2 2% 4 5% 17 21% 44 54% 14 1 MOT1 3.84 0.84 1 1% 2 2% 24 30% 36 44% 18 2 MOT2 4.05 0.82 0 0% 2 2% 19 23% 33 41% 27 33 MOT3 3.65 0.87 0 0% 9 11% 22 27% 38 47% 12 1 MOT4 3.98 0.82 0 0% 3 4% 19 23% 36 44% 23 2 MOT5 3.77 0.91 1 1% 6 7% 21 26% 36 44% 17 2 CF1 3.44 1.01 4 5% 9 11% 25 31% 33 41% 10 1				6		13							6%
MOT1 3.84 0.84 1 1% 2 2% 24 30% 36 44% 18 2 MOT2 4.05 0.82 0 0% 2 2% 19 23% 33 41% 27 3 MOT3 3.65 0.87 0 0% 9 11% 22 27% 38 47% 12 1 MOT4 3.98 0.82 0 0% 3 4% 19 23% 36 44% 23 2 MOT5 3.77 0.91 1 1% 6 7% 21 26% 36 44% 17 2 CF1 3.44 1.01 4 5% 9 11% 25 31% 33 41% 10 1						4							17%
MOT2 4.05 0.82 0 0% 2 2% 19 23% 33 41% 27 3 MOT3 3.65 0.87 0 0% 9 11% 22 27% 38 47% 12 1 MOT4 3.98 0.82 0 0% 3 4% 19 23% 36 44% 23 2 MOT5 3.77 0.91 1 1% 6 7% 21 26% 36 44% 17 2 CF1 3.44 1.01 4 5% 9 11% 25 31% 33 41% 10 1				1		2				36		18	22%
MOT3 3.65 0.87 0 0% 9 11% 22 27% 38 47% 12 1 MOT4 3.98 0.82 0 0% 3 4% 19 23% 36 44% 23 2 MOT5 3.77 0.91 1 1% 6 7% 21 26% 36 44% 17 2 CF1 3.44 1.01 4 5% 9 11% 25 31% 33 41% 10 1				0		2							33%
MOT4 3.98 0.82 0 0% 3 4% 19 23% 36 44% 23 2 MOT5 3.77 0.91 1 1% 6 7% 21 26% 36 44% 17 2 CF1 3.44 1.01 4 5% 9 11% 25 31% 33 41% 10 1				0		9							15%
MOT5 3.77 0.91 1 1% 6 7% 21 26% 36 44% 17 2 CF1 3.44 1.01 4 5% 9 11% 25 31% 33 41% 10 1				0		3							28%
CF1 3.44 1.01 4 5% 9 11% 25 31% 33 41% 10 1	МОТ5		0.91	1		6	7%						21%
				4		9						1	12%
													6%
CF3 3.44 0.97 3 4% 11 14% 22 27% 37 46% 8 1													10%
						6							10%
													7%

ANNEXURE 6: (CONTINUED)

PP1	3.70	0.95	3	4%	5	6%	19	23%	40	49%	14	17%
PP2	3.78	0.99	4	5%	4	5%	14	17%	43	53%	16	20%
PP3	3.51	0.95	3	4%	6	7%	30	37%	31	38%	11	14%
PP4	4.11	0.72	0	0%	2	2%	11	14%	44	54%	24	30%
PP5	3.88	0.86	2	2%	1	1%	20	25%	40	49%	18	22%
PP6	4.17	0.72	0	0%	2	2%	9	11%	43	53%	27	33%
PP7	3.57	0.95	1	1%	9	11%	28	35%	29	36%	14	17%
SOC1	3.90	0.82	0	0%	5	6%	16	20%	42	52%	18	22%
SOC2	3.72	0.93	0	0%	10	12%	19	23%	36	44%	16	20%
SOC3	4.01	0.84	0	0%	5	6%	13	16%	39	48%	24	30%
SOC4	3.93	0.74	0	0%	2	2%	19	23%	43	53%	17	21%
KEN1	4.32	0.72	0	0%	0	0%	12	15%	31	38%	38	47%
KEN2	4.16	0.75	0	0%	2	2%	11	14%	40	49%	28	35%
KEN3	4.10	0.89	0	0%	6	7%	10	12%	35	43%	30	37%
KEN4	3.86	1.08	3	4%	7	9%	14	17%	31	38%	26	32%
OCQ1	4.30	0.66	0	0%	0	0%	9	11%	39	48%	33	41%
OCQ2	4.07	0.97	1	1%	4	5%	17	21%	25	31%	34	42%
OCQ3	3.70	1.05	3	4%	9	11%	15	19%	36	44%	18	22%
OCQ4	4.01	0.81	0	0%	2	2%	20	25%	34	42%	25	31%
OCQ5	4.12	0.91	0	0%	5	6%	14	17%	28	35%	34	42%
OCQ6	4.11	0.81	0	0%	2	2%	16	20%	34	42%	29	36%
OCQ7	4.19	0.73	0	0%	0	0%	15	19%	36	44%	30	37%
OCQ8	4.43	0.71	0	0%	1	1%	7	9%	29	36%	44	54%
OCQ9	3.89	0.95	1	1%	6	7%	17	21%	34	42%	23	28%

Table x: Co	ntingency Ta	able - D\	/1.KEN and	IV1.1.IP								
	IV1.1.IP											
DV1.KEN	[1.0 to 1	L.8)	[1.8 to	2.6]	(2.6 to	3.4]	(3.4 to	4.2]	(4.2 to	5.0]	Tota	ıl
[1.0 to 1.8)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
[1.8 to 2.6]	0	0%	0	0%	2	50%	2	50%	0	0%	4	100%
(2.6 to 3.4]	0	0%	1	14%	1	14%	5	71%	0	0%	7	100%
(3.4 to 4.2]	0	0%	1	3%	3	9%	17	52%	12	36%	33	100%
(4.2 to 5.0]	0	0%	0	0%	2	5%	14	38%	21	57%	37	100%
Total	0	0%	2	2%	8	10%	38	47%	33	41%	81	100%
Table x: Co	ntingency Ta	able - DV	/1.KEN and	IV1.2.EE	,		,				,	
	IV1.2.EE											
DV1.KEN	[1.0 to 1	.8)	[1.8 to	2.61	(2.6 to	3.41	(3.4 to	4.21	(4.2 to	5.01	Tota	al .
[1.0 to 1.8)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
[1.8 to 2.6]	0	0%	0	0%	2	50%	2	50%	0	0%	4	100%
(2.6 to 3.4]	0	0%	1	14%	1	14%	5	71%	0	0%	7	100%
(3.4 to 4.2]	0	0%	1	3%	3	9%	17	52%	12	36%	33	100%
(4.2 to 5.0]	0	0%	0	0%	2	5%	14	38%	21	57%	37	100%
Total	0	0%	2	2%	8	10%	38	47%	33	41%	81	100%
		7,1										
Table x: Co	ntingency Ta	able - D\	/1.KEN and	IV1.3.Fa							1	
	IV1.3.Fa											
DV1.KEN	[1.0 to 1	1.8)	[1.8 to	2.61	(2.6 to	3.41	(3.4 to	4.21	(4.2 to	5.01	Tota	
[1.0 to 1.8)	0	0%	0	0%	0	0%	0.410	0%	0	0%	0	0%
[1.8 to 2.6]	0	0%	0	0%	2	50%	2	50%	0	0%	4	100%
(2.6 to 3.4]	0	0%	1	14%	1	14%	5	71%	0	0%	7	100%
(3.4 to 4.2)	0	0%	1	3%	3	9%	17	52%	12	36%	33	100%
(4.2 to 5.0]	0	0%	0	0%	2	5%	14	38%	21	57%	37	100%
Total	0	0%	2	2%	8	10%	38	47%	33	41%	81	100%
Total	0	070		270		10/0	30	4770	33	41/0	01	10070
Table x: Co	ontingency Ta	able - D\	/1.KEN and	IV1.4.Le					I .			
DV4 KEN	IV1.4.Le	. 0)	[4.0+-	2.61	/2.C+-	2.41	/2.4+-	4.21	/42+-	E 01	Т.4.	
DV1.KEN	[1.0 to 1		[1.8 to		(2.6 to		(3.4 to		(4.2 to		Tota	
[1.0 to 1.8)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
[1.8 to 2.6]	0	0%	0	0%	4	100%	0	0%	0	0%	4	100%
(2.6 to 3.4]	0	0%	2	29%	4	57%	1	14%	0	0%	7	100%
(3.4 to 4.2]	0	0%	2	6%	16	48%	9	27%	6	36%	33	100%
(4.2 to 5.0]	2	5%	0	0%	7	19%	16	43%	12	32%	37	100%
Total	2	2%	4	5%	31	38%	26	32%	18	41%	81	100%
Table X: Co	ntingency Ta	able - DV	11.KEN and	IV1.5.LO								
DV4 KEN	IV1.5.LO	. 0)	[4.0+-	2.61	/2.C+-	2.41	/2.4+-	4.21	/4.2+-	F 01	T-1-	
DV1.KEN	[1.0 to 1		[1.8 to		(2.6 to		(3.4 to		(4.2 to		Tota	
[1.0 to 1.8)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
[1.8 to 2.6]	0	0%	0	0%	3	75%	1	25%	0	0%	4	100%
(2.6 to 3.4]	0	0%	0	0%	6	86%	1	14%	0	0%	7	100%
(3.4 to 4.2]	0	0%	1	3%	8	24%	16	48%	8	24%	33	100%
(4.2 to 5.0]	1	3%	0	0%	3	8%	13	35%	20	54%	37	100%
Total	1	1%	1	1%	20	25%	31	38%	28	35%	81	100%
Toble C	 	able C'	/4 I/FN 1	11/4 01:15	 							
Table X: Co	ntingency Ta	abie - DV		1V1.5HP	VV I							
DV1 VEN	IV1.SHPWI	1 O) I	[1 0 +-	2.61	(2.6 to	2 41	12 41-	4 21	1434-	E 01	Tata	NI.
DV1.KEN	[1.0 to 1		[1.8 to				(3.4 to		(4.2 to		Tota	
[1.0 to 1.8)	0	0%	0	0%	0	0% 75%	0	0%	0	0%	0	100%
[1.8 to 2.6]	0	0%	0	0%	3	75%	1	25%	0	0%	4	100%
(2.6 to 3.4]	0	0%	1	14%	0	0%	6	86%	0	0%	7	100%
(3.4 to 4.2]	0	0%	0	12%	6	18%	16	48%	7	21%	33	100%
(4.2 to 5.0]	0	0%	0	0%	2	5%	11	30%	23	62%	37	100%
Total	0	0%	1	6%	11	14%	34	42%	30	37%	81	100%
	<u> </u>		4 1/5									
Table x: Co	ntingency Ta	able - DV	1.KEN and	IV2.COM								
D) /4 :/5::	IV2.COM	. 0)	f4 0 :	2.61	/2 ::	2.41	/2 **	4.21	/	F 01	_	
DV1.KEN	[1.0 to 1		[1.8 to		(2.6 to		(3.4 to		(4.2 to		Tota	
[1.0 to 1.8)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
[1.8 to 2.6]	0	0%	2	50%	1	25%	1	25%	0	0%	4	100%
(2.6 to 3.4]	1	14%	4	57%	2	29%	0	0%	0	0%	7	100%
(3.4 to 4.2]	0	0%	5	15%	15	45%	11	33%	2	6%	33	100%
(4.2 to 5.0]	0	0%	2	5%	7	19%	21	57%	7	19%	37	100%
Total	1	1%	13	16%	25	31%	33	41%	9	11%	81	100%

