Gordon Institute of Business Science
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The moderating effect of transformational leadership on the relationship between organisational culture and participative decision-making

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ABSTRACT

The importance of organisational culture, leadership style and participative decision-making are widely debated themes in driving job satisfaction in order to reduce employee turnover. In particular, the reciprocating relationship between organisational culture and transformational leadership was presented as a key area for focus in understanding the propensity for participative decision-making. In achieving the research objectives, the purpose of this research was to determine the moderating effect of transformational leadership on the relationship between organisational culture and participative decision-making.

This study employed a quantitative, cross-sectional, and survey-styled approach to address the research purpose. The research instrument utilised three standardised and pre-tested measurement scales, with a total of 192 responses validated for statistical regression analysis.

Through structural equation modelling, this study found that transformational leadership partially moderates the relationship between organisational culture and participative decision-making. Furthermore, the findings contribute to literature in the field of participative decision-making as well as present practical and empirically tested justification for business to invest in leadership development.

KEYWORDS

Transformational leadership

Participative decision-making

Organisational culture

DECLARATION

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

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1. CHAPTER 1: Introduction to Research Problem

1.1. Research Purpose

This research investigates organisational dynamics to understand the moderating effect of transformational leadership on the relationship between organisational culture and participative decision-making. The purpose of this study is to add to the existing theory, based on empirical evidence. In doing so, this study provides an empirically tested argument for the importance of transformational leadership in moderating the effects of organisational culture on participative decision-making.

1.2. Research Motivation

The motivation behind this study stems from a real problem facing business today; employee retention, attrition and turnover. While this has been a persistent problem for organisations, an increase has most notably been identified during the shifting working environment during 2021 as a result of the COVID-19 pandemic. The shift in retention, attrition and turnover trend has been termed the period of “Great Resignation”. One of the major causes of this phenomenon is argued to be low job satisfaction in both individual factors as well as organisational factors (Cook, 2021; Kelly, 2021; Pacheco & Webber, 2016; Russ, 2011).

Job satisfaction is defined by Pacheco and Webber (2016) as “a function of the perceived relationship between what an employee seeks to gain from their job and what the employee perceives their job to be offering” (p.3). The main focus of which is the relationship between the employee and their ability to determine the outcomes which they receive. This is important to investigate, as low job satisfaction, in an organisation, has been found to be costly as it results in low productivity, low performance and ultimately high talent turnover (Pacheco & Webber, 2016).

The drivers in predicting an employee’s levels of satisfaction at work are covered by five main themes, namely; suitability of work, motivation to do work, the team one works with, feedback on success and value-add and finally growth in career and skillset (Conway, 2021). In order to enhance job satisfaction, as a means of retaining employees and lowering turnover rates, there is a positive relationship between the factors resulting in job satisfaction and three key areas; organisational culture, transformational leadership style and participative decision-making (Cameron & Quinn, 2006; Carless et al., 2000; Guinot et al., 2021; Jacobsen et al., 2021). As

these three constructs play a significant role in improving job satisfaction, the dynamics of each aspect, as well as the relational interactions with each other, requires further investigation and understanding.

1.3. Research Background and Importance

Within the context of South Africa, the relevance of organisational culture, leadership style and participative decision-making needs to be at the forefront of business in order to engage the work force in building the economy. The availability of skills and the competitiveness of companies is critical to achieving a positive outcome for South Africa.

With the economy decelerating in a declining phase of gross domestic product (GDP), it is important to identify the resultant causes, in order to address the problem (Republic of South Africa, 2020). The major impact of a declining economy is the resultant decline in employment demand. In 2018, the real GDP growth of South Africa was around 1%. The impact of this extremely low economic growth has been that the majority of industries have seen a decline in job availability. This, amongst other factors, has resulted in a high unemployment rate of 57.2% (Republic of South Africa, 2020). Despite a decrease in employment, there has still been marginal growth, year on year, in the majority of sectors.

The insights drawn indicate that the remaining employees are being worked harder in order to achieve the same or increased outputs. As a result of the higher stressors placed on individuals, the importance of participative decision-making, leadership style and organisational culture is further stressed as they are important contributors in employee retention and motivation. Furthermore, the importance of employee retention should be a central focus and concern for all organisations as the selection pool within South Africa is decreasing due to a lower-level of skills development and availability (Republic of South Africa, 2020).

In driving the importance of this study, at a company level as well as a country level, the most prominent areas affected by skills shortages are found in the primary and secondary sectors. From a company perspective, these sectors should be particularly concerned as the majority decline in these sectors includes high and middle skilled individuals. Of note, within the skills shortage identified in South Africa, the greatest skills shortage identified, at an 81.8% shortage, is found in the managers

category (Republic of South Africa, 2020). From a country perspective, this is a concern, as these sectors are fundamental in developing an emerging economy. In the context of South Africa, these two sectors contribute a significant portion, roughly 28%, of the annual GDP (Statista, 2021).

In light of these challenges, in order to protect companies from unnecessary employee turnover, a competent manager is a critical component in driving job satisfaction and organisational competitiveness. Furthermore, through the shortage in management skills in South Africa, this further emphasises the importance of understanding the management competency within a company and the effects thereof. In order to develop a management competency, it is important to train individuals within organisations on proven leadership styles. From an organisational perspective, the importance of training leadership style is supported as it has a direct impact on retention rate, which ultimately improves the skills competency and availability within the organisation. Other factors impacted by an increase in leadership competency is the improvement of organisational culture and competitiveness (Groysberg et al., 2018; Peterson et al., 2020).

A pivotal insight is that culture development in an organisation is reliant on leaders who are capable of identifying that fundamentally, culture development has reciprocal relationships with other organisational factors that ultimately improve overall competitiveness. As such, in order to achieve competitiveness, a leader must focus on harmonising the alignment between the organisational goals, culture and decision-making in a company (Groysberg et al., 2018; Warrick, 2017). In aligning individuals with the organisational goals, it is important for leaders to have an understanding of the factors that drive decisions. Making decisions that ensure the complexity of the decision is made at the correct level is achieved through delegation of decision-making into the organisation. Through this process, multiple opinions and alternatives are tabled which enhances collaboration and discussion richness. Furthermore, the individual with the most applicable and relevant skillset will make the best decision for the organisation. The ultimate outcome is that the decisions made, develop a stronger sense of accountability and participation in driving organisational competitiveness (Aminov et al., 2019; Landry, 2020). This is commonly known as participative decision-making.

In bringing this together, organisational culture, leadership style and participative decision-making are the foundational aspects that have been identified as critical components in driving motivation, retention and organisational competitiveness as components in driving job satisfaction. In doing so, providing the impetus for this research study.

1.4. Research Objective

The purpose of this research was to investigate the moderating effect of transformational leadership on the relationship between organisational culture and participative decision-making. The study utilised the framework for identifying participative decision-making, developed by Kahnweiler and Thompson, (2000), within organisations, to establish the moderating effect that transformational leadership style has on the relationship between organisational culture types and participative decision-making.

In order to investigate the moderating effect that transformational leadership style has on the relationship between organisational culture and participative decision-making, the underlying relationships between organisational culture and transformational leadership style with participative decision-making need to be understood. As such, the following research objectives will need to be answered;

Research Objective One: To determine the relationship between organisational culture and transformational leadership style with participative decision-making.

Research Objective Two: To determine to what degree does transformational leadership style act as the moderator on the relationship between organisational cultures and participative decision-making.

1.5. Implications for Business

The practical benefit of this study, for business, is to first and foremost highlight the contributing factors that drive performance within their companies through the understanding of the roles that organisational culture, leadership style and participative decision-making play. The importance of which is that companies can implement and utilise participative decision-making strategies to improve decision-making efficiency, resulting in improved organisational competitiveness. The benefit of which is that organisations that actively utilise participative decision-making initiatives in their approach to leadership are 6.8 times more likely to produce

decisions of higher quality and speed (Aminov et al., 2019).

In addition, having an understanding of the importance of participative decision-making as well as an empirically tested argument for the value of a transformational leadership style in moderating the relationship between organisational culture and participative decision-making, organisations can substantiate the need for focus to be placed on developing employees and more importantly managers accordingly.

This highlights the importance of this research in addressing the critical skills shortage in management by informing and assisting businesses in developing human capital management programs and governance strategies in leadership development that provide companies with a competitive advantage (Aminov et al., 2019).

1.6. Significance to Theory

The significance of this research, from a theory perspective, is to not only build on previous research but to also investigate a gap in relevant and current research understanding. Specifically, in the field of participative decision-making, the density of research in developing participative decision-making frameworks in the last ten years is sparse with the majority of research dating back twenty years (Black & Gregersen, 1997; Cotton et al., 1988; Glew et al., 1995; Kahnweiler & Thompson, 2000; Parnell & Crandall, 2001).

Furthermore, the last ten years of research predominantly covered the antecedences of participative decision-making as well as the relationships with organisational factors (Behravesh et al., 2020; Carbonell & Rodriguez-Escudero, 2013; García et al., 2019; M. Y. Lee & Edmondson, 2017; Russ, 2011; van der Westhuizen et al., 2012; Wong et al., 2018). Current literature supports the view that organisational culture and transformational leadership both act as singular factors driving the propensity for participative decision-making. However, few studies have investigated the inter-related correlations of the organisational factors and how this dynamic relationship impacts participative decision-making.