Table v. C.	ontingonou T	able D	/1 KEN and	IV3 I GLI								
Table X: CO	IV3.LSH	anie - DV	I.NEN AND	143.LON								
DV1.KEN	[1.0 to 1	8)	[1.8 to]	2.61	(2.6 to	3.4] T	(3.4 to 4	4.21 I	(4.2 to	5.01	Tota	al
[1.0 to 1.8)	0	6)	0	2.0]	(2.610)	0%	(3.4 to 2	4.2j 0%	0	0%	0	0%
[1.8 to 2.6]	0	0%	0	0%	3	75%	1	25%	0	0%	4	100%
(2.6 to 3.4]	0	0%	0	0%	4	57%	3	43%	0	0%	7	100%
(3.4 to 4.2)	0	0%	0	0%	8	24%	21	64%	4	12%	33	100%
(4.2 to 5.0]	0	0%	0	0%	1	3%	12	32%	24	65%	37	100%
Total	0	0%	0	0%	16	20%	37	46%	28	35%	81	100%
Table x: Co	ontingency Ta	able - DV	/1.KEN and	IV4.STR	AT							
	IV4.STRAT											
DV1.KEN	[1.0 to 1	8)	[1.8 to	2.6]	(2.6 to	3.4]	(3.4 to 4	4.2]	(4.2 to	5.0]	Tota	al
[1.0 to 1.8)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
[1.8 to 2.6]	0	0%	0	0%	3	75%	1	25%	0	0%	4	100%
(2.6 to 3.4]	0	0%	0	0%	1	14%	5	71%	1	14%	7	100%
(3.4 to 4.2]	0	0%	2	6%	3	9%	19	58%	9	27%	33	100%
(4.2 to 5.0]	0	0%	0	0%	2	5%	9	24%	26	70%	37	100%
Total	0	0%	2	2%	9	11%	34	42%	36	44%	81	100%
Table x: Co	ontingency Ta	able - D\	/1.KEN and	IV5.TW								
	IV5.TW											
DV1.KEN	[1.0 to 1		[1.8 to	•	(2.6 to		(3.4 to 4		(4.2 to	_	Tota	
[1.0 to 1.8)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
[1.8 to 2.6]	0	0%	2	50%	1	25%	1	25%	0	0%	4	100%
(2.6 to 3.4]	0	0%	1	14%	6	86%	0	0%	0	0%	7	100%
(3.4 to 4.2]	2	6%	6	18%	13	39%	10	30%	2	6%	33	100%
(4.2 to 5.0]	1	3%	0	0%	9	24%	16	43%	11	30%	37	100%
Total	3	4%	9	11%	29	36%	27	33%	13	16%	81	100%
Table v. C.	ontingency T	able D	/1 KEN and	IVE MOT								
rable X: Co	ontingency Ta	abie - DV		I V D.IVI O I								
DV1.KEN	[1.0 to 1	<u>ρ</u>) Ι	[1.8 to	2 61	(2.6 to	_{2 /1}	(3.4 to 4	4 21 I	(4.2 to	5.01	Tota	al
[1.0 to 1.8)	0	8)	0 0	2.6]	(2.610)	0%	(3.4 to 4	4.2j 0%	(4.2 to	0%	0	0%
[1.0 to 1.8]	0	0%	2	50%	1	25%	1	25%	0	0%	4	100%
(2.6 to 3.4]	0	0%	1	14%	6	86%	0	0%	0	0%	7	100%
(3.4 to 4.2]	2	6%	6	18%	13	39%	10	30%	2	6%	33	100%
(4.2 to 5.0]	1	3%	0	0%	9	24%	16	43%	11	30%	37	100%
Total	3	4%	9	11%	29	36%	27	33%	13	16%	81	100%
Table x: Co	ontingency Ta	able - DV	/1.KEN and	IV7.CF								
	IV7.CF											
DV1.KEN	[1.0 to 1	8)	[1.8 to	2.6]	(2.6 to	3.4]	(3.4 to 4	4.2]	(4.2 to	5.0]	Tota	al
[1.0 to 1.8)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
[1.8 to 2.6]	0	0%	0	0%	4	100%	0	0%	0	0%	4	100%
(2.6 to 3.4]	0	0%	3	43%	3	43%	1	14%	0	0%	7	100%
(3.4 to 4.2]	0	0%	2	6%	9	27%	21	64%	1	3%	33	100%
(4.2 to 5.0]	0	0%	1	3%	1	3%	13	35%	22	59%	37	100%
Total	0	0%	6	7%	17	21%	35	43%	23	28%	81	100%
Table x: Co	ontingency Ta	able - DV	/1.KEN and	IV8.PP								
	IV8.PP				T							
DV1.KEN	[1.0 to 1		[1.8 to		(2.6 to		(3.4 to 4		(4.2 to	•	Tota	
[1.0 to 1.8)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
[1.8 to 2.6]	0	0%	0	0%	3	75%	1	25%	0	0%	4	100%
(2.6 to 3.4]	0	0%	2	29%	0	0%	5	71%	0	0%	7	100%
(3.4 to 4.2]	0	0%	2	6%	6	18%	21	64%	4	12%	33	100%
(4.2 to 5.0]	0	0%	1	3%	2	5%	17	46%	17	46%	37	100%
Total	0	0%	5	6%	11	14%	44	54%	21	26%	81	100%
.			(4 IZE)	N/0 0 = =								
Table x: Co	ontingency Ta	abie - DV	1.KEN and	1V9.SOC								
D) /4 //551	IV9.SOC	0) [[4.0.	2.61	12.5	2 41	12.41	4 21	/43:	r 01		
DV1.KEN	[1.0 to 1		[1.8 to]		(2.6 to		(3.4 to 4		(4.2 to			
[1.0 to 1.8)	0	0%	0	0%	0	0%	0	0%	0	0%		
[1.8 to 2.6]	0	0%	1	25%	2	50%	1	25%	0	0%		
	0	0%	0	0%	3	43%	4	57% 58%	3	0% 9%		
(2.6 to 3.4]	0	00/	1									
(3.4 to 4.2]	0	0%	1	3%	10	30%	19					
	0 0 0	0% 0% 0%	0 2	3% 0% 2%	10 2 17	30% 5% 21%	19 13 37	35% 46%	22 25	59% 31%		