The significance of this study is such that, the extant literature does not include a study which covers participative decision-making, organisational culture and transformational leadership in a single view. In addition to the gap in participative decision-making research, this research aims to answer the call for more research

into the role of organisational culture and transformational leadership on the propensity of participative decision-making (Behravesh et al., 2020; Lam et al., 2015; van der Westhuizen et al., 2012). To this end, in the researcher's knowledge, no studies have been conducted whereby the moderating effect of transformational leadership style on the relationship between organisational culture and participative decision-making has been researched and empirically tested. As such, through empirical evidence, this research aims to add to the body of knowledge by investigating the moderating effect of transformational leadership style on the relationship between organisational culture and participative decision-making.

In the document to follow, a focused literature review is presented in Chapter two, discussing and applying the relevant theoretical frameworks in building the argument for this research. In this, key frameworks that are important in this research will be presented in substantiating the argument of the research. Furthermore, extant literature will be comparatively analysed in substantiating the need for this research. Following the literature review, Chapter three will present the research model as guided by the literature review as well as the proposed hypotheses to be tested.

In Chapter four, an explicit and systematic breakdown of the methodology and design will be presented, displaying the approach taken in conducting the research to achieve the research objectives. A presentation of the research responses and findings will be outlined in chapter five, followed by a comparative analysis of said findings in chapter six. Furthermore, the insights from the comparative analysis will be extracted and presented accordingly. Finally, conclusions of this research, implications for stakeholders, limitations and suggestions for future research are presented in Chapter seven.

2. CHAPTER 2: Literature Review

The purpose of this research is to investigate the moderating effect of transformational leadership on the relationship between organisational culture and participative decision-making. In order to further investigate the research objectives within this study, as well as deepen the theoretical understanding and antecedents of participative decision-making, the following will be presented. The literature review will cover three central constructs in this research as well as their relationship to each other. Furthermore, through this comparative review, a need for this research will be highlighted and presented. Figure 1 below, presents a graphical form of the literature review.

To begin with, a discussion on decision-making followed by a focused review on participative decision-making will be presented. The aim of which is to inform this research on the current discourse in the field of participatory decision-making. Furthermore, this section aims to examine the underpinnings of participative decision-making and the resultant effects thereof.

Following on from the above, a review of theory on organisational culture will be discussed highlighting the various approaches to defining cultural values and how each classification impacts an organisation. In particular, the effects that different types of culture have on participative decision-making will be integrated.

Furthermore, a review of two classical leadership style approaches, namely transformational and transactional, will then be presented outlining the separate schools of thought. Through this, the integration between organisational culture and transformational leadership style will be presented and critically analysed in order to understand the theoretical nature of the relationship. Leading on from this, a discussion will be presented outlining the impact of transformational leadership style on participative decision-making.

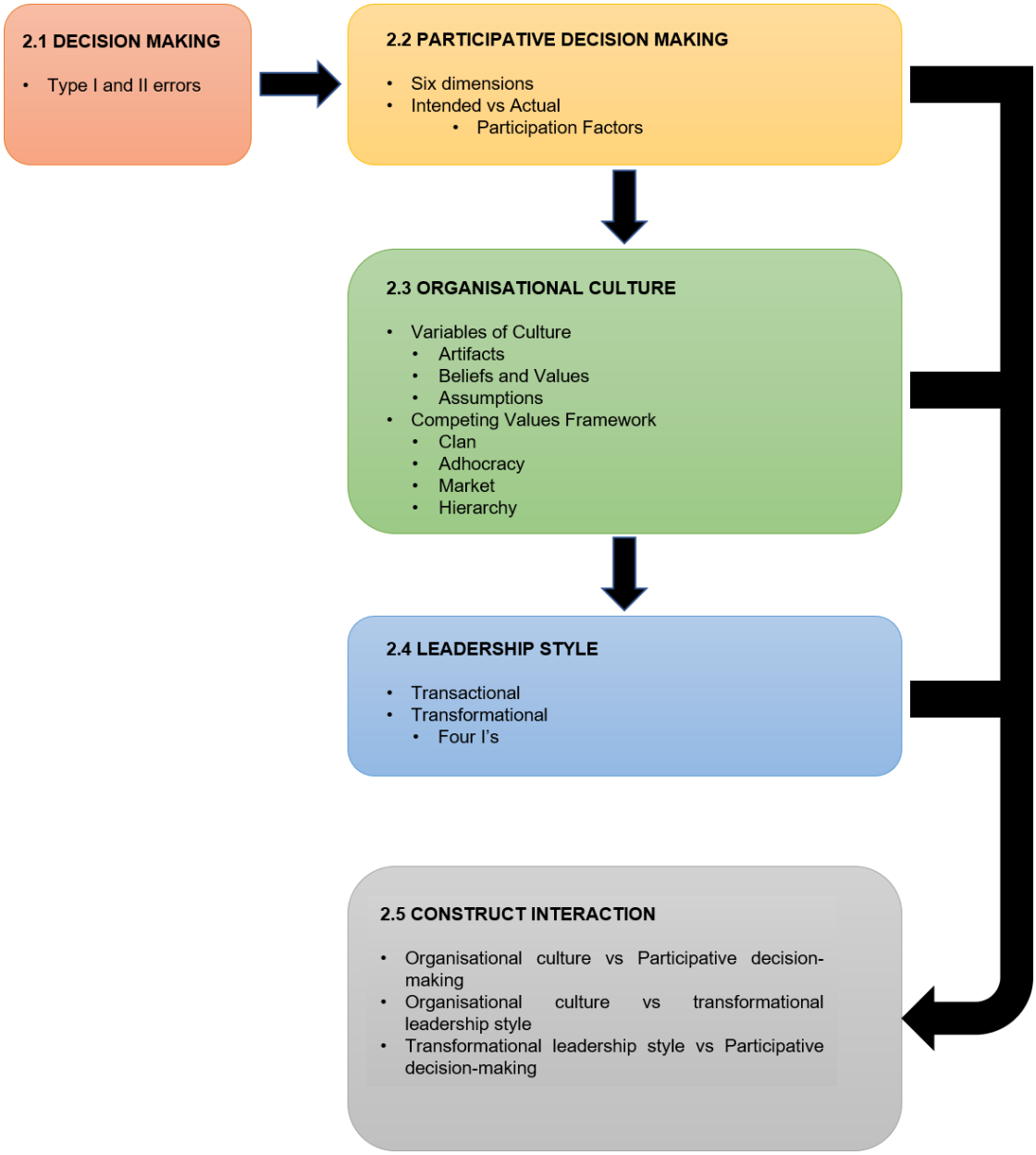

Figure 1: Literature Review Layout

2.1. Decision-Making

The central underlying theoretical concept in this research is decision-making. The understanding thereof and, in particular, how decision-making is undertaken within hierarchical organisations and the benefits thereof is crucial in providing support for the purpose of this research.

Decision-making, particularly at an organisational level, is typically the role of a manager and entails the application of knowledge and experience in determining the best outcome between two or more choices (Brousseau et al., 2006; Christensen & Knudsen, 2010). On the one hand, decisive and flexible approaches take an individualist approach to decision making, whereas hierarchic and participative approaches are collectivist in nature (Brousseau et al., 2006).

In managing how decisions are made within an organisation, it is important to understand what the most appropriate decision-making methodology is. This decision is important to ensure that Type I errors, whereby a superior alternative is rejected, and Type II errors, whereby an inferior alternative is accepted, are avoided (Brousseau et al., 2006; Christensen & Knudsen, 2010). The drivers of which is understanding the knowledge requirements of the decision and the respective individual with said knowledge, such that the correct and most efficient decision is made. In the business environment, a collectivist, and more importantly, participative approach offers an advantage in cost and decision quality. (Csaszar & Eggers, 2013).

2.2. Participative Decision-Making

Participative decision-making is defined as the transfer of power from manager to employee by directly or indirectly enabling individuals to contribute in the decision-making process through self-determined choices (van der Westhuizen et al., 2012; Wong et al., 2018). Within organisational research, the value of participative decision-making has been identified as one of the key drivers in improving job satisfaction and lowering the intent to turnover (Behravesh et al., 2020; Carbonell & Rodriguez-Escudero, 2013; Wong et al., 2018).

In order to understand the role of participative decision-making in an organisation and the significance it holds in this research, it is important to understand the in-depth underpinnings of the framework. To this end, the framework developed by Black and

Gregersen, (1997), provides us with six dimensions that frame the theory of participative decision-making.

The first dimension, or rationale dimension, outlines the motivation for why participative decision-making should occur. The justification thereof is that employees have a right and ability to partake in decisions that may affect them. In addition, participative decision-making is an active way of driving efficiency, profits and other metrics within an organisation (Behravesh et al., 2020; Black & Gregersen, 1997; Russ, 2011). This dimension of the theory is seminal in justifying the need for participative decision-making in driving job satisfaction and organisational competitiveness.

In order to understand the enablers of participative decision-making, the framework provides five facets that define the what and how dimensions of the theory. From an internal view of an organisation, the formal and informal structure of an organisation forms the second dimension. Through formal processes and procedures or informally through daily decisions, which are made between managers and employees, participative decision-making is enabled (Black & Gregersen, 1997; Cotton et al., 1988). This enabler offers an insight into the importance of the inner workings of companies and how they organise themselves to achieve their goals. Furthermore, the role of the manager is introduced as another key enabler in driving participative decision-making.