		/2.OCQ and	17 1.1.15								
IV1.1.IP											
[1.0 to 1	8)	[1.8 to]	2.6]	(2.6 to	3.4]	(3.4 to	1.2]	(4.2 to	5.0]	Tota	ıl
0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
							0%				100%
0		2	14%			10	71%	1		14	100%
							-				100%
											100%
											100%
0	076		2/0	0	1070	30	4770	33	41/0	01	10070
 	- I- I- D)	(0.0001	N/4 0 EE								
	able - D	72.0CQ and	IV1.2.EE								
	_,		1								
			-,			•	-	•	•		
											0%
			0%								100%
0	0%	0	0%	6	43%	5	36%	3	21%	14	100%
0	0%	0	0%	1	4%	15	58%	10	38%	26	100%
0	0%	0	0%	0	0%	6	15%	33	85%	39	100%
0	0%	0	0%	8	10%	27	33%	46	57%	81	100%
ntingency Ta	able - D\	/2.OCQ and	IV1.3.Fa	,	,					1	
IV1.3.Fa											
	.8)	[1.8 to	2.61 I	(2.6 to	3.4] I	(3.4 to 4	1.21	(4.2 to	5.01	Tota	ıl
-		-		•		•			•		0%
							-				100%
											100%
											100%
			-								100%
2	2%	4	5%	31	38%	26	32%	18	22%	81	100%
ntingency Ta	able - D\	/2.OCQ and	IV1.4.Le								
IV1.4.Le											
[1.0 to 1	.8)	[1.8 to]	2.6]	(2.6 to 3	3.4]	(3.4 to 4	1.2]	(4.2 to	5.0]	Tota	ıl
0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
0	0%	0	0%	2	100%	0	0%	0	0%	2	100%
0	0%	0	0%	9	64%	4	29%	1	7%	14	100%
0	0%	0	0%	6	23%	14	54%	6	23%	26	100%
1		1	3%	3		13	33%	21			100%
											100%
	-70	_	1,0			31			3370	0-	100/0
						31	3070				
ntingonov T	abla DI	/2 OCO and	IV4 5 L O			31	3070				
ontingency Ta	able - D\	/2.OCQ and	IV1.5.LO			31	30%				
IV1.5.LO								(4.24-	r 01	Taba	
IV1.5.LO [1.0 to 1	8)	[1.8 to	2.6]	(2.6 to	3.4]	(3.4 to 4	1.2]	(4.2 to		Tota	
IV1.5.LO [1.0 to 1	l.8) 0%	[1.8 to 2	2.6]	(2.6 to 3	3.4]	(3.4 to 4	1.2]	0	0%	0	0%
IV1.5.LO [1.0 to 1 0 0	8) 0% 0%	[1.8 to 3	2.6] 0% 50%	(2.6 to 3	3.4] 0% 50%	(3.4 to 4	1.2] 0% 0%	0	0% 0%	0	0% 100%
IV1.5.LO [1.0 to 1 0 0	0% 0% 0%	[1.8 to 2	2.6] 0% 50% 14%	(2.6 to 3 0 1 4	3.4] 0% 50% 29%	(3.4 to 4 0 0 7	1.2] 0% 0% 50%	0 0 1	0% 0% 7%	0 2 14	0% 100% 100%
IV1.5.LO [1.0 to 1 0 0	8) 0% 0%	[1.8 to 3	2.6] 0% 50%	(2.6 to 3	3.4] 0% 50%	(3.4 to 4	1.2] 0% 0%	0	0% 0%	0	0% 100%
IV1.5.LO [1.0 to 1 0 0	0% 0% 0%	[1.8 to 2	2.6] 0% 50% 14%	(2.6 to 3 0 1 4	3.4] 0% 50% 29%	(3.4 to 4 0 0 7	1.2] 0% 0% 50%	0 0 1	0% 0% 7%	0 2 14	0% 100% 100%
IV1.5.LO [1.0 to 1 0 0 0 1	0% 0% 0% 4%	[1.8 to 2	2.6] 0% 50% 14% 4%	(2.6 to : 0 1 4 4 4	3.4] 0% 50% 29% 15%	(3.4 to 4 0 0 7 14	1.2] 0% 0% 50% 54%	0 0 1 6	0% 0% 7% 23%	0 2 14 26	0% 100% 100% 100%
IV1.5.LO [1.0 to 1 0 0 0 1 0	0% 0% 0% 4% 0%	[1.8 to 2	2.6] 0% 50% 14% 4% 3%	(2.6 to : 0 1 4 4 2	3.4] 0% 50% 29% 15% 5%	(3.4 to 4 0 0 7 14 13	1.2] 0% 0% 50% 54% 33%	0 0 1 6 23	0% 0% 7% 23% 59%	0 2 14 26 39	0% 100% 100% 100% 100%
IV1.5.LO [1.0 to 1 0 0 0 1 0	0% 0% 0% 4% 0% 1%	[1.8 to] 0 1 2 1 1 5	2.6] 0% 50% 14% 4% 3% 6%	(2.6 to : 0	3.4] 0% 50% 29% 15% 5%	(3.4 to 4 0 0 7 14 13	1.2] 0% 0% 50% 54% 33%	0 0 1 6 23	0% 0% 7% 23% 59%	0 2 14 26 39	0% 100% 100% 100% 100%
IV1.5.LO [1.0 to 1 0 0 1 0 1	0% 0% 0% 4% 0% 1%	[1.8 to] 0 1 2 1 1 5	2.6] 0% 50% 14% 4% 3% 6%	(2.6 to : 0	3.4] 0% 50% 29% 15% 5%	(3.4 to 4 0 0 7 14 13	1.2] 0% 0% 50% 54% 33%	0 0 1 6 23	0% 0% 7% 23% 59%	0 2 14 26 39	0% 100% 100% 100% 100%
IV1.5.LO [1.0 to 1 0 0 0 1 0 1 ontingency Ta	0% 0% 0% 4% 0% 1%	[1.8 to] 0 1 2 1 1 5	2.6] 0% 50% 14% 4% 3% 6% IV1.SHP	(2.6 to : 0	3.4] 0% 50% 29% 15% 5% 14%	(3.4 to 4 0 0 7 14 13	1.2] 0% 0% 50% 54% 33% 42%	0 0 1 6 23	0% 0% 7% 23% 59% 37%	0 2 14 26 39	0% 100% 100% 100% 100%
IV1.5.LO [1.0 to 1 0 0 1 0 1 votingency Tailors	0% 0% 0% 4% 0% 1%	[1.8 to : 0	2.6] 0% 50% 14% 4% 3% 6% IV1.SHP	(2.6 to : 0	3.4] 0% 50% 29% 15% 5% 14%	(3.4 to 4 to	1.2] 0% 0% 50% 54% 33% 42%	0 0 1 6 23 30	0% 0% 7% 23% 59% 37%	0 2 14 26 39 81	0% 100% 100% 100% 100%
IV1.5.LO [1.0 to 1 0 0 1 0 1 ontingency Tailor of 1 [1.0 to 1 0 0 1 This is a second of the second o	0% 0% 0% 4% 0% 1% able - D\	[1.8 to : 0	2.6] 0% 50% 14% 4% 3% 6% IV1.SHP	(2.6 to : 0	3.4] 0% 50% 29% 15% 5% 14% 3.4] 0%	(3.4 to 4 to	1.2] 0% 0% 50% 54% 33% 42% 42% 4.2] 0%	0 0 1 6 23 30 (4.2 to	0% 0% 7% 23% 59% 37%	0 2 14 26 39 81	0% 100% 100% 100% 100% 100%
IV1.5.LO [1.0 to 1 0 0 1 0 1 ontingency Ta IV1.SHPWI [1.0 to 1 0 0	0% 0% 0% 4% 0% 1% able - D\	[1.8 to 2	2.6] 0% 50% 14% 4% 3% 6% IV1.SHP 2.6] 0% 0%	(2.6 to : 0	3.4] 0% 50% 29% 15% 5% 14% 3.4] 0% 100%	(3.4 to 4 to	1.2] 0% 0% 50% 54% 33% 42% 42% 4.2] 0% 0%	0 0 1 6 23 30 (4.2 to 0	0% 0% 7% 23% 59% 37% 5.0] 0%	0 2 14 26 39 81 Tota	100% 100% 100% 100% 100% 100%
IV1.5.LO [1.0 to 1 0 0 1 0 1 ontingency Ta IV1.SHPWI [1.0 to 1 0 0 0	8) 0% 0% 4% 0% 1% able - DV	[1.8 to 2	2.6] 0% 50% 14% 4% 3% 6% IV1.SHP 2.6] 0% 0% 7%	(2.6 to : 0	3.4] 0% 50% 29% 15% 5% 14% 3.4] 0% 100% 29%	(3.4 to 4 to	1.2] 0% 0% 50% 54% 33% 42% 1.2] 0% 0% 64%	0 0 1 6 23 30 (4.2 to 0 0	0% 0% 7% 23% 59% 37% 5.0] 0% 0%	0 2 14 26 39 81 Tota 0 2	0% 100% 100% 100% 100% 100%
IV1.5.LO [1.0 to 1 0 0 1 0 1 0 1 ontingency TailV1.SHPWI [1.0 to 1 0 0 0 0 0	8) 0% 0% 0% 4% 0% 1% able - DV 8) 0% 0% 0% 0%	[1.8 to 2	2.6] 0% 50% 14% 4% 3% 6% IV1.SHP 2.6] 0% 0% 7% 0%	(2.6 to : 0	3.4] 0% 50% 29% 15% 5% 14% 3.4] 0% 100% 29% 12%	(3.4 to 4 to	1.2] 0% 0% 50% 54% 33% 42% 1.2] 0% 0% 64% 69%	0 0 1 6 23 30 (4.2 to 0 0 0	0% 0% 7% 23% 59% 37% 5.0] 0% 0% 0%	0 2 14 26 39 81 Tota 0 2 14	0% 100% 100% 100% 100% 100% 100%
IV1.5.LO [1.0 to 1 0 0 1 0 1 0 1 ontingency Ta IV1.SHPWI [1.0 to 1 0 0 0 0 0 0 0 0	8) 0% 0% 4% 0% 1% able - D\ 8) 0% 0% 0% 0% 0% 0%	[1.8 to 2	2.6] 0% 50% 14% 4% 3% 6% IV1.SHP 2.6] 0% 0% 0% 0% 0% 0%	(2.6 to : 0	3.4] 0% 50% 29% 15% 5% 14% 3.4] 0% 100% 29% 12% 8%	(3.4 to 4 to	1.2] 0% 0% 50% 54% 33% 42% 1.2] 0% 0% 64% 69% 28%	0 0 1 6 23 30 (4.2 to 0 0 0 5	0% 0% 7% 23% 59% 37% 5.0] 0% 0% 0% 19% 64%	0 2 14 26 39 81 Tota 0 2 14 26 39	0% 100% 100% 100% 100% 100% 100%
IV1.5.LO [1.0 to 1 0 0 1 0 1 0 1 ontingency TailV1.SHPWI [1.0 to 1 0 0 0 0 0	8) 0% 0% 0% 4% 0% 1% able - DV 8) 0% 0% 0% 0%	[1.8 to 2	2.6] 0% 50% 14% 4% 3% 6% IV1.SHP 2.6] 0% 0% 7% 0%	(2.6 to : 0	3.4] 0% 50% 29% 15% 5% 14% 3.4] 0% 100% 29% 12%	(3.4 to 4 to	1.2] 0% 0% 50% 54% 33% 42% 1.2] 0% 0% 64% 69%	0 0 1 6 23 30 (4.2 to 0 0 0	0% 0% 7% 23% 59% 37% 5.0] 0% 0% 0%	0 2 14 26 39 81 Tota 0 2 14	0% 100% 100% 100% 100% 100% 100%
IV1.5.LO [1.0 to 1 0 0 1 0 1 0 1 ontingency Ta IV1.SHPWI [1.0 to 1 0 0 0 0 0 0 0 0 0	8) 0% 0% 4% 0% 1% able - DV 8) 0% 0% 0% 0% 0% 0% 0%	[1.8 to] 0 1 2 1 1 5 /2.0CQ and [1.8 to] 0 0 1 0 1	2.6] 0% 50% 14% 4% 3% 6% IV1.SHP 2.6] 0% 0% 7% 0% 0% 1%	(2.6 to : 0	3.4] 0% 50% 29% 15% 5% 14% 3.4] 0% 100% 29% 12% 8%	(3.4 to 4 to	1.2] 0% 0% 50% 54% 33% 42% 1.2] 0% 0% 64% 69% 28%	0 0 1 6 23 30 (4.2 to 0 0 0 5	0% 0% 7% 23% 59% 37% 5.0] 0% 0% 0% 19% 64%	0 2 14 26 39 81 Tota 0 2 14 26 39	0% 100% 100% 100% 100% 100% 100%
IV1.5.LO [1.0 to 1 0 0 0 1 0 1 0 1 0 1 IV1.SHPWI [1.0 to 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8) 0% 0% 4% 0% 1% able - DV 8) 0% 0% 0% 0% 0% 0% 0%	[1.8 to] 0 1 2 1 1 5 /2.0CQ and [1.8 to] 0 0 1 0 1	2.6] 0% 50% 14% 4% 3% 6% IV1.SHP 2.6] 0% 0% 7% 0% 0% 1%	(2.6 to : 0	3.4] 0% 50% 29% 15% 5% 14% 3.4] 0% 100% 29% 12% 8%	(3.4 to 4 to	1.2] 0% 0% 50% 54% 33% 42% 1.2] 0% 0% 64% 69% 28%	0 0 1 6 23 30 (4.2 to 0 0 0 5	0% 0% 7% 23% 59% 37% 5.0] 0% 0% 0% 19% 64%	0 2 14 26 39 81 Tota 0 2 14 26 39	0% 100% 100% 100% 100% 100% 100%
IV1.5.LO [1.0 to 1 0 0 0 1 0 1 0 1 0 1 0 1 IV1.SHPWI [1.0 to 1 0 0 0 0 0 0 0 IV1.SHPWI IV1.SHPW	8) 0% 0% 0% 4% 0% 1% able - D\ 8) 0% 0% 0% 0% 0% 0% able - D\	[1.8 to 2	2.6] 0% 50% 14% 4% 3% 6% IV1.SHP 0% 0% 7% 0% 1% IV2.COM	(2.6 to : 0	3.4] 0% 50% 29% 15% 5% 14% 3.4] 0% 100% 29% 12% 8% 15%	(3.4 to 4 to	1.2] 0% 0% 50% 54% 33% 42% 1.2] 0% 0% 64% 69% 28% 47%	0 0 1 6 23 30 (4.2 to 0 0 0 5 25	0% 0% 7% 23% 59% 37% 5.0] 0% 0% 0% 19% 64% 37%	0 2 14 26 39 81 Tota 0 2 14 26 39	0% 100% 100% 100% 100% 100% 100% 100% 1
IV1.5.LO [1.0 to 1 0 0 0 1 0 1 0 1 0 1 IV1.SHPWI [1.0 to 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8) 0% 0% 0% 4% 0% 1% able - D\ 8) 0% 0% 0% 0% 0% 0% able - D\	[1.8 to] 0 1 2 1 1 5 /2.0CQ and [1.8 to] 0 0 1 0 1	2.6] 0% 50% 14% 4% 3% 6% IV1.SHP 0% 0% 7% 0% 1% IV2.COM	(2.6 to : 0	3.4] 0% 50% 29% 15% 5% 14% 3.4] 0% 100% 29% 12% 8% 15%	(3.4 to 4 to	1.2] 0% 0% 50% 54% 33% 42% 1.2] 0% 0% 64% 69% 28% 47%	0 0 1 6 23 30 (4.2 to 0 0 0 5	0% 0% 7% 23% 59% 37% 5.0] 0% 0% 0% 19% 64% 37%	0 2 14 26 39 81 Tota 0 2 14 26 39	0% 100% 100% 100% 100% 100% 100% 100% 1
IV1.5.LO [1.0 to 1 0 0 0 1 0 1 0 1 0 1 0 1 IV1.SHPWI [1.0 to 1 0 0 0 0 0 0 0 IV1.SHPWI IV1.SHPW	8) 0% 0% 0% 4% 0% 1% able - D\ 8) 0% 0% 0% 0% 0% 0% able - D\	[1.8 to 2	2.6] 0% 50% 14% 4% 3% 6% IV1.SHP 0% 0% 7% 0% 1% IV2.COM	(2.6 to : 0	3.4] 0% 50% 29% 15% 5% 14% 3.4] 0% 100% 29% 12% 8% 15%	(3.4 to 4 to	1.2] 0% 0% 50% 54% 33% 42% 1.2] 0% 0% 64% 69% 28% 47%	0 0 1 6 23 30 (4.2 to 0 0 0 5 25	0% 0% 7% 23% 59% 37% 5.0] 0% 0% 0% 19% 64% 37%	0 2 14 26 39 81 Tota 0 2 14 26 39	0% 100% 100% 100% 100% 100% 100% 100% 1
IV1.5.LO [1.0 to 1 0 0 0 1 0 1 0 1 IV1.SHPWI [1.0 to 1 0 0 0 0 0 IV2.COM [1.0 to 1	8) 0% 0% 4% 0% 1% able - D\ 8) 0% 0% 0% 0% 0% 0% 0% 8)	[1.8 to : 0	2.6] 0% 50% 14% 4% 3% 6% IV1.SHP 0% 0% 7% 0% 1% IV2.COM	(2.6 to : 0	3.4] 0% 50% 29% 15% 5% 14% 3.4] 0% 100% 29% 12% 8% 15%	(3.4 to 4 to	1.2] 0% 0% 50% 54% 33% 42% 1.2] 0% 0% 64% 69% 28% 47% 1.2]	0 0 1 6 23 30 (4.2 to 0 0 0 5 25 30	0% 0% 7% 23% 59% 37% 5.0] 0% 0% 0% 19% 64% 37%	0 2 14 26 39 81 Tota 0 2 14 26 39 81	0% 100% 100% 100% 100% 100% 100% 100% 1
IV1.5.LO [1.0 to 1 0 0 0 1 0 1 0 1 0 1 IV1.SHPWI [1.0 to 1 0 0 0 0 0 IV2.COM [1.0 to 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8) 0% 0% 4% 0% 1% able - D\ 8) 0% 0% 0% 0% 0% 0% 8)	[1.8 to : 0	2.6] 0% 50% 14% 4% 3% 6% IV1.SHP 2.6] 0% 0% 1% IV2.COM	(2.6 to : 0	3.4] 0% 50% 29% 15% 5% 14% 3.4] 0% 100% 29% 15% 3.4] 0 3.4] 0 3.4] 0 3.4] 0 3.4] 0 3.4] 0 3.4] 0 3.4] 0 3.4] 0 3.4] 0 3.4] 0 3.4] 0 3.4] 0 3.4] 0 3.4] 0 3.4] 0 3.4] 0 3.4]	(3.4 to 4 to	1.2] 0% 0% 50% 54% 33% 42% 1.2] 0% 0% 64% 69% 28% 47% 1.2] 0%	0 0 1 6 23 30 (4.2 to 0 0 0 5 25 30	0% 0% 7% 23% 59% 37% 5.0] 0% 0% 19% 64% 37%	0 2 14 26 39 81 Tota 0 2 14 26 39 81	0% 100% 100% 100% 100% 100% 100% 100% 1
IV1.5.LO [1.0 to 1 0 0 0 1 0 1 0 1 0 1 IV1.SHPWI [1.0 to 1 0 0 0 0 1 IV2.COM [1.0 to 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8) 0% 0% 4% 0% 1% able - D\ 8) 0% 0% 0% 0% 0% 0% 8)	[1.8 to : 0	2.6] 0% 50% 14% 4% 3% 6% IV1.SHP 0% 0% 1% IV2.COM 1% 1V2.COM 2.6] 0% 50%	(2.6 to : 0	3.4] 0% 50% 29% 15% 5% 14% 3.4] 0% 100% 29% 15% 3.4] 0% 50%	(3.4 to 4 to	1.2] 0% 0% 50% 54% 33% 42% 1.2] 0% 0% 64% 69% 28% 47% 1.2] 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%	0 0 1 6 23 30 (4.2 to 0 0 5 25 30 (4.2 to 0 0	0% 0% 7% 23% 59% 37% 5.0] 0% 0% 19% 64% 37%	0 2 14 26 39 81 Tota 0 2 14 26 39 81 Tota 0 2 14 26 39 81	0% 100% 100% 100% 100% 100% 100% 100% 1
IV1.5.LO [1.0 to 1 0 0 0 1 0 1 0 1 0 1 IV1.SHPWI [1.0 to 1 0 0 0 0 0 IV2.COM [1.0 to 1 0 0 1 IV2.COM [1.0 to 1 0 0 1	8) 0% 0% 0% 4% 0% 1% able - D\ 8) 0% 0% 0% 0% 0% 0%	[1.8 to : 0	2.6] 0% 50% 14% 4% 3% 6% IV1.SHP 0% 0% 1% IV2.COM 1% 50% 21%	(2.6 to : 0	3.4] 0% 50% 29% 15% 5% 14% 3.4] 0% 100% 29% 15% 3.4] 0% 50% 64%	(3.4 to 4 to	1.2] 0% 0% 50% 54% 33% 42% 1.2] 0% 0% 64% 69% 28% 47% 1.2] 0% 0% 0% 7%	0 0 1 6 23 30 (4.2 to 0 0 0 5 25 30 (4.2 to 0 0	0% 0% 7% 23% 59% 37% 5.0] 0% 0% 19% 64% 37%	0 2 14 26 39 81 Tota 0 2 14 26 39 81 Tota 0 2 14 14 16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	0% 100% 100% 100% 100% 100% 100% 100% 1
	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0% 0 0% 0 0% 0 0% 0 0% 0 0% 0 0% 0 0%	0 0% 0 0 0% 1 0 0% 1 0 0% 1 0 0% 1 0 0% 0	0 0% 0 0% 0 0% 0 0% 0 0% 0 0% 0 0% 0 0	0 0% 0 0% 2 0 0% 0 0% 2 0 0% 0 0% 3 0 0% 0 0% 3 0 0% 2 2% 8 0 0% 0 0% 3 0 0% 2 2% 8 0 0 0% 0 0% 0 0 0% 0 0% 0 0 0% 0 0%	0 0% 0 0% 2 100% 0 0% 2 14% 1 7% 0 0 0% 0 0% 2 8% 0 0 0% 0 0% 3 8% 0 0 0% 2 2% 8 10% Intingency Table - DV2.OCQ and IV1.2.EE V1.2.EE [1.0 to 1.8)	0 0% 0 0% 2 100% 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	O 0%	O 0% O 0%	0 0% 0 0% 2 14% 1 7% 10 71% 1 7% 0 0% 0 0% 0 0% 0 0% 0	0 0% 0 0% 2 14% 1 7% 10 71% 1 7% 14 0 0% 0 0% 2 14% 1 7% 10 71% 1 7% 14 0 0 0% 0 0% 2 8% 15 58% 9 35% 26 0 0 0% 0 0% 3 8% 13 33% 23 59% 39 0 0 0% 2 2% 8 10% 38 47% 33 41% 81 Intingency Table - DV2.OCQ and IV1.2.EE V1.2.EE V1.2.EE [1.0 to 1.8)