The third dimension involves the form in which individuals can partake in decision-making; namely the direct and indirect forms. The direct form enables employees to personally partake immediately in the decision-making process by offering up their perspectives and opinions to the other members involved in the decision. The indirect form of participative decision-making involves an appointed set of individuals whom represent a sub group's perspective (Black & Gregersen, 1997; Cotton et al., 1988; M. Y. Lee & Edmondson, 2017). From this enabler, the importance of a company's structural drivers of participative decision-making is shown in providing opportunity for individuals. Furthermore, in indirect forms of participative decision-making, the manner in which employees view each other and support each other's perspectives is highlighted as an important enabler. Specifically, this brings in the element of organisational culture through either an individualist or collectivist approach (Brousseau et al., 2006; Schein, 2010).

In decision-making, what the issues are related to also plays a significant role in the levels of participation. As such, the fourth dimension defines the issues that vary participative decision-making. These issues are identified as work/task, working conditions, strategic, capital distribution and investment-based decisions. Through this dimension, the noticeable variation between the issues is the impact of the decision and more specifically the level of risk in the decision. In particular, two themes can be extracted from these issues as either having an impact on the individual or on the organisation (Black & Gregersen, 1997; Kahnweiler & Thompson, 2000). In addition, it is important to note that inclusion in decisions involving organisational impacts, over and above individual work and task decisions, further enhances the impact on job satisfaction (Cotton et al., 1988; García et al., 2019).

In understanding the role of the manager further, the fifth dimension covers the degree of involvement in the decision process and describes the continuum to which a manager includes the employees. This dimension ranges from no advanced information, given advanced information, opinions on the decision can be provided, employee perspectives are taken into deliberation, a decision can be overturned by the employees and the decision is solely up to the employees (Black & Gregersen, 1997; Guthrie, 2001). Through this dimension, an empowering management style is highlighted as an important characteristic in enabling participative decision-making (Kahnweiler & Thompson, 2000).

The sixth and final dimension comprises of the five stages of how the decision-making process occurs. In this, five distinct stages of decision-making are outlined, namely; problem identification, solution generation, solution selection, solution implementation and implementation evaluation (Black & Gregersen, 1997; van der Westhuizen et al., 2012). Similar to the third and fifth dimensions, the importance of organisational culture and leadership plays a significant role in including individuals early in the process in order to remove the potential for Type I or II errors.

In essence, the intent of implementing participative decision-making initiatives throughout the six dimensions is such that it promotes gains in productivity for the organisation as well as creating job satisfaction for the employees through Maslow's higher-order needs (Behravesh et al., 2020; Maslow, 1943; van der Westhuizen et al., 2012; Wong et al., 2018). The corresponding organisational benefits are realised through ensuring that information flow and use thereof is channelled through the

individuals with the greatest applicable knowledge in the organisation and as such, the best solutions can be identified and implemented (Russ, 2011; van der Westhuizen et al., 2012). The job satisfaction aspects are most notably prevalent through the use of participative decision-making through an employee's ability to discuss, clarify and agree on the task process and outcome. Through this approach, job ambiguity and role conflict are reduced. The benefits of which further reinforces the organisational benefits by improving the adherence to budget and product quality which ultimately improves market competitiveness (Carbonell & Rodriguez-Escudero, 2013).

While participative decision-making practices are recommended in literature, it is important to highlight that there are two sides to the participative decision-making process that need to be considered. The first side indicates a manager's propensity to include employees in the decision ("asks"). Secondly, it is important to identify whether an employee wants to be included in a decision ("wants") (Kahnweiler & Thompson, 2000). This is an important perspective to view participative decision-making from, in light of this research, as the drivers of participative decision-making are an important dimension to quantify, specifically the factors that generate self-motivated action in participation.

The theoretical foundation of the six dimensions is an important contributor that underpins the propensity for participative decision-making in this study. However, in practice, converting an intended participation initiative into an actual participation outcome requires an understanding of the dynamic factors that influence the conversion. As can be seen in Figure 2 below, both organisational and individual factors influence the probability for participation initiatives to be converted to actual participation. In addition, these factors play a significant role in converting actual participation into organisational outcomes (Glew et al., 1995; Kahnweiler & Thompson, 2000).

Without these factors generating actual participation, the statistical impact of the intended initiatives has been found to be low (Glew et al., 1995; Wagner, 1994). As such, research in the field of participative decision-making calls for further studies into the factors that result in actual participation (Glew et al., 1995; Guinot et al., 2021; Kahnweiler & Thompson, 2000; van der Westhuizen et al., 2012; Wagner, 1994).

In breaking down the process enablers, organisational factors such as culture, technology, legacy, structural design and systems are argued to be enablers of the process. In addition, individual factors such as ability levels, preferences, attitudes and personality criteria of the individual equally enable the conversion to actual participation (Glew et al., 1995).

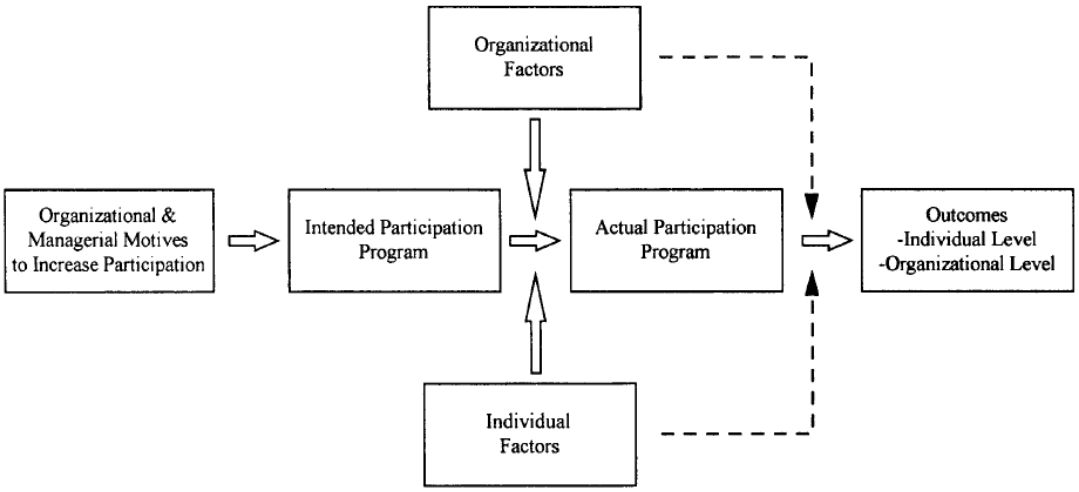

Figure 2: Participation Process (Glew et al., 1995)

A third factor that impacts the outcomes of participative initiatives, not shown in the model, lies within the relational realm between intended and actual participation. In this space, the function of the manager is highlighted as determining the effectiveness of such initiatives in embracing and managing the process (Glew et al., 1995; Guinot et al., 2021; Kahnweiler & Thompson, 2000).

The importance of Figure 2, is such that it represents the dynamic factors that influence participative decision-making that result in job satisfaction and organisational competitiveness. As such, this framework represents the central nervous system of this research in answering the research objectives. In order to investigate the drivers of actual participative decision making, for the purposes of this research, the individual factors will not be focused on further and only leadership factors and organisational factors will be discussed. Specifically, from an organisational factor point of view, this research will only focus on the relationship of organisational culture to participative decision-making.

2.3. Organisational Culture

In order for a participative environment to exist, that actively empowers employees to engage and partake in daily tasks/decisions, it is important to understand the factors that strengthen or weaken the interactions with said environment. Organisational culture is defined as the practices, ethics, assumptions and symbols that the employees of an organisation share. It is through these factors that shape the behaviours and attitudes within a company (Groysberg et al., 2018; Wiewiora et al., 2013; Zeb et al., 2021). Culture is further categorised into three variables, namely; artefacts, values and assumptions (Schein, 2010). Ultimately, it is through continuous alignment across the organisational with the culture variables that informs individuals' behaviour to engage or disengage with said environment (Reis et al., 2016).

The importance of the three culture variables is such that organisational culture is dynamic in nature. The most noteworthy effect each variable has on the other is to continuously define and redefine the organisational culture as well as the individuals within the organisation (Schein, 2010). This is a significant contribution, in relation to Figure 2, as it adds to the understanding of the dynamic relationship that results in participative decision-making. Furthermore, a link between organisational and individual factors is theorised in determining the outcomes (Schein, 2010).

An organisation's culture is most visible in its artefacts, which refers to the physical presentation of the organisation to the world. It is an important dimension of culture as it provides an understanding into how the organisation and its employees present themselves based on a prioritised stakeholder view. Typically, this gives a sense of the differential between an internal versus external focus of a company. In prioritising the focus of a company, the underlying values offer insight into how the structural and individual enablers impact the company's norms and philosophies which informs how decisions are made (Cameron & Quinn, 2006; Schein, 2010). Thus, it provides insight and linkage into how the individual actors inform the processes and procedures at the artefact level. Finally, the underlying assumptions of repeated outcomes is arguably the most important variable in organisational culture as it defines the perceptions, values and behaviours that are deemed acceptable. (Hatch, 1993; Schein, 2010; Wiewiora et al., 2013).

The importance of understanding the bi-directional influences each variable has on the other within the context of this research is such that, organisational culture can be viewed as a singular overarching construct. However, a granular view highlights the importance of organisational norms, leadership style and values in guiding how decisions are made. Furthermore, through the complexity of a multi-facetted cultural system, the interactions between each variable are pivotal in understanding what culture type is formed and how that culture type affects participation (Hartnell et al., 2011; Schein, 2010).

2.3.1. The Competing Values Framework

In order to differentiate between different types of organisational cultures and the effects thereof, the competing values framework for organisational level culture analysis is useful. The importance of highlighting the competing values framework is such that the identification and understanding of each culture type is critical in extracting insights into how organisational culture affects participative decision-making.

The framework identifies two continuums that quantify the effectiveness indicators of an organisation and how individuals identify what is good and appropriate (Cameron & Quinn, 2006). The vertical dimension ranges from organisational stability (bottom) to flexibility (top). The horizontal dimension ranges from internal (left) to external (right) focus (Reis et al., 2016). Through the comparison of the two dimensional axis, there are four quadrants that identify the four types of organisational cultures, namely; Clan (top/left), Adhocracy (top/right), Market (bottom/right) and Hierarchy (bottom/left) (Cameron & Quinn, 2006; Reis et al., 2016; Wiewiora et al., 2013; Zeb et al., 2021).

The clan culture has a primary focus on participation, open communication, trust and collaboration. Through a flexible internal focus, the culture is focused on creating an environment whereby employees are respected, developed and valued through a team-based perspective. Through this approach, employees are more likely to offer up their opinions and beliefs on tasks to inform a shared understanding of what is required. Unsurprisingly, a clan culture has the highest probability of displaying a participative approach to decision making (Cameron & Quinn, 2006; Reis et al., 2016; Wiewiora et al., 2013; Zeb et al., 2021).

In an adhocracy culture, the drivers focus on flexibility in being able to react effectively to a dynamic external environment. As such, temporary structures are common in achieving the task as this extracts the maximum competitiveness from an organisation. As power is inherently decentralised, information flows from team to team or employee to employee. The result of which is that through this communication, individuals are able to participate in the decision process (Cameron & Quinn, 2006; Reis et al., 2016; Wiewiora et al., 2013; Zeb et al., 2021).

The market culture focuses on relationships with the external environment by providing value to external stakeholders at the lowest possible cost. However, a similar focus on stability and control is imperative in order to achieve success. In this culture, organisations value competitiveness, efficiency and achievement. As such, due to the external goal focus, a consultative environment within the organisation is unlikely to exist as this would negatively impact the achievable outputs due to time constraints and internal competitiveness. In addition, a demanding and tough leadership style is common in getting the job done, further hindering participation levels (Cameron & Quinn, 2006; Reis et al., 2016; Wiewiora et al., 2013; Zeb et al., 2021).

Finally, the hierarchy culture focuses on the internal environment of the organisation. Similar to a market culture, the drivers of which strive for stability and control. Subsequently, this culture type focuses on predictable and conformity in following standardised processes and procedures. As the method of governance is dominated by internal controls, the effect on relationships is that they are depersonalised. The effect of such a culture, that is driven by rigid and formal roles and norms, is that employees' opinions are less likely to be consulted or offered up during decision-making (Reis et al., 2016; Wiewiora et al., 2013; Zeb et al., 2021).

When overlapping the competing values framework with the three variables of organisational culture, a central theme that is present in all four value types is indicative of a manager's responsibilities in affecting the culture of a company as well as the levels of participation. This insight supports the third factor relationship of leadership, highlighted in section 2.2, in influencing the process that yields actual participation (Glew et al., 1995). Through this insight, the importance of leadership style will be discussed highlighting various approaches and the respective impact on participative decision-making.

2.4. Leadership Style

In its simplest form, an organisation is a system that converts individual or group effort and physical resources into products and services under the control of leaders. In order to influence employee effort in achieving organisational goals sustainably, leadership style is an important dimension to study. In addition to the management aspect of leadership in achieving the organisational goals, a leader can affect an individual's alignment with the organisation and their participation (Buil et al., 2019; Jacobsen et al., 2021; Sun & Wang, 2017). A leader is able to influence, for good or bad, the employees of a company through the conscious approach to achieving said goals (Antonakis et al., 2003; Buil et al., 2019).

Leadership theory has undergone significant evolution in the last two decades. Most notably with the addition of shared, authentic, ethical, pragmatic, servant and instrumental leadership types to the classical laissez-faire, transactional and transformational model (Anderson & Sun, 2017; Antonakis & House, 2014). Review of the latest styles of leadership, highlights a lack of differentiation between the new styles and the classical transformational style. Furthermore, this was highlighted as a concern for leadership theory and calls for future research into the formulation of new, unique, leadership styles is called for (Anderson & Sun, 2017; Antonakis & House, 2014). As such, for this research, the classical leadership dimensions of transformational and transactional leadership will be used going forward.

While the central leadership style of this research is that of a transformational style, the insights into both transactional and transformational are required in order to compare the benefits of each approach and the respective impacts on participation. Fundamentally, the approaches differ in the manner in which leaders motivate employees. The motivation approaches can vary on a continuum by either focusing on identifying, communicating and sustaining a vision and subsequently driving performance through the nurturing of employees, as is the case for a transformational leadership style. Alternatively, motivation is achieved through a transactional leadership style by communicating the tasks required, monitoring performance and utilising rewards in order to align individuals self-interests to the organisational goals (Antonakis et al., 2003; Buil et al., 2019; Jacobsen et al., 2021; Sun & Wang, 2017).

A transactional style of leadership focuses on achieving organisational goals through defining objectives, monitoring progress and ultimately controlling the outcomes in a

contractually obligatory fashion by rewarding outcomes that align with the organisational goals. There are three sub-categories within this framework that define distinctly different approaches to transactional leadership, namely contingent reward, active management by exception, and passive management by exception (Antonakis et al., 2003; Bass & Riggio, 2006; Jacobsen et al., 2021).

A contingent reward approach focuses on goal achievement through the provision of physical or psychological rewards in lieu of the fulfilment of the contractual obligation. An active management by exception approach encompasses a proactive practice in achieving results by enforcing rules and standards. Finally, a passive management by exception approach involves the punishment of non-compliance in achieving organisational goals (Antonakis et al., 2003; Bass & Riggio, 2006). From an employee's point of view, the effect is two-fold. A transactional leader is primarily focused on goal achievement and as such the employee receives task motivation only and lacks other motivational elements. On the other hand, a transactional leader is capable of providing concise and constructive task specific feedback that can build an individual's skillset, which will enhance their engagement (M. C. C. Lee et al., 2019). As such, based on these two factors individuals are likely to become followers of the leaders instead of participate with leaders in getting the job done.

On the contrary, a transformational leadership style is a proactive, collaborative and team-orientated approach that enables employees to collaborate and engage in order to achieve goals. The main drivers behind this approach are to focus on the needs and development of employees. This is achieved through the mentoring and motivating of individuals to strive for a common organisational vision (Antonakis et al., 2003; Bass & Riggio, 2006; Buil et al., 2019; Jacobsen et al., 2021). A transformational leadership framework is broken down into four factors, namely; Idealised influence, Inspirational motivation, Intellectual stimulation and Individualised consideration or the four I's. These four factors are key to this research as they outline the manner in which transactional leaders are capable of creating a participative environment organically by driving self-motivation (Jacobsen et al., 2021; Kahnweiler & Thompson, 2000).

Through an idealised influence approach, a transformational leader is capable, through their perceived charisma, of leading by example and generating buy-in to the vision. Through this approach, employees are motivated to partake in the process

which drives engagement. Furthermore, transformational leaders are capable of utilising inspirational motivation to further communicate and drive an ambitious vision for the organisation. Through this communication, the achievability of such an ambitious goal is disseminated into the team and this intrinsically gains individuals' commitment and engagement (Antonakis et al., 2003; Bass & Riggio, 2006; Buil et al., 2019; Jacobsen et al., 2021).

The third manner in which a leader can be transformational is through intellectual stimulation. The aim of which is to challenge employees to think innovatively in finding solutions to difficult problems that are outside the norms. In doing so, the leader communicates openness and actively seeks out differing views and engagement. As a result, a participative environment within an organisation can be formed (Antonakis et al., 2003; Bass & Riggio, 2006; Sun & Wang, 2017).

The final and arguably the most important factor within the transformational leadership toolbox is individualised consideration. The driver behind this approach is to support and empower individuals in a manner that enables them to develop personally and professionally. By listening to the individual needs and concerns of an employee, a transformational leader is able to coach employees through challenges, but most importantly, is able to instil an environment where all views are discussed. This in turn stimulates employee participation and engagement (Antonakis et al., 2003; Bass & Riggio, 2006).

Referring back to Figure 3, employees will identify and engage with the organisation more frequently as a result of a transformational leader's approaches. Ultimately, through the development of the assumptions and values of culture, improve the performance of individuals by creating a supportive environment resulting that improves job satisfaction and organisational competitiveness (Buil et al., 2019; Hansen & Pihl-thingvad, 2019).

For the purposes of this study, due to the unlikeliness of a transactional leadership style developing, supporting and nurturing participative environments, the leadership style discussion will focus specifically on a transformational approach.

2.5. Organisational Culture, Transformational Leadership and Participative Decision-Making

As presented in Figure 3, when looking at the interaction of the three major constructs in this literature review, it is important to understand the impacts they have on one another. Particularly, the relationship with the propensity for participative decision-making.