DV2.OCQ			12.UCQ and	IV3.LSH								
DV2.OCQ	IV3.LSH											
	[1.0 to 1	.8)	[1.8 to	2.6]	(2.6 to	3.4]	(3.4 to 4	4.2]	(4.2 to	5.0]	Tota	ıl
[1.0 to 1.8)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
[1.8 to 2.6]	0	0%	0	0%	2	100%	0	0%	0	0%	2	100%
(2.6 to 3.4]	0	0%	0	0%	8	57%	6	43%	0	0%	14	100%
(3.4 to 4.2]	0	0%	0	0%	4	15%	18	69%	4	15%	26	100%
(4.2 to 5.0]	0	0%	0	0%	2	5%	13	33%	24	62%	39	100%
Total	0	0%	0	0%	16	20%	37	46%	28	35%	81	100%
Total	0	070	- 0	070	10	2070	37	4070	20	3370	- 01	10070
T-515 C.	 	-bl- D	(2 OCO ===d	IVA CTD	A.T.		1					
Table X: Co	ontingency Ta	able - DV	72.00Q and	1V4.51K	AI							
D) /2 000	IV4.STRAT	0)	[4.0.	2.61	12.61	2.41	/2.41	4 01	/42:	5.01		
DV2.OCQ	[1.0 to 1		[1.8 to		(2.6 to		(3.4 to 4		(4.2 to		Tota	
[1.0 to 1.8)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
[1.8 to 2.6]	0	0%	0	0%	2	100%	0	0%	0	0%	2	100%
(2.6 to 3.4]	0	0%	0	0%	8	57%	6	43%	0	0%	14	100%
(3.4 to 4.2]	0	0%	0	0%	4	15%	18	69%	4	15%	26	100%
(4.2 to 5.0]	0	0%	0	0%	2	5%	13	33%	24	62%	39	100%
Total	0	0%	0	0%	16	20%	37	46%	28	35%	81	100%
Table x: Co	ontingency Ta	able - D\	/2.OCQ and	IV5.TW			1	1	1	1	1	
	IV5.TW											
DV2.OCQ	[1.0 to 1	.8)	[1.8 to	2.61	(2.6 to	3.41	(3.4 to 4	4.21 I	(4.2 to	5.01	Tota	ıl
[1.0 to 1.8)	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
-	0	0%	2	100%	0	0%	0	0%	0	0%	2	100%
[1.8 to 2.6]	+											
(2.6 to 3.4]	1	7%	2	14%	9	64%	2	14%	0	0%	14	100%
(3.4 to 4.2]	0	0%	3	12%	11	42%	9	35%	3	12%	26	100%
(4.2 to 5.0]	2	5%	2	5%	9	23%	16	41%	10	26%	39	100%
Total	3	4%	9	11%	29	36%	27	33%	13	16%	81	100%
Table x: Co	ontingency Ta	able - D\	/2.OCQ and	IV6.MOT								
	IV6.MOT		•									
DV2.OCQ	[1.0 to 1	.8)	[1.8 to	2.6]	(2.6 to	3.4]	(3.4 to 4	4.2]	(4.2 to	5.0]	Tota	ıl
[1.0 to 1.8)	0	0%	0	0%	, 0	0%	, 0	0%	, 0	0%	0	0%
[1.8 to 2.6]	0	0%	0	0%	2	100%	0	0%	0	0%	2	100%
(2.6 to 3.4]	0	0%	3	21%	11	79%	0	0%	0	0%	14	100%
<u> </u>	0	0%	1	4%	3	12%	21	81%	1	4%	26	
(3.4 to 4.2]	1							-				100%
(4.2 to 5.0]	0	0%	2	5%	11	3%	14	36%	22	56%	39	100%
Total	0	0%	6	7%	17	21%	35	43%	23	28%	81	100%
Table x: Co	ontingency Ta	able - D\	/2.OCQ and	IV7.CF								
	IV7.CF											
DV2.OCQ	[1.0 to 1	.8)	[1.8 to	2.6]	(2.6 to	3.4]		4 21		5.01		AI.
[1.0 to 1.8)	0	0%			(2.0 t0		(3.4 to 4	4.2]	(4.2 to	5.0]	Tota	
			0	0%	0	0%	(3.4 to 4	0%	(4.2 to 0	0%	Tota 0	0%
[1.8 to 2.6]		0%	0	0% 100%		0% 0%						
(2.6 to 3.4]	0	0% 0%			0		0	0%	0	0%	0	0%
	0		2	100%	0	0%	0	0% 0%	0	0% 0%	0	0% 100%
(2.6 to 3.4]	0	0% 4%	2 6	100% 43% 19%	0 0 6	0% 43% 42%	0 0 2	0% 0% 14% 35%	0 0 0	0% 0% 0% 0%	0 2 14	0% 100% 100% 100%
(2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0]	0 1 1	0% 4% 3%	2 6 5 3	100% 43% 19% 8%	0 0 6 11 4	0% 43% 42% 10%	0 0 2 9 24	0% 0% 14% 35% 62%	0 0 0 0 7	0% 0% 0% 0% 18%	0 2 14 26 39	0% 100% 100% 100% 100%
(2.6 to 3.4] (3.4 to 4.2]	0	0% 4%	2 6 5	100% 43% 19%	0 0 6 11	0% 43% 42%	0 0 2 9	0% 0% 14% 35%	0 0 0	0% 0% 0% 0%	0 2 14 26	0% 100% 100% 100%
(2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total	0 1 1 2	0% 4% 3% 2%	2 6 5 3 16	100% 43% 19% 8% 20%	0 0 6 11 4	0% 43% 42% 10%	0 0 2 9 24	0% 0% 14% 35% 62%	0 0 0 0 7	0% 0% 0% 0% 18%	0 2 14 26 39	0% 100% 100% 100% 100%
(2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total	0 1 1 2 ntingency Tab	0% 4% 3% 2%	2 6 5 3 16	100% 43% 19% 8% 20%	0 0 6 11 4	0% 43% 42% 10%	0 0 2 9 24	0% 0% 14% 35% 62%	0 0 0 0 7	0% 0% 0% 0% 18%	0 2 14 26 39	0% 100% 100% 100% 100%
(2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total	0 1 1 2 2 Intingency Tab	0% 4% 3% 2% ble - DV2	2 6 5 3 16	100% 43% 19% 8% 20%	0 0 6 11 4 21	0% 43% 42% 10% 26%	0 0 2 9 24 35	0% 0% 14% 35% 62% 43%	0 0 0 0 7 7	0% 0% 0% 0% 18% 9%	0 2 14 26 39 81	0% 100% 100% 100% 100% 100%
(2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total Table x: Co	0 1 1 2 2 Intingency Tab	0% 4% 3% 2% ble - DV2	2 6 5 3 16 2.OCQ and IV	100% 43% 19% 8% 20% (8.PP	0 0 6 11 4 21 (2.6 to	0% 43% 42% 10% 26%	0 0 2 9 24 35	0% 0% 14% 35% 62% 43%	0 0 0 0 7 7 7 (4.2 to	0% 0% 0% 0% 18% 9%	0 2 14 26 39 81	0% 100% 100% 100% 100% 100%
(2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total Table x: Co DV2.OCQ [1.0 to 1.8)	0 1 1 2 ntingency Tab IV8.PP [1.0 to 1	0% 4% 3% 2% ole - DV2	2 6 5 3 16 2.OCQ and IV	100% 43% 19% 8% 20% 28.PP 2.6]	0 0 6 11 4 21 (2.6 to	0% 43% 42% 10% 26% 3.4]	0 0 2 9 24 35	0% 0% 14% 35% 62% 43%	0 0 0 0 7 7 7 (4.2 to	0% 0% 0% 0% 18% 9%	0 2 14 26 39 81 Tota	0% 100% 100% 100% 100% 100%
(2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total Table x: Col DV2.OCQ [1.0 to 1.8) [1.8 to 2.6]	0 1 1 2 IV8.PP [1.0 to 1 0	0% 4% 3% 2% ble - DV2 8) 0% 0%	2 6 5 3 16 2.OCQ and IV [1.8 to 0 1	100% 43% 19% 8% 20% (8.PP	0 0 6 11 4 21 (2.6to	0% 43% 42% 10% 26% 3.4] 0% 0%	0 0 2 9 24 35 (3.4 to 4	0% 0% 14% 35% 62% 43% 4.2] 0% 50%	0 0 0 7 7 7 (4.2 to	0% 0% 0% 0% 18% 9% 5.0] 0%	0 2 14 26 39 81 Tota	0% 100% 100% 100% 100% 100%
(2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total Table x: Co DV2.OCQ [1.0 to 1.8)	0 1 1 2 ntingency Tab IV8.PP [1.0 to 1	0% 4% 3% 2% ole - DV2	2 6 5 3 16 2.OCQ and IV	100% 43% 19% 8% 20% 28.PP 2.6]	0 0 6 11 4 21 (2.6 to	0% 43% 42% 10% 26% 3.4]	0 0 2 9 24 35	0% 0% 14% 35% 62% 43%	0 0 0 0 7 7 7 (4.2 to	0% 0% 0% 0% 18% 9%	0 2 14 26 39 81 Tota	0% 100% 100% 100% 100% 100%
(2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total Table x: Co DV2.OCQ [1.0 to 1.8) [1.8 to 2.6]	0 1 1 2 IV8.PP [1.0 to 1 0	0% 4% 3% 2% ble - DV2 8) 0% 0%	2 6 5 3 16 2.OCQ and IV [1.8 to 0 1	100% 43% 19% 8% 20% (8.PP	0 0 6 11 4 21 (2.6to	0% 43% 42% 10% 26% 3.4] 0% 0%	0 0 2 9 24 35 (3.4 to 4	0% 0% 14% 35% 62% 43% 4.2] 0% 50%	0 0 0 7 7 7 (4.2 to	0% 0% 0% 0% 18% 9% 5.0] 0%	0 2 14 26 39 81 Tota	0% 100% 100% 100% 100% 100%
(2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total Table x: Col DV2.OCQ [1.0 to 1.8) [1.8 to 2.6] (2.6 to 3.4]	0 1 1 2 IV8.PP [1.0 to 1 0 0	0% 4% 3% 2% ble - DV2 8) 0% 0%	2 6 5 3 16 2.OCQ and IV [1.8 to 0 1 3	100% 43% 19% 8% 20% (8.PP 2.6] 0% 50% 21%	0 0 6 11 4 21 (2.6 to 0 0	0% 43% 42% 10% 26% 3.4] 0% 0% 29%	0 0 2 9 24 35 (3.4 to 4 0 1	0% 0% 14% 35% 62% 43% 4.2] 0% 50% 50%	0 0 0 0 7 7 7 (4.2 to	0% 0% 0% 0% 18% 9% 5.0] 0% 0%	0 2 14 26 39 81 Tota 0 2	0% 100% 100% 100% 100% 100%
(2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total Table x: Col DV2.OCQ [1.0 to 1.8) [1.8 to 2.6] (2.6 to 3.4] (3.4 to 4.2]	0 1 1 2 IV8.PP [1.0 to 1 0 0	0% 4% 3% 2% ole - DV2 8) 0% 0% 0%	2 6 5 3 16 2.OCQ and IV [1.8 to 0 1 3 0 0]	100% 43% 19% 8% 20% (8.PP 2.6] 0% 50% 21%	0 0 6 11 4 21 (2.6to 0 0	0% 43% 42% 10% 26% 3.4] 0% 0% 29% 12%	0 0 2 9 24 35 (3.4 to 4 0 1 7	0% 0% 14% 35% 62% 43% 4.2] 0% 50% 50% 73%	0 0 0 7 7 7 (4.2 to 0 0	0% 0% 0% 0% 18% 9% 5.0] 0% 0% 0% 15%	0 2 14 26 39 81 Tota 0 2 14	0% 100% 100% 100% 100% 100% 100% 100% 1
(2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total Table x: Col DV2.OCQ [1.0 to 1.8) [1.8 to 2.6] (2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0]	0 1 1 2 IV8.PP [1.0 to 1 0 0	0% 4% 3% 2% ble - DV2 8) 0% 0% 0% 0%	2 6 5 3 16 2.OCQ and IV [1.8 to 0 1 3 0	100% 43% 19% 8% 20% (8.PP 2.6] 0% 50% 21% 0% 3%	0 0 6 11 4 21 (2.6 to 0 0 4 3	0% 43% 42% 10% 26% 3.4] 0% 0% 29% 12% 10%	0 0 2 9 24 35 (3.4 to 4 0 1 7 19	0% 0% 14% 35% 62% 43% 4.2] 0% 50% 50% 73% 44%	0 0 0 7 7 7 (4.2 to 0 0 0	0% 0% 0% 0% 18% 9% 5.0] 0% 0% 0% 15% 44%	0 2 14 26 39 81 Tota 0 2 14 26 39	0% 100% 100% 100% 100% 100% 100% 100% 1