The importance and role of organisational culture in developing a participative environment is crucial in understanding that the culture of an organisation contextualises the meaning and values that individuals attribute to a manager's intended participation initiatives. The influence on the process between intended and actual participative is broken down into five factors that affect initiative efficacy, namely; what is the essence, what is the reason, what is the inclusion level, what are the primary issues agenda and is the process cognitive or motivational (Sagie & Aycan, 2003).

The variation in these five effects results in varying value profiles. These variations are typically represented by the four culture types. The resultant impact is that the variation in values impacts the effectiveness of participation programs. As such, the inter relation of the concepts requires further probing in order to understand the dynamics of the relationship fully.

As a clan culture is focused on motivating through all five effects, as such, a strong positive relationship to participation is found (Hartnell et al., 2011; Jones et al., 2005). From an adhocracy culture perspective, mediating and moderating variables are found to impact the levels of participation. Variables such as autonomy, individuals' ability and trust with the manager are found to be the highest contributing factors in predicting participation in this culture type. As this culture is externally focused, the development of individual is typically neglected, resulting in only four of the five affects being satisfied. While the relationship with participative decision-making is not as strong as a clan culture, due to a lesser collectivist approach, a positive relationship is still expected (Hartnell et al., 2011; Jones et al., 2005).

With market culture types, as the drivers are for external excellence, a positive relationship to participation is possible. This is typically due to a collectivist employee culture motivated by extrinsic and intrinsic rewards. Satisfying three of the five

affects. In practice, it is found that, typically due to centralised decision-making and aggressive internal competitiveness, participation is not a likely outcome (Cameron & Quinn, 2006; Hartnell et al., 2011; Jones et al., 2005). Similarly, a hierarchy culture type, only satisfies two of the five effects in the process by being exclusively focused on internal control of the process and procedures. As such a participative environment is not evident in this culture type (Cameron & Quinn, 2006; Hartnell et al., 2011; Jones et al., 2005).

The third factor acting on the process, resulting in actual participation, was highlighted in Figure 3 as the role of a transformational leader. When looking at the relationship between a transformational leader and the propensity of participative decision-making, it is found that a strong positive relationship is typical. This is an expected relationship as transformational leaders typically drives the five effects of organisational culture that influence the process of participation (Kahnweiler & Thompson, 2000; Sagie & Aycan, 2003). In addition, a transformational leadership four I's approach aligns, as drivers, of the six dimensions of participative decision-making (Black & Gregersen, 1997; Buil et al., 2019). Furthermore, when looking at the organisational level drivers of participative decision-making, the majority of the factors are either directly or indirectly influenced by a transformational leader (Kahnweiler & Thompson, 2000; Parnell & Crandall, 2001).

Moreover, based on the influential nature of a transformational leader and organisational culture, the relationship is important to understand in this research context. Primarily, the literature outlines an intertwined relationship between the two constructs. The ability for leadership style to significantly influence the culture of an organisation is outlined and supported. In addition, the culture is also identified as being able to significantly shape the leadership style of the company (M. C. C. Lee et al., 2017; Ogbonna & Harris, 2000). An important differential in leadership approach is that a transactional leadership style typically operates within the set organisational culture. In contrast, transformational leaders work towards changing the organisational culture (Ogbonna & Harris, 2000; Sun & Wang, 2017).

When reviewing the literature on the relationship between organisational culture and transformational leadership, it is identified that organisational culture has a mediating and in some cases moderating effect on the relationship between transformational leadership style and organisational outcomes such as competitiveness, employee

turnover and job satisfaction (Buil et al., 2019; Lok & Crawford, 2004; Ogbonna & Harris, 2000; Sun & Wang, 2017).

Within the current literature, as outlined above, studies investigating the relationship between organisational culture and participative decision-making as well as transformational leadership and participative decision-making are well established. However, to the researcher's knowledge, studies including organisational culture, transformational leadership and participative decision-making in a single study have not been conducted. As such, a gap in the theoretical understanding of the inter-relational dynamics in current research is present. As such, this gap forms the aim of this research and informs the research objectives.

2.6. Conclusion

The literature review presented decision-making approaches in organisations with a focused review of the antecedents of participative decision-making through the six dimensions (Black & Gregersen, 1997). Furthermore, in reviewing the process of developing actual participation in decision-making, the organisational and leadership factors that impact the process were also critically reviewed. In this, the variables of culture were unpacked to identify the varying types of culture that exist in organisations, namely; Clan, Adhocracy, Market and Hierarchy (Cameron & Quinn, 2006; Schein, 2010). Furthermore, transactional and transformational leadership styles were discussed with only a transformational approach being identified as having a role that results in participative decision-making (Antonakis et al., 2003; Buil et al., 2019; Jacobsen et al., 2021).

An analysis of the interrelations of the three constructs was conducted in order to further understand the dynamics of the relationships. Through the gap identified in literature on the dynamic relationship of all three constructs simultaneously, this study argues that said relationship between organisational culture and participative decision-making is moderated by transformational leadership.

3. CHAPTER 3: Research Model and Hypotheses

3.1. Research Model

The primary goal of this research was to investigate the moderating effect of transformational leadership on the relationship between organisational culture and participative decision-making. To that end, research objectives were proposed based on a comparative analysis of the available literature, a model of which can be found in Figure 3. The research model aims to confirm key underpinning relationships highlighted in literature as well as explore the research gap identified. The model achieved this by investigating the relationship between organisational culture and transformational leadership and the dependent variable, participative decision-making. In addition, the effect that transformational leadership has as a moderating variable on the relationship between organisational culture and participative decision-making was also tested. The intent of the research objectives was to build on the existing literature to enhance the understanding in this field.

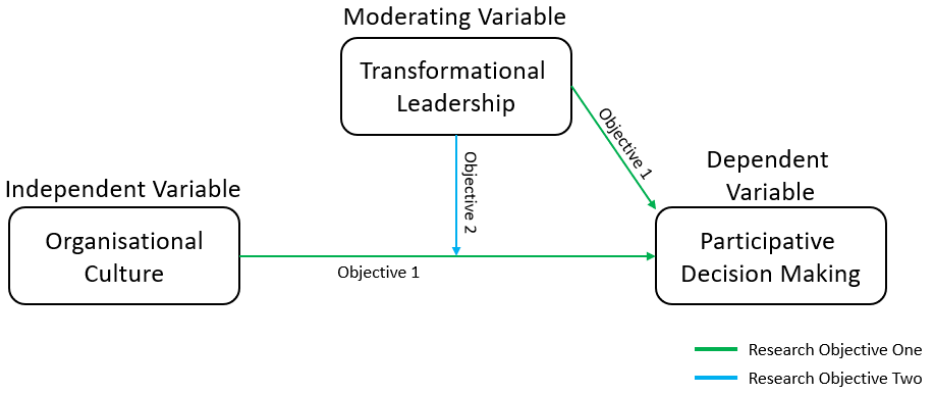

Figure 3: Research Model

3.2. Research Hypotheses

In this section, the research hypotheses are presented systematically based on the research objectives in order to guide the research process. A model of the hypotheses framework can be seen below in Figure 4. In order to satisfy the first research objective, five research hypotheses were tested to provide empirical evidence to confirm the theorised relationships between organisational culture, transformational leadership style and participative decision-making, within this research context. Due to the four different types of cultures extracted from literature, the respective relationships with participative decision-making will be tested per

culture type. The fifth hypothesis tested the relationship between transformational leadership and participative decision-making. Following on, the second research objective was addressed through one hypothesis, containing two sub-hypotheses. The hypotheses tested represent the primary research purpose in understanding the moderating effect of transformational leadership on the relationship between organisational culture and participative decision-making.

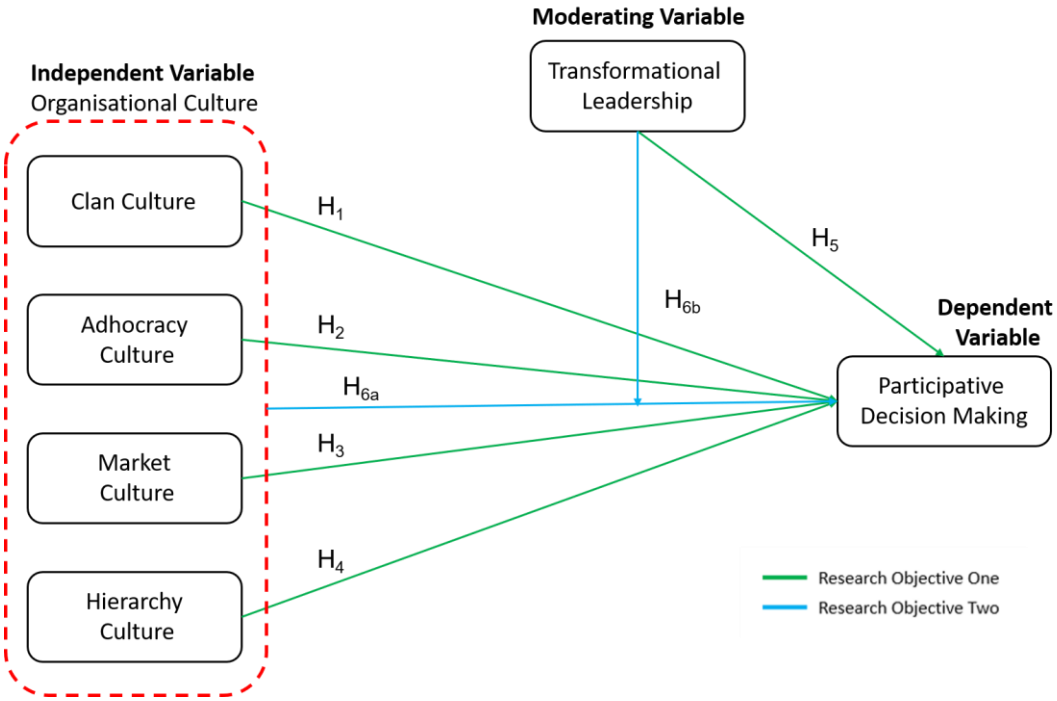

Figure 4: Hypotheses Framework

Research Objective One: To determine the relationship between organisational culture and transformational leadership style with participative decision-making.

H1: Clan culture has an effect on the occurrence of participative decision-making.

H2: Adhocracy culture has an effect on the occurrence of participative decision-making.

H3: Market culture has no effect on the occurrence of participative decision-making.

H4: Hierarchy culture has no effect on the occurrence of participative decision-making.

H5: Transformational leadership has an effect on the occurrence of participative decision-making.

Research Objective Two: To determine if a transformational leadership style acts as a moderator on the relationship between organisational culture and participative decision-making.

$H6_a$: Organisational culture predicts the occurrence of participative decision-making.

$H6_b$: Transformational leadership style moderates the relationship between organisational culture and the occurrence of participative decision-making.

4. CHAPTER 4: Research Design and Methodology

The primary aim of this study, at the core of the literature review and research model, was to investigate the moderating effect of transformational leadership on the relationship between organisational culture and participative decision-making. In order to test the hypotheses posited in the research model, the research design and methodology are pivotal in providing structure, reliability and validity to the research process (Kallet, 2004). This chapter of the research outlines the choice of research design and methodology employed that ensured that the research process remained in line with its purpose, problem statement and research model.

4.1. Research Design

In conducting research, the design is imperative to guide the logic and logistics of the research process. The design outlines a holistic framework for how thinking, reasoning and doing are actioned to ensure alignment between all research elements (McGregor, 2019). As such, the design was broken down into five functional sections, as outlined below.

4.1.1. Research Purpose

The research purpose is an important dimension in understanding how the research objectives will be answered (Valerie & Ritter, 2012). In the context of this research, the research model outlines a structured approach, through hypothesis testing, in determining the moderating effect of transformational leadership on the relationship between organisational culture and participative decision-making. Furthermore, the hypotheses have been formulated based on sound theoretical underpinnings. As such, a descriptive or exploratory research purpose would not be suited to this study.

In principle, this research was focused on analysing an environment in order to empirically test the relationships between the independent, dependent and moderating variables statistically, in order to predict the relationships therein. As such, based on the research objectives, the most applicable research purpose was that of an explanatory study (Valerie & Ritter, 2012).

4.1.2. Research Philosophy

The research philosophy is defined by the assumptions and system of beliefs of the researcher and the impact this has on the nature and development of knowledge (Byrne, 2017; Saunders & Lewis, 2012). Within research philosophy, the ontological, epistemological and axiological assumptions of the research impact the choice of philosophy. However, in the study of social sciences, two predominant philosophy types underpin research, positivist and interpretivist (Byrne, 2017).

With regards to this research, from an ontological point of view, based on the natural tendency of the researcher as well as the context of the study, an objective view of social reality was taken such that said reality can be obtained from pure data and facts. From an axiological point of view, the research conducted was explanatory in nature. Finally, from an epistemological point of view, the knowledge developed stemmed from the testing of hypotheses to draw correlation and causation relationships without the interaction or bias of the researcher. As such, based on the alignment of the ontological, epistemological and axiological assumptions, a positivist philosophy was used in conducting this research (Byrne, 2017).

4.1.3. Research Approach

The approach to theory development is defined as the method in which theory is used and developed in research and is informed by the research design and methodology as well as the extent of existing research in the field of study (O'Leary, 2007). Within this research context, theory on participative decision-making, transformational leadership style and organisational culture is well established. In addition, the purpose of the research was explanatory in nature. As such, inductive and abductive approaches are not suitable for this research, therefore a deductive approach to theory development was used.

This approach was in line with the positivist philosophy of the research design in that it utilised existing theory to develop a set of research hypotheses whereby data was collected and tested to verify the initial theory (O'Leary, 2007). A positivist deductive explanatory approach is further supported by research in the fields of transformational leadership, organisational culture and participative decision-making (Black & Gregersen, 1997; Kahnweiler & Thompson, 2000; Sun & Wang, 2017; Wiewiora et al., 2013; Zeb et al., 2021).

4.1.4. Research Methodological Choice and Strategy

The research choice employed for this research was a mono-method study. Further to this, a mono-method quantitative study was conducted as this further aligns with the purpose, philosophy and approach of the research objectives. The choice supports an unbiased, context independent approach in answering the research objectives (Saunders & Lewis, 2012).

The most appropriate method to collect data, specific to this mono-method quantitative study, was a survey strategy. In particular, a self-administered online survey strategy was used (Valerie & Ritter, 2012). This strategy was appropriate as it provided a snapshot of the environment being studied through the use of verified and standardised questionnaires. In addition, a survey strategy, specifically within an explanatory study, is useful in determining the factors that influence the dependent variable.

Furthermore, a self-administered online survey strategy provided the researcher with a low cost, efficient and effective method of maximising the sample size in collecting data (Ruel et al., 2016; Valerie & Ritter, 2012). Survey strategies used in the fields of transformational leadership as well as participative decision-making have typically been deployed in order to collect data for analysis, further supporting this choice of strategy. (Amundsen & Martinsen, 2014; Russ, 2011; Wong et al., 2018).

4.1.5. Research Time horizon

As the research strategy for this study was that of an online survey, a cross-sectional approach was used. This is opposed to a longitudinal approach whereby data is collected at multiple instances to create a two comparative datasets (Ruel et al., 2016). This approach is applicable to this research as it provides a cost effective and efficient method of collecting data Furthermore, because the research objectives are not time-dependent, a snapshot of responses is sufficient for testing hypotheses (Allen, 2017). In support of this approach, this choice of data collection is supported by literature in the fields of participative decision-making and transformational leadership (Hanna et al., 2021; Pacheco & Webber, 2016; Russ, 2011).

4.2. Research Methods

The purpose of this section is to provide validity to the study by detailing the subjects studied, the measurements used, data collected and analysis thereof. The aim of which is to provide future researchers the ability to judge the repeatability of the study as well as determine whether the results achieved and conclusions drawn are valid (Salkind, 2010). As such, this section details the population, unit of analysis, sampling method and size, data collection and analysis, ethics and limitations in this study.

4.2.1. Population

In survey strategy research, the population is defined by the finite collection of units from which the data is sought and includes the content, unit, extent and temporal dimensions (Lavrakas, 2008). The population of this study is comprised of individuals (content), who are currently affected by organisational culture, transformational leadership style and participative decision-making (units), and are employed within a hierarchically structured organisation (extent). Furthermore, the participants are required to have at least one higher ranked individual in the structure to whom they report to.

The relationship between organisational culture and transformational leadership with participative decision making is not limited to the industry or company. The relationship is typically an intangible factor that influences an employee based on environmental factors, as such this allows the population to be expanded to multiple industries without limitation (Black & Gregersen, 1997; Kahnweiler & Thompson, 2000; Pacheco & Webber, 2016). This is beneficial for this study as it enabled a larger population to be sampled. Furthermore, it enabled this study to collect data with greater diversity, thus enhancing the insights that can be extracted.

As the continuum of participative decision-making occurrence varies from high to non-existent, all respondents within the selected population possess insights into the occurrence of participative decision-making and thus can provide valuable insights into the dynamic impact that organisational culture and transformational leadership style have. Furthermore, this population is supported by research in the fields of participative decision-making, organisational culture and transformational leadership (Buil et al., 2019; García et al., 2019; Reis et al., 2016; Wiewiora et al., 2013).

4.2.2. Unit of Analysis

According to Kraemer and Pinsonneault, (1993) the unit(s) of analysis is simply the unit that the statement is made about or information is collected on. In this study, the unit of analysis was chosen at the individual level, specifically the individual's experiences with organizational culture, transformational leadership style, and participative decision-making.

Through the collection of data at the individual level, insights into the effects of the environmental factors within an organisation on the individual can be gained, highlighting the relationships in line with the research objectives. This approach is further supported by the research in the field of participative decision-making (Guinot et al., 2021; Kahnweiler & Thompson, 2000; Parnell & Crandall, 2001).

4.2.3. Sampling Method and Size

In order to simplify the research process, a subset of the population was selected (Salkind, 2010). For the purpose of this study, an entire list of the population is not known to the researcher. As such, a non-probability sampling technique was utilised. Kraemer and Pinsonneault, (1993) identified that the most common non-probability sampling methodology in explanatory survey research, at both the organisation and individual levels, is that of purposive sampling. As such, for this research study, purposive sampling was used, where judgement was exercised by the researcher, in selecting the sample that was typical of the population (Zikmund et al., 2019). In order to increase response rates during data collection, snowball sampling was later employed.

To ensure that the data received throughout the data collection phase was typical and aligned with the research design and objectives, the survey contained a mandatory qualifying statement to enable verification of the respondent’s alignment with the research criteria.