(2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total Table x: Co DV2.OCQ [1.0 to 1.8) [1.8 to 2.6] (2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0]	0 1 1 2 IV8.PP [1.0 to 1 0 0 0	0% 4% 3% 2% ble - DV2 8) 0% 0% 0% 0% 0% 0%	2 6 5 3 16 2.OCQ and IV 0 1 3 0 0 1 5 5	100% 43% 19% 8% 20% (8.PP 2.6] 0% 50% 21% 0% 3% 6%	0 0 6 11 4 21 (2.6 to 0 0 4 3 4	0% 43% 42% 10% 26% 3.4] 0% 0% 29% 12% 10%	0 0 2 9 24 35 (3.4 to 4 0 1 7 19	0% 0% 14% 35% 62% 43% 4.2] 0% 50% 50% 73% 44%	0 0 0 7 7 7 (4.2 to 0 0 0	0% 0% 0% 0% 18% 9% 5.0] 0% 0% 15% 44%	0 2 14 26 39 81 Tota 0 2 14 26 39	0% 100% 100% 100% 100% 100% 100% 100% 1
(2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total Table x: Co DV2.OCQ [1.0 to 1.8) [1.8 to 2.6] (2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0]	0 1 1 2 Intingency Tak IV8.PP [1.0 to 1 0 0 0 0 0 0 0 ontingency Tak	0% 4% 3% 2% ble - DV2 8) 0% 0% 0% 0% 0% 0%	2 6 5 3 16 2.OCQ and IV 0 1 3 0 0 1 5 5	100% 43% 19% 8% 20% (8.PP 2.6] 0% 50% 21% 0% 3% 6%	0 0 6 11 4 21 (2.6 to 0 0 4 3 4	0% 43% 42% 10% 26% 3.4] 0% 0% 29% 12% 10%	0 0 2 9 24 35 (3.4 to 4 0 1 7 19	0% 0% 14% 35% 62% 43% 4.2] 0% 50% 50% 73% 44%	0 0 0 7 7 7 (4.2 to 0 0 0	0% 0% 0% 0% 18% 9% 5.0] 0% 0% 15% 44%	0 2 14 26 39 81 Tota 0 2 14 26 39	0% 100% 100% 100% 100% 100% 100% 100% 1
(2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total Table x: Co DV2.OCQ [1.0 to 1.8) [1.8 to 2.6] (2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total	0 1 1 2 Intingency Tak IV8.PP [1.0 to 1 0 0 0 0 0 0 0 Intingency Tak IV9.SOC	0% 4% 3% 2% ble - DV2 8) 0% 0% 0% 0% 0% 0% 0% 0%	2 6 5 3 16 2.OCQ and IV 1 3 0 1 5 V2.OCQ and	100% 43% 19% 8% 20% (8.PP 2.6] 0% 50% 21% 0% 3% 6% IV9.SOC	0 0 6 11 4 21 (2.6 to 0 0 4 3 4	0% 43% 42% 10% 26% 3.4] 0% 0% 29% 12% 10% 14%	0 0 2 9 24 35 (3.4 to 4 0 1 7 19 17	0% 0% 14% 35% 62% 43% 4.2] 0% 50% 50% 73% 44% 54%	0 0 0 7 7 7 (4.2 to 0 0 0 4 17	0% 0% 0% 0% 18% 9% 5.0] 0% 0% 15% 44% 26%	0 2 14 26 39 81 Tota 0 2 14 26 39 81	0% 100% 100% 100% 100% 100% 100% 100% 1
(2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total Table x: Co DV2.OCQ [1.0 to 1.8) [1.8 to 2.6] (2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total Table x: Co	0 1 1 2 Intingency Tak IV8.PP [1.0 to 1 0 0 0 0 0 0 Intingency Tak IV9.SOC [1.0 to 1	0% 4% 3% 2% ble - DV2 8) 0% 0% 0% 0% 0% 0%8)	2 6 5 3 16 2.OCQ and IV 0 1 3 0 1 5 5 V2.OCQ and [1.8 to 2 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1	100% 43% 19% 8% 20% (8.PP) 2.6] 0% 50% 21% 0% 3% 6% IV9.SOC	0 0 6 11 4 21 (2.6 to	0% 43% 42% 10% 26% 3.4] 0% 0% 29% 12% 10% 14%	0 0 2 9 24 35 (3.4 to 4 0 1 7 19 17 44	0% 0% 14% 35% 62% 43% 4.2] 0% 50% 73% 44% 54% 4.2]	0 0 0 0 7 7 7 (4.2 to 0 0 0 4 17 21	0% 0% 0% 0% 18% 9% 5.0] 0% 0% 15% 44% 26%	0 2 14 26 39 81 Tota 0 2 14 26 39 81	0% 100% 100% 100% 100% 100% 100% 100% 1
(2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total Table x: Co DV2.OCQ [1.0 to 1.8) [1.8 to 2.6] (2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total Table x: Co DV2.OCQ [1.0 to 1.8)	0 1 1 2 Intingency Tak IV8.PP [1.0 to 1 0 0 0 0 0 0 Intingency Tak IV9.SOC [1.0 to 1	0% 4% 3% 2% ble - DV2 8) 0% 0% 0% 0% 0% 0%8)8)	2 6 5 3 16 2.OCQ and IV 1 3 0 1 5 V2.OCQ and [1.8 to 0 0 1 1 5]	100% 43% 19% 8% 20% (8.PP 2.6] 0% 50% 21% 0% 6% IV9.SOC	0 0 6 11 4 21 (2.6 to 0 0 4 3 4 11	0% 43% 42% 10% 26% 3.4] 0% 0% 29% 12% 10% 14%	0 0 2 9 24 35 (3.4 to 4 0 1 7 19 17 44	0% 0% 14% 35% 62% 43% 4.2] 0% 50% 73% 44% 54% 4.2] 0%	0 0 0 0 7 7 7 (4.2 to 0 0 4 17 21	0% 0% 0% 0% 18% 9% 5.0] 0% 0% 15% 44% 26%	0 2 14 26 39 81 Tota 0 2 14 26 39 81	0% 100% 100% 100% 100% 100% 100% 100% 1
(2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total Table x: Co DV2.OCQ [1.0 to 1.8) [1.8 to 2.6] (2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total Table x: Co DV2.OCQ [1.0 to 1.8) [1.8 to 2.6]	0 1 1 2 Intingency Tak IV8.PP [1.0 to 1 0 0 0 0 0 Intingency Tak IV9.SOC [1.0 to 1 0 0 0	0% 4% 3% 2% Dile - DV2 8) 0% 0% 0% 0%8)88	2 6 5 3 16 2.OCQ and IV [1.8 to 0 1 5 5 4 2.OCQ and IV 2.	100% 43% 19% 8% 20% (8.PP 2.6] 0% 50% 21% 0% (8.V9.SOC	0 0 6 11 4 21 (2.6 to 0 0 4 3 4 11	0% 43% 42% 10% 26% 3.4] 0% 0% 29% 12% 10% 14% 3.4] 0%	0 0 2 9 24 35 (3.4 to 4 0 1 7 19 17 44	0% 0% 14% 35% 62% 43% 4.2] 0% 50% 4.2] 0% 50% 54% 54%	0 0 0 0 7 7 7 (4.2 to 0 0 4 17 21	5.0] 0% 0% 0% 0% 18% 9% 5.0] 0% 0% 15% 44% 26% 5.0] 0%	0 2 14 26 39 81 Tota 0 2 14 26 39 81	100% 100% 100% 100% 100% 100% 100% 100%
(2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total Table x: Co DV2.OCQ [1.0 to 1.8) [1.8 to 2.6] (2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total Table x: Co	0 1 1 2 Intingency Tak IV8.PP [1.0 to 1 0 0 0 0 0 Intingency Tak IV9.SOC [1.0 to 1 0 0 0	0% 4% 3% 2% ble - DV2 8) 0% 0% 0% 0% 0% 0%8)8)	2 6 5 3 16 2.OCQ and IV 1 3 0 1 5 V2.OCQ and [1.8 to 0 0 1 1 5]	100% 43% 19% 8% 20% (8.PP 2.6] 0% 50% 21% 0% 6% IV9.SOC	0 0 6 11 4 21 (2.6 to 0 0 4 3 4 11	0% 43% 42% 10% 26% 3.4] 0% 0% 29% 12% 10% 14%	0 0 2 9 24 35 (3.4 to 4 0 1 7 19 17 44	0% 0% 14% 35% 62% 43% 4.2] 0% 50% 73% 44% 54% 4.2] 0%	0 0 0 0 7 7 7 (4.2 to 0 0 4 17 21	0% 0% 0% 0% 18% 9% 5.0] 0% 0% 15% 44% 26%	0 2 14 26 39 81 Tota 0 2 14 26 39 81	0% 100% 100% 100% 100% 100% 100% 100% 1
(2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total Table x: Co DV2.OCQ [1.0 to 1.8) [1.8 to 2.6] (2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total Table x: Co DV2.OCQ [1.0 to 1.8) [1.8 to 2.6]	0 1 1 2 Intingency Tak IV8.PP [1.0 to 1 0 0 0 0 0 IV9.SOC [1.0 to 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 4% 3% 2% Dile - DV2 8) 0% 0% 0% 0%8)88	2 6 5 3 16 2.OCQ and IV [1.8 to 0 1 5 5 4 2.OCQ and IV 2.	100% 43% 19% 8% 20% (8.PP 2.6] 0% 50% 21% 0% (8.V9.SOC	0 0 6 11 4 21 (2.6 to 0 0 4 3 4 11	0% 43% 42% 10% 26% 3.4] 0% 0% 29% 12% 10% 14% 3.4] 0%	0 0 2 9 24 35 (3.4 to 4 0 1 7 19 17 44	0% 0% 14% 35% 62% 43% 4.2] 0% 50% 4.2] 0% 50% 54% 54%	0 0 0 0 7 7 7 (4.2 to 0 0 4 17 21	5.0] 0% 0% 0% 0% 18% 9% 5.0] 0% 0% 15% 44% 26% 5.0] 0%	0 2 14 26 39 81 Tota 0 2 14 26 39 81	100% 100% 100% 100% 100% 100% 100% 100%
(2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total Table x: Co DV2.OCQ [1.0 to 1.8) [1.8 to 2.6] (2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0] Total Table x: Co DV2.OCQ [1.0 to 1.8) [1.8 to 2.6] (2.6 to 3.4] (3.4 to 4.2] (4.2 to 5.0]	0 1 1 2 Intingency Tak IV8.PP [1.0 to 1 0 0 0 0 0 IV9.SOC [1.0 to 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0% 4% 3% 2% Dile - DV28) 0% 0% 0% 0% 0% .8) .8) 0% .8) 0% 0%	2 6 5 3 16 2.OCQ and IV [1.8 to 0 1 5 5 4 5 5 4 5 5 6 6 6 6 6 6 6 6 6 6 6 6	100% 43% 19% 8% 20% (8.PP 2.6] 0% 50% 21% 0% (1V9.SOC	0 0 6 11 4 21 (2.6 to 0 0 4 3 4 11	0% 43% 42% 10% 26% 3.4] 0% 0% 29% 12% 10% 14% 3.4] 0% 0% 29%	0 0 2 9 24 35 (3.4 to 4 0 1 7 (3.4 to 4 0 1 7	0% 0% 14% 35% 62% 43% 4.2] 0% 50% 54% 4.2] 0% 50% 50% 50% 50% 50% 50% 50% 50%	0 0 0 0 7 7 7 (4.2 to 0 0 4 17 21	5.0] 0% 0% 0% 0% 18% 9% 5.0] 0% 0% 15% 44% 26% 5.0] 0% 0%	0 2 14 26 39 81 Tota 0 2 14 26 39 81	100% 100% 100% 100% 100% 100% 100% 100%