With regards to sample size in the fields of organisational culture, transformational leadership and participative decision-making utilising a survey style approach, reflected sample sizes ranged from 144-240 (Amor et al., 2020; Huang et al., 2006; Reis et al., 2016; Russ, 2011). Furthermore, it was found by Kraemer and Pinsonneault, (1993) that in explanatory research, the majority of sample sizes for individual and organisational units of analysis are over 200. From a statistical

analysis point of view, where population size is unknown, the determinant of sample size relies on the effect size as well as the level of predictor analysis required (Green, 1991). A large effect size is defined by a difference in the data collected that is visible without having to look for it (Allen, 2017). On the contrary, a small effect size is defined whereby the effect is important but not overtly visible.

However, for this research, while the effect is not invisible, it does require analysis in order to extract insights and as such a medium effect size is applicable. In addition, evaluation of individual predicators is required by the research objectives, resulting in the minimum sample required for statistical analysis being defined by:

$$n = 104 + m$$

Where n is the sample size and m is the number of predictors (Green, 1991).

The analysis conducted in this research contained two predictors in the regression study. Based on this, the minimum sample size for this study is calculated to be 106 responses. However, due to sub-optimal response rates in survey style research as well as the statistical analysis requirements, an actual sample size of 200 was set for this study. Based on data found by Kraemer and Pinsonneault, (1993) the majority of surveys conducted resulted in a below 51% response rate. As such, a minimum of 400 individuals were sent the survey link in order to achieve the desired response.

4.3. Research Instrument

The research instrument refers to the tool the research employs to collect data in order to measure research variables (Salkind, 2010). For the purpose of a non-probability sample, survey oriented, quantitative and explanatory study, the measurement instrument most applicable is a questionnaire (Ruel et al., 2016). Furthermore, a questionnaire offers the respondents anonymity and confidentiality.

In non-probability purposive sampling research, an online survey lends itself appropriately due to the inherent sample selection bias of the tool (Vehovar & Manfreda, 2008). This approach to data collection is supported by other research in the fields of participative decision-making, leadership and organisational culture (Amundsen & Martinsen, 2014; Hempel et al., 2012; Parnell & Crandall, 2001).

Due to the scope of the project, standardised and pretested questionnaire sets were used to collect data on the three constructs of study. In addition to the three scale

sections, demographic and qualifying questions were included to ensure the sample participants' statistics are understood, as well as to ensure that consent and qualification for the study is guaranteed. An outline of the survey structure can be seen below in Table 1.

Table 1: Survey Structure

Section	Purpose	Rating	Questions	Source
Consent	Agreement to take part	-	1	-
Qualifier	Qualifying filter	-	1	-
A	Demographic Info	Descriptive	6	-
B	Organisational Culture Scale	5-Point Likert	24	(Cameron & Quinn, 2006)
C	Transformational Leadership Scale	5-Point Likert	7	(Carless et al., 2000)
D	Participative Decision-Making Scale	5-Point Likert	27	(Kahnweiler & Thompson, 2000)

The three separate scales were employed in order to cover the distinct constructs as outlined in the research model. The measurement scale used to measure participative decision-making, with sub-scale Cronbach alpha scores ranging between 0.7815 and 0.9253, was sourced from the work done on decision-making by Kahnweiler and Thompson, (2000). The scale used to identify cultural traits within an organisation and was sourced from the competing values culture assessment, specifically utilising the competing values framework. As this scale is covered under proprietary information, permission was requested and received in order to utilise the scale for this research, a copy of which can be found in Appendix C. The Cronbach alpha score of this scale is 0.71-0.79 (Cameron & Quinn, 2006). Finally, the transformational leadership scale used was the Global Transformational Leadership scale with a Cronbach alpha score of 0.9. This scale was sourced from the work conducted on transformational leadership by Carless et al., (2000). Furthermore, a copy of the full survey content can be found in Appendix A.

In order to extract the maximum value from the survey process, the questions related to organisational culture and transformational leadership were posed first. The intent of which was to stimulate the participants' thoughts on those constructs within their current environment. As a result, when presented with the participative decision-making section, the answers will be more in line with the research objectives. In addition, the organisational culture questions were randomised such that the participants could not infer any cause and effect relationships that would impact the validity of the data (Buil et al., 2019). Furthermore, all questions in the survey were marked as mandatory to prevent non-response bias.

With regards to the rating scale of the survey, it is important for this research to mention the Likert scale. The Likert-type scale is one of the most used scales to rank a respondent's level of agreement or disagreement with a statement (Frey, 2018). The importance of this scale is such that it differs from other numerical rating scales in that it can assess both positive and negative sentiments toward a statement. The one disadvantage to this scale is that responses can be higher than actual due to a social desire to be perceived positively (Frey, 2018).

Furthermore, within this research instrument, the original scale developed for the organisational culture scale, section B of the survey, was that of the standard ipsative rating scale. While this scale is useful in lowering self-report bias due to social desirability, the inability to conduct statistical analysis on the data created a challenge for this research (Frey, 2018). As such, the rating scale of the organisational culture scale was changed to a 5-point Likert scale to suit the data analysis approach as discussed in Section 4.6. The updated rating scale selected will measure each statement as follows; 1 – Strongly Disagree, 2 – Disagree, 3 – Neutral, 4 – Agree, 5 – Strongly Agree. While changing the rating scale in a questionnaire typically influences the validity of the scale, studies utilising the competing values framework have validated this conversion and thus the reliability and validity of the scale is maintained (Cameron & Quinn, 2006; Heritage et al., 2014; Kalliath et al., 1999; Limaj & Bernroider, 2019).

For section C and D of the survey, a 5-point Likert scale was used for the questions on participative decision-making and transformational leadership as per the original studies (Carless et al., 2000; Kahnweiler & Thompson, 2000).

As the questions are related to frequency the scale ranged from 1 – Never, 2 – Rarely, 3 – Sometimes, 4 – Very frequently and 5 – Always.

4.4. Data Collection

As a first point of call, ethical clearance from The Gordon Institute of Business Science (GIBS) was received prior to any surveys being distributed, a copy of the approval can be found in Appendix B.

4.4.1. Phase One: Pre-Testing

Once ethical clearance was granted, the research instrument was tested in a pilot study. Pre-testing was conducted to ensure that there was no confusion or misinterpretation, by the respondents, of any of the instrument scales. In addition, the time required to complete the survey was validated. Recommendations on pilot study size indicate a target response of between five to 15 individuals that are typical of the target sample (Zikmund et al., 2019). For this research's pilot study, a total of ten valid responses were received for analysis.

Responses from the pilot study were received electronically from all of the participants. Feedback from the pilot study indicated an average time to complete the survey of nine minutes. Further to this feedback, two concerns were raised. The first concern was that the survey was "extremely long". The second concern was with regards to providing improved clarity on the scope of the research in the cover letter.

Subsequently, the survey was assessed for any possibilities to narrow down the question set. However, as each question formed part of a standardised scale, the importance of each question was deemed critical to the reliability and validity of the study and no changes were made. Further to this, the cover letter was improved to provide further clarity. The feedback and changes to the cover letter were incorporated into the survey instrument and uploaded to an online survey platform called Google Forms.

4.4.2. Phase Two: Main Study

The main data collection phase began with the survey being operationalised into a hyperlink which was sent via WhatsApp and Telegram to individuals known to the researcher to fit within the target sample (Saunders & Lewis, 2012). Along with the hyperlink, a cover page and a brief outline of the research was submitted to provide further insight into the study.

As the response rate began to wane, one week post the initial distribution, a second message was sent thanking those for participating in the research and encouraging anyone who hadn't to partake (Chidlow et al., 2015; Saunders & Lewis, 2012). Once responses subsequently decreased, the survey linked was distributed via multiple social media platforms as well as via email to members of the researcher's organisation in order to increase responses. Similarly, as the response rate began to decline a follow up message was sent, which was then left to be completed organically until the data collection period was closed. The entire data collection period was conducted between the months of July and September 2021.

4.5. Data Preparation

In line with hypothesis testing, the collection of data is not valuable unless it undergoes analysis. During the data collection phase, both categorical and numerical data was collected as a part of the quantitative study (Saunders & Lewis, 2012). A process of coding and editing, prior to the analysis, was conducted in order for any analysis to be followed (Ruel et al., 2016).

4.5.1. Data Coding

As a quality control step, the downloaded data was compared to the Google Forms data to ensure that no capturing errors occurred during the transfer process. Once the data integrity was verified, the Excel data was modified according to the coding key found in Appendix D, such that any string data was removed and replaced with a numerically representative value. This was important as without this step, statistical analysis could not be conducted (Ruel et al., 2016).

4.5.2. Data Editing

Once the data had been coded, missing data entries or non-response biases are typically an issue for survey research. However, in this survey, this was not a concern as all responses received incorporated all answers as mentioned in section 4.3 above (Ruel et al., 2016). As such, the data set was sorted according to the consent question as well as the qualifying statement. Finally, only qualifying data was loaded into IBM SPSS Statistics 27 to be analysed.

4.6. Data Analysis

4.6.1. Outliers

In order to analyse the data statistically, one of the assumptions is that no outliers are present within the data set. Outliers are points in the data set that do not follow a normal distribution of the entire data set. A typical impact on the data set if outliers are present is that the curve is skewed either positively or negatively outside of acceptable limits (Wegner, 2018). The criteria for no existence of outliers was -3 ≤ z-score ≤ +3 (Wegner, 2018). Where the z-score is calculated by the following equation:

$$z = \frac{x - \mu}{\sigma}$$

Where z is the standard score, x is the observed value, μ is the sample mean and σ is the standard deviation.