ANNEXURE 8: PEARSON PRODUCT MOMENT CORRELATION

Table x: Pe	arson Produc	t Moment	Correlations	s (n = 81)	
					Variable
Rank	Variable	DV1.KEN	Variable	DV2.OCQ	Overall
1	IV1.2.EE	.609	IV1.2.EE	.668	IV1.2.EE
2	IV1.4.Le	.582	IV1.5.LO	.557	IV1.4.Le
3	IV1.1.IP	.553	IV1.4.Le	.539	IV1.5.LO
4	IV1.5.LO	.484	IV1.3.Fa	.476	IV1.1.IP
5	IV1.3.Fa	.453	IV1.1.IP	.473	IV1.3.Fa
1	IV6.MOT	.750	IV6.MOT	.747	IV6.MOT
2	IV3.LSH	.734	IV3.LSH	.742	IV3.LSH
3	IV1.SHPWI	.669	IV4.STRAT	.737	IV1.SHPWI
4	IV9.SOC	.635	IV1.SHPWI	.681	IV4.STRAT
5	IV4.STRAT	.605	IV9.SOC	.585	IV9.SOC
6	IV2.COM	.576	IV7.CF	.565	IV7.CF
7	IV7.CF	.574	IV8.PP	.545	IV2.COM
8	IV5.TW	.513	IV2.COM	.525	IV8.PP
9	IV8.PP	.510	IV5.TW	.483	IV5.TW

ANNEXURE 9: DESCRIPTIVE STATISTICS PER SCHOOL SCHOOL 1

Table x: De	scriptive s	statistics: I	/1.1.IP to [OV2.OCQ -	School =	School1 (n	= 21)
	Mean	S.D.	Minimum	Quartile 1	Median	Quartile 3	Maximum
IV1.1.IP	3.95	0.45	2.67	3.67	4.00	4.00	5.00
IV1.2.EE	4.08	0.58	3.00	3.75	4.00	4.50	5.00
IV1.3.Fa	3.48	0.77	1.67	3.00	3.67	4.00	4.67
IV1.4.Le	3.52	0.87	1.33	3.00	3.67	4.00	5.00
IV1.5.LO	3.36	0.96	1.50	3.00	3.00	4.00	5.00
IV1.SHPWI	3.68	0.52	2.72	3.28	3.65	3.97	4.62
IV2.COM	3.26	0.53	2.20	2.80	3.40	3.60	4.00
IV3.LSH	3.64	0.58	2.83	3.17	3.67	4.00	4.83
IV4.STRAT	3.79	0.59	2.50	3.25	3.75	4.25	4.75
IV5.TW	2.82	0.87	1.00	2.20	3.20	3.40	4.00
IV6.MOT	3.51	0.59	2.60	3.00	3.60	4.00	4.60
IV7.CF	2.90	0.74	1.20	2.60	3.00	3.20	4.20
IV8.PP	3.27	0.64	2.14	2.86	3.43	3.71	4.29
IV9.SOC	3.39	0.64	2.50	3.00	3.25	4.00	5.00
DV1.KEN	3.82	0.64	2.25	3.50	4.00	4.00	5.00
DV2.OCQ	3.80	0.65	2.56	3.33	4.00	4.22	4.89

SCHOOL 2

Table x: De	scriptive	statistics: I	V1.1.IP to I	DV2.OCQ -	School =	School2 (n	= 32)
	Mean	S.D.	Minimum	Quartile 1	Median	Quartile 3	Maximum
IV1.1.IP	3.95	0.67	2.33	3.67	4.00	4.33	5.00
IV1.2.EE	4.09	0.64	2.75	3.69	4.00	4.50	5.00
IV1.3.Fa	3.43	0.86	1.00	3.00	3.33	4.00	5.00
IV1.4.Le	3.88	0.69	2.67	3.58	3.67	4.33	5.00
IV1.5.LO	4.13	0.72	2.00	4.00	4.00	4.63	5.00
IV1.SHPWI	3.89	0.58	2.53	3.65	3.85	4.34	5.00
IV2.COM	3.32	0.81	1.60	2.80	3.30	4.00	5.00
IV3.LSH	3.87	0.60	2.67	3.46	3.83	4.38	5.00
IV4.STRAT	4.03	0.71	2.25	3.75	4.00	4.75	5.00
IV5.TW	3.51	0.77	1.80	3.00	3.40	4.00	5.00
IV6.MOT	3.79	0.72	2.60	3.35	3.80	4.40	5.00
IV7.CF	3.35	0.88	1.40	2.60	3.60	4.00	5.00
IV8.PP	3.96	0.50	3.00	3.68	3.86	4.14	5.00
IV9.SOC	3.91	0.50	3.00	3.69	3.88	4.25	5.00
DV1.KEN	3.98	0.79	2.25	3.50	4.00	4.56	5.00
DV2.OCQ	4.01	0.75	2.44	3.31	4.00	4.67	5.00

SCHOOL 3

Table x: De	scriptive s	statistics: I\	/1.1.IP to [OV2.OCQ -	School =	School3 (n	= 17)
	Mean	S.D.	Minimum	Quartile 1	Median	Quartile 3	Maximum
IV1.1.IP	4.12	0.60	3.00	4.00	4.00	4.33	5.00
IV1.2.EE	4.41	0.47	3.50	4.00	4.50	4.75	5.00
IV1.3.Fa	3.73	0.77	2.00	3.33	3.67	4.00	5.00
IV1.4.Le	4.12	0.80	2.00	3.67	4.00	4.67	5.00
IV1.5.LO	4.12	0.63	3.00	4.00	4.00	4.50	5.00
IV1.SHPWI	4.10	0.55	2.93	3.70	4.13	4.28	5.00
IV2.COM	3.68	0.74	2.00	3.40	3.80	4.00	5.00
IV3.LSH	4.20	0.58	2.83	3.67	4.33	4.50	5.00
IV4.STRAT	4.41	0.42	3.75	4.00	4.50	4.75	5.00
IV5.TW	3.89	0.79	2.20	3.20	4.00	4.20	5.00
IV6.MOT	4.18	0.65	3.00	3.80	4.20	4.80	5.00
IV7.CF	3.79	0.82	1.80	3.60	3.80	4.20	5.00
IV8.PP	4.04	0.71	2.57	3.71	3.86	4.43	5.00
IV9.SOC	4.25	0.58	3.00	4.00	4.00	4.75	5.00
DV1.KEN	4.54	0.57	3.25	4.25	4.75	5.00	5.00
DV2.OCQ	4.51	0.51	3.22	4.44	4.56	4.89	5.00

SCHOOL 4

Table x: De	scriptive s	tatistics: IV	/1.1.IP to [V2.OCQ -	School = \$	School4 (n	= 11)
	Mean	S.D.	Minimum	Quartile 1	Median	Quartile 3	Maximum
IV1.1.IP	4.64	0.38	4.00	4.33	4.67	5.00	5.00
IV1.2.EE	4.55	0.38	4.00	4.25	4.50	4.88	5.00
IV1.3.Fa	4.09	0.58	3.00	3.83	4.33	4.33	5.00
IV1.4.Le	4.33	0.49	3.33	4.00	4.33	4.67	5.00
IV1.5.LO	4.59	0.44	4.00	4.25	4.50	5.00	5.00
IV1.SHPWI	4.44	0.29	3.97	4.26	4.40	4.58	5.00
IV2.COM	3.95	0.61	2.60	3.60	4.20	4.40	4.60
IV3.LSH	4.32	0.26	4.00	4.17	4.33	4.42	4.83
IV4.STRAT	4.00	0.51	3.50	3.50	4.00	4.38	5.00
IV5.TW	4.07	0.48	3.00	4.00	4.00	4.30	5.00
IV6.MOT	4.22	0.38	3.60	4.00	4.20	4.40	5.00
IV7.CF	3.76	0.61	2.60	3.50	3.80	4.10	4.80
IV8.PP	4.10	0.38	3.29	4.00	4.29	4.43	4.43
IV9.SOC	4.23	0.60	2.75	4.00	4.50	4.50	5.00
DV1.KEN	4.39	0.48	3.75	4.00	4.25	4.88	5.00
DV2.OCQ	4.24	0.41	3.67	3.94	4.22	4.44	5.00

ANNEXURE 10: ONE WAY ANOVA AND COHENS d

Table x: Sui	mmary of (One-wa	y ANOVA k	y School r	esults
	SS	df	MS	F	<i>p-</i> value
IV1.SHPWI	4.654	3	1.551	5.556	.002
IV2.COM	4.934	3	1.645	3.276	.025
IV3.LSH	4.700	3	1.567	5.006	.003
IV4.STRAT	3.727	3	1.242	3.386	.022
IV5.TW	15.981	3	5.327	8.898	<.005
IV6.MOT	5.791	3	1.930	4.754	.004
IV7.CF	9.416	3	3.139	4.897	.004
IV8.PP	9.416	3	3.139	4.897	.004
IV9.SOC	8.653	3	2.884	8.938	<.005
DV1.KEN	6.362	3	2.121	4.698	.005
DV2.OCQ	5.187	3	1.729	4.226	.008

Cohens d: BY SCHOOL DIFFERENCES

IV1.SHPW	School1	School4	-1	.003	1.67	Large	School2	School4	-1	.040	1.04	Large						
IV2.COM																		
IV3.LSH	School1	School3	-1	.033	0.95	Large	School1	School4	-1	.019	1.35	Large						
IV4.STRAT	School1	School3	-1	.023	1.20	Large												
IV5.TW	School1	School2	-1	.022	0.85	Large	School1	School3	-1	.001	1.28	Large	School1	School4	-1	.001	1.64	Large
IV6.MOT	School1	School3	-1	.022	1.08	Large	School1	School4	-1	.039	1.33	Large						
IV7.CF	School1	School3	-1	.012	1.15	Large	School1	School4	-1	.044	1.24	Large						
IV8.PP	School1	School3	-1	.012	1.15	Large	School1	School4	-1	.044	1.24	Large						
IV9.SOC	School1	School2	-1	.021	0.92	Large	School1	School3	-1	<.0005	1.40	Large	School1	School4	-1	.003	1.33	Large
DV1.KEN	School1	School3	-1	.017	1.19	Large												
DV2.OCQ	School1	School3	-1	.013	1.19	Large												

ANNEXURE 11: INFERENTIAL RANKING OF VARIABLES FOR SCHOOL

1										
Table x: Inf	Table x: Inferential Ranking of IV1.SHPWI variables for School = 1 (n = 21)									
					Low	High				
Variable	Rank	Signif. Group	Mean	SD		Conf. erval				
IV1.2.EE	1	1	4.08	0.58	3.83	4.33				
IV1.1.IP	1	1	3.95	0.45	3.76	4.15				
IV1.4.Le	3	2	3.52	0.87	3.15	3.90				
IV1.3.Fa	3	2	3.48	0.77	3.15	3.81				
IV1.5.LO	3	2	3.36	0.96	2.95	3.77				
				_						
Table x: Inf	Table x: Inferential Ranking of IVs variables for School = 1 (n = 21)									
					Low	High				
Variable	Rank	Signif. Group	Mean	SD		Conf. erval				
IV4.STRAT	1	1	3.79	0.59	3.53	4.04				
IV1.SHPWI	1	1	3.68	0.52	3.46	3.90				
IV3.LSH	1	1	3.64	0.58	3.39	3.89				
IV6.MOT	4	2	3.51	0.59	3.26	3.77				
IV9.SOC	5	3	3.39	0.64	3.12	3.67				
IV8.PP	5	3	3.27	0.64	3.00	3.54				
IV2.COM	5	3	3.26	0.53	3.03	3.48				
IV7.CF	8	4	2.90	0.74	2.58	3.21				
IV5.TW	8	4	2.82	0.87	2.45	3.19				
Table x: Inferential Ranking of DVs variables for School = 1 (n = 21)										
					Low	High				
Variable	Rank	Signif. Group	Mean	SD	95% Conf. Interval					
DV1.KEN	1	1	3.82	0.64	3.55	4.09				
DV2.OCQ	1	1	3.80	0.65	3.53	4.08				

	-								
hool 2									
	Table x: Infe	rential Rai	nking of IV	1.SHPWI v	ariables fo	r School =	2 (n = 32)		
						Low	High		
	Variable	Rank	Signif. Group	Mean	SD		Conf. rval		
	IV1.5.LO	1	1	4.13	0.72	3.88	4.37		
	IV1.2.EE	1	1	4.09	0.64	3.87	4.32		
	IV1.1.IP	3	2	3.95	0.67	3.72	4.18		
	IV1.4.Le	3	2	3.88	0.69	3.64	4.11		
	IV1.3.Fa	5	3	3.43	0.86	3.13	3.73		
	Table x: Inferential Ranking of IVs variables for School = 2 (n = 32)								
						Low	High		
			Signif.		65	95%	Conf.		
	Variable	Rank	Group	Mean	SD	Inte	erval		
	IV4.STRAT	1	1	4.03	0.71	3.78	4.28		
	IV8.PP	1	1	3.96	0.50	3.78	4.13		
	IV9.SOC	1	1	3.91	0.50	3.73	4.08		
	IV1.SHPWI	1	1	3.89	0.58	3.69	4.10		
	IV3.LSH	1	1	3.87	0.60	3.66	4.08		
	IV6.MOT	1	1	3.79	0.72	3.54	4.04		
	IV5.TW	7	2	3.51	0.77	3.25	3.78		
	IV7.CF	8	3	3.35	0.88	3.05	3.65		
	IV2.COM	8	3	3.32	0.81	3.04	3.60		
	Table x: Inferential Ranking of DVs variables for School = 2 (n = 32)								
						Low	High		
			Signif.		65	95%	Conf.		
	Variable	Rank	Group	Mean	SD	Inte	rval		
	DV2.OCQ	1	1	4.01	0.75	3.75	4.27		
	DV1.KEN	1	1	3.98	0.79	3.70	4.25		

chool 3							- / \			
	Table x: Infe	rential Rar	nking of IV	1.SHPWI v	ariables fo	r School = 3	3 (n = 17)			
						Low	High			
	Marialal a	Davids	Signif.	N/10 011		95% (Conf.			
	Variable	Rank	Group	Mean	SD	Interval				
	IV1.2.EE	1	1	4.41	0.47	4.19	4.63			
	IV1.1.IP	2	2	4.12	0.60	3.83	4.40			
	IV1.4.Le	2	2	4.12	0.80	3.74	4.50			
	IV1.5.LO	2	2	4.12	0.63	3.82	4.42			
	IV1.3.Fa	5	3	3.73	0.77	3.36	4.09			
	Table x: Inferential Ranking of IVs variables for School = 3 (n = 17)									
						Low	High			
			Signif.	Mean	25	95% Conf.				
	Variable	Rank	Rank Group		SD	Interval				
	IV4.STRAT	1	1	4.41	0.42	4.21	4.61			
	IV9.SOC	2	2	4.25	0.58	3.97	4.53			
	IV3.LSH	2	2	4.20	0.58	3.92	4.47			
	IV6.MOT	2	2	4.18	0.65	3.87	4.48			
	IV1.SHPWI	5	3	4.10	0.55	3.84	4.36			
	IV8.PP	6	4	4.04	0.71	3.71	4.38			
	IV5.TW	7	5	3.89	0.79	3.52	4.27			
	IV7.CF	8	6	3.79	0.82	3.40	4.18			
Ī	IV2.COM	9	7	3.68	0.74	3.33	4.03			
	Table x: Inferential Ranking of DVs variables for School = 3 (n = 17)									
						Low	High			
	M	D- 1	Signif.	2.0	65	95%	Conf.			
	Variable	Rank	Group	Mean	SD	Inte	rval			
	DV1.KEN	1	1	4.54	0.57	4.27	4.81			
	DV2.OCQ	1	1	4.51	0.51	4.27	4.75			

Table x: Infe	rential Ra	nking of IV	/1 SHPW/I v	ariahles fo	r School =	4 (n = 1	
Table X. IIIIe	Territar Na	IIKIIIG OI IV	1.3116 001 0	arrables to	Low	Hig	
Variable	Rank	Signif. Group	Mean	SD	95%	Conf. erval	
IV1.1.IP	1	1	4.64	0.38	4.41	4.8	
IV1.5.LO	1	1	4.59	0.44	4.33	4.8	
IV1.2.EE	1	1	4.55	0.38	4.32	4.7	
IV1.4.Le	1	1	4.33	0.49	4.04	4.6	
IV1.3.Fa	5	2	4.09	0.58	3.75	4.4	
Table x: Infe	rential Ra	nking of IV	s variables	s for Schoo	l = 4 (n = 11	L)	
					Low	Hig	
Variable	Rank	Signif. Group	Mean	SD		Conf. rval	
IV1.SHPWI	1	1	4.44	0.29	4.27	4.6	
IV3.LSH	1	1	4.32	0.26	4.16	4.4	
IV9.SOC	3	2	4.23	0.60	3.87	4.5	
IV6.MOT	3	2	4.22	0.38	3.99	4.4	
IV8.PP	3	2	4.10	0.38	3.88	4.3	
IV5.TW	3	2	4.07	0.48	3.79	4.3	
IV4.STRAT	7	3	4.00	0.51	3.70	4.3	
IV2.COM	7	3	3.95	0.61	3.58	4.3	
IV7.CF	7	3	3.76	0.61	3.41	4.1	
Table x: Inferential Ranking of DVs variables for School = 4 (n = 11)							
					Low	Hig	
Variable	Rank	Signif. Group	Mean	SD	95% Conf. Interval		
DV1.KEN	1	1	4.39	0.48	4.10	4.6	
DV2.OCQ	2	2	4.24	0.41	4.00	4.4	

ANNEXURE 12: CORRELATION OF DV1 and IV's: MULTIPLE REGRESSION ANALYSIS

All correlat	ions can be desc	ribed as stror	ng because st	atistically s	ignificant a	and r>.50	0	
Correlation	s. Marked corre	lations are sig	nificant at p	< .05000 N=	81 (Casew	se deletio	n of missir	ng data)
	DV1.SHPWI							
IV3.COM	.785							
IV4.LSH	.822							
IV5.STRAT	.610							
IV6.TW	.679							
IV7.MOT	.766							
IV8.CF	.730							
IV9.PP	.564							
IV10.SOC	.552							
IV2.KEN	.669							
IV1.OCQ	.681							

Regression Summary for Dependent Variable: DV1.SHPWI R= .887, R²= .787, Adjusted R²= .756

F(10,70)=25.79 p<.0005, Std.Error of estimate: .2824

	b* Er	r of b*	b	.Err of b	t(70)	p-value
Intercept			0.6500	0.2620	2.48	.016
IV2.KEN_EEI	-0.0385	0.1146	-0.0307	0.0914	-0.34	.738
IV3.COM	0.3722	0.1015	0.2883	0.0786	3.67	.000
IV4.LSH	0.2735	0.1175	0.2606	0.1120	2.33	.023
IV5.STRAT	0.1272	0.0845	0.1151	0.0764	1.51	.136
IV6.TW	-0.0119	0.1072	-0.0077	0.0696	-0.11	.912
IV7.MOT	0.2070	0.1122	0.1739	0.0943	1.85	.069
IV8.CF	0.0410	0.1066	0.0274	0.0711	0.38	.701
IV9.PP	0.0109	0.0974	0.0096	0.0856	0.11	.911
IV10.SOC	0.0138	0.0877	0.0122	0.0775	0.16	.875
IV2.OCQ	0.0346	0.1268	0.0292	0.1070	0.27	.786

Regression Summary for Dependent Variable: DV1.SHPWI

R= .880, R²= .774, Adjusted R²= .766

F(3,77)=88.08 p<.0005, Std. Error of estimate: .2768

	b* Err	of b*	b	.Err of b	t(77)	p-value
Intercept			0.8248	0.2064	4.00	.000
IV3.COM	0.3820	0.0781	0.2959	0.0605	4.89	.000
IV4.LSH	0.3500	0.1043	0.3335	0.0994	3.35	.001
IV7.MOT	0.2441	0.0929	0.2051	0.0780	2.63	.010

Regression Summary for Dependent Variable: DV1.SHPWI

R= .886, R²= .785, Adjusted R²= .774

F(4,76)=69.52 p<.0005 Std.Error of estimate: .2710

1 (4,70)-03.32 p<.0003 3td.E1101 01 e3timate2710									
	b* Eri	r of b*	b	.Err of b	t(76)	p-value			
Intercept			0.6549	0.2202	2.97	.004			
IV4.LSH	0.2767	0.1089	0.2637	0.1038	2.54	.013			
IV3.COM	0.3869	0.0767	0.2997	0.0594	5.04	.000			
IV7.MOT	0.2232	0.0918	0.1875	0.0771	2.43	.017			
IV5.STRAT	0.1366	0.0692	0.1235	0.0626	1.97	.052			

ANNEXURE 13: ORIGINAL COMMENTS: QUALITATIVE DATA

- "We must have a good well developed team spirit"
- "Management should treat all individuals professionally and honestly"
- "It is discouraging not to be noticed when you want an extra mile, but are quickly rebuked when you by chance make a mistake"
- "The security of the school is much needed and equipment and resources"
- "Textbooks for each learner"
- "We are listened to and encouraged to do our best and listened to in times of despair"
- "Communication must go directly to address the issue"
- "Opportunities to develop"
- "Mutual respect and recognition"
- "Support from all involved in teaching and learning"
- "We should improve our human relations"
- "We should be open and honest with all our staff"
- "Problems shouldn't be avoided; they should be dealt with immediately"
- "More professionalism, integrity, openness, honesty and transparency"
- "Teachers work hard towards a common goal; to help learners reach their full potential"
- "Unify the team; understand other cultures and the freedom to explore new ways of doing things"
- "Miscommunication or lack of communication hinders our performance"
- "Less conflict situations and more skills development courses as well as teambuilding activities"
- "Leaders should set inspirational examples"
- "Ethical practices must be adhered to and any infringement punished"
- "Communication from the top is poor when it comes to feedback on issues"
- "Incentive should be given to teachers that go beyond the call of duty"
- "The pillars: caring, respect, trustworthy, responsibility, fairness and citizenship"
- "Would like technology in classrooms to make lessons more interesting"
- "Rewards are important"
- "Fair treatment of all staff is important. I hate favouritism"
- "Certain staff members have hidden agendas"
- "Working in an environment of excellence"

- "More recognition, positive talk and motivation"
- "Well organised and fast paced"
- "Leadership doesn't always know what everyone is doing"
- "Clear set goals"
- "All learners need to buy into the schools core function- to do well educationally"
- "Motivated colleagues who have the same goals as I do"
- "Positive encouragement and motivation, good clear communication"
- "Our motto is to excel in whatever we do"
- "Encourage and motivate learners to respect their school and involve parents"
- "Motivational speakers for staff, learners and parents"
- "Strong leadership that motivates and sets a good example, makes a decision and sticks with it as well as has good planning"