For this research, any outliers identified were removed or trimmed as they distort the mean values of the data and could impact the ability to conduct inferential statistics. Once outliers were removed, the process was repeated until zero outliers existed in the data set.

4.6.2. Construct Reliability and Validity

Within this survey research, the reliability and validity of the measurement instrument was critical in ensuring that the insights gained from the research scales were accurate (Ruel et al., 2016; Zikmund et al., 2019). The reliability of a construct measures the internal consistency of a scale. Reliability was an important dimension in this study in improving the consistency and repeatability. While repeatability is important for survey research, the validity of the instrument is equally as important. The validity of an instrument is represented by the accuracy of the constructs, which measures how well the scale represents the intended concept (Zikmund et al., 2019).

For this study, the internal consistency or reliability of the study was measured per construct through the use of Cronbach's Alpha (Ruel et al., 2016; Zikmund et al., 2019). The aim of calculating Cronbach's Alpha is to determine how well the scale items converge. A minimum Cronbach's Alpha value of 0.7 was required to ensure that the scale is reliable and thus improving the construct validity of the research tool which ultimately improved the content validity of the study (Lavrakas, 2008). In this

study, for an alpha value above 0.7, the scale is deemed to have good reliability. Furthermore, an alpha score greater than 0.8 is deemed to have very good reliability (Zikmund et al., 2019).

The validity in this study was measured using construct validity. Construct validity is the soundest and most rigorous method for determining instrument validity (Ruel et al., 2016). In order to prove construct validity, the instrument must have both convergent validity as well as discriminant validity (Frey, 2018). Convergent validity exists when two or more measures of a scale correlate to each other with a Pearson's correlation coefficient (r) value of greater than 0.3, with a statistically significant relationship, $p<0.05$. This indicates that the scale's measures are all measuring the same thing. Furthermore, discriminant validity exists when the correlation to any other scale measure is less than 0.75 (Frey, 2018; Zikmund et al., 2019). This indicates that measures between scales are not measuring a similar construct.

4.6.3. Factor Analysis

Factor analysis is a set of statistical procedures that enables the researcher to simplify complex sets of quantitative data. The method of analysis compares the correlation coefficients of the variables to determine the smallest number of variables that can statistically explain the correlations between the variance (Jupp, 2006). The aim of factor analysis is to improve the construct validity as well as simplify the data set for analysis (Salkind, 2010; Zikmund et al., 2019).

Within factor analysis, there are two types, namely; confirmatory factor analysis and exploratory factor analysis. Confirmatory factor analysis was initially conducted to validate the theoretically hypothesised relationships in order to determine intercorrelation fit. The fit indices that determine a good fit and confirm that the theorised hypotheses between constructs are accurate, X^2 must be significant, $p>0.05$; $CFI>0.9$; $RMSEA<0.08$ and $SRMR<0.08$ (Furr, 2011).

In this study, the confirmatory factor analysis fit indices were not found to be within the acceptable limits. As a result, an exploratory factor analysis was deemed to be a suitable method of factor analysis. However, importance was placed on the researcher, during the factor extraction process, in ensuring that the factors extracted were in line with the theory (Beavers et al., 2013).

In conducting the exploratory factor analysis, more specifically a principal component analysis, the main variables within the scale that sufficiently explained the intercorrelation and removed any redundant variables were extracted (Jupp, 2006; Salkind, 2010). For a principal component analysis to be accepted, Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's test of sphericity (BTS) values were calculated prior to factor analysis to ensure significant levels of inter-correlations exist. Further to this, for this study, a minimum KMO of 0.6 and $p < 0.05$ for BTS were required for the principal component analysis to be determined as a satisfactory method of factor analysis (Salkind, 2010). Once confirmed as an appropriate method, the factors were extracted, outlining the respective questions per factor.

4.6.4. Normality

Testing for normality or normal distribution within the data set is a critical step in parametric statistical hypotheses testing as it is one of the underlying assumptions (Newton & Rudestam, 2013). As such, testing for normality of the data set was conducted by performing a Shapiro-Wilk test. The Shapiro-Wilk test is the most popular non-graphical test for normal distribution (Salkind, 2010). Within the Shapiro-Wilk test, the null hypothesis defines that the data is normally distributed. Conversely, the alternate hypothesis defines that the data is not normally distributed. As such, the rejection of the null hypothesis will occur when $p < 0.05$ (Salkind, 2007).

In cases of non-normal distribution, it is suggested that data transformation of the data via a natural log transformation be conducted. However, this kind of transformation of the data does impact the ability to interpret the results as well as potentially hide the significance of the data skewness (Osborne et al., 2008; Salkind, 2007). When conducting significance testing, the definition of normality can be further assessed in terms of the skewness and the presence of outliers.

If the data is skew but does not contain outliers, the inferential statistical results are unlikely to be significantly affected and can be tested without data transformation (Tabachnick & Fidell, 2019). The limits to the skewness of the data, for it to be considered practically normal, are for skewness values between 0 and +/-1 with the ideal number closer to zero (Osborne et al., 2008). This is further supported by the central limit theorem in that for large samples, the data will be approximately normal and thus have little to no effect on the statistical results (Frey, 2018; Salkind, 2010).

4.6.5. Descriptive Statistics

The aim of descriptive statistics is to summarise, organise and describe the basic characteristics of the data. The intent thereof is to provide a simple and manageable view of the data to the researcher and reader. The breakdown of the data is typically in the form of measures of central tendency, dispersion and distribution shape (Frey, 2018; Zikmund et al., 2019).

To begin with, an analysis of the research response was completed outlining the original data set received and any changes made as outlined above. The intent was to provide the researcher with a representation of the actual sample that was analysed. Descriptive statistics were then conducted on categorical data, namely the nominal and ordinal data from section A of the survey study. This data was presented by frequency and percentage measures. Furthermore, descriptive statistics of the factorised ordinal data collected in Section B-D of the survey was presented through the mean, median, mode, skewness and standard deviation, values.

4.6.6. Inferential Statistics

Inferential statistics refers to the process of analysing observed data statistically such that conclusions beyond what is evident in the data can be drawn (Frey, 2018; Zikmund et al., 2019). To that end, the conclusions drawn infer a statistically significant or insignificant relationship between the dependant and independent variables (Zikmund et al., 2019). The aim of the inferential statistics analysis conducted in this research was to enable null hypothesis testing at a 95% confidence interval ($p < 0.05$). Furthermore, before any statistical analysis was conducted, the underlying assumptions were tested to ensure the viability of the test methodology.

For this study, statistical analysis was conducted per research objective. For the first objective, the relationships posited by hypotheses one to five, required a comparative analysis to be conducted between a single dependent and independent variable. In order to conduct this testing, simple linear regression methods were employed.

A simple linear regression analysis determines the straight-line relationship that fits best between two variables. The intent of the best fit line indicates the strength and direction of the relationship between the two variables.

The general equation of a simple linear regression is:

$$Y = a + bX$$

In the above equation, ‘Y’ represents the dependent variable, ‘X’ represents the independent variable, ‘a’ represents the vertical axis intercept when ‘X’ is zero and finally, ‘b’ represents the gradient of the correlation. (Allen, 2017).

At the core of the simple linear regression model is a Pearson’s correlation (r) analysis (Allen, 2017). In such an analysis, the value of r represents the strength of the relationship provided it is statistically significant ($p < 0.05$). The direction of the correlation is indicated by the sign of the result, either positive or negative. The strength of the relationship is dependent on the r value with; $|r| < 0.19$ indicating a negligible strength of relationship, $0.2 \leqslant |r| < 0.39$ indicating a weak strength of relationship, $0.4 \leqslant |r| < 0.59$ indicating a fair strength of relationship, $0.6 \leqslant |r| < 0.79$ indicating a moderate strength of relationship and $0.8 \leqslant |r| < 1$ indicating a strong strength of relationship (Allen, 2017).

For research objective two, the relationships posited by hypotheses six required an analysis to determine a moderating effect between multiple independent variables on the dependent variable. As such, a hierarchical regression analysis was conducted. The aim of this statistical approach was to determine the variance in a dependent variable through the addition of the moderating variable (Frey, 2018).

This variance is measured by R^2 and is the variance in the dependent variable as a result of an optimal linear fit of the independent variables. In this analysis, the ΔR^2 represents the change in variance through the addition of the moderating variable (Frey, 2018). The formula for a hierarchical or multiple regression is:

$$Y = a + b_1X_1 + b_2X_2 + \cdots + b_nX_n$$

In this equation, ‘b_1’ represents the gradient of the first predictor and ‘X_1’ is the first independent variable. This process is followed dependent on the number of variables in the study. ‘a’ represents the vertical axis intercept when all predictors are zero. Finally, ‘Y’ represents the dependent variable (Allen, 2017).

4.7. Research Quality and Ethics

Most importantly, the quality of this study was underpinned by a systematic and rigorous research design and methodology. This guaranteed every aspect of the research worked harmoniously with one another. In addition, this research was supported by sound literature, in both the construct fields as well as the methodology employed, that are firmly based on highly rated academic articles (Hall, 2011).

In order to guarantee that the researcher collected data in an ethical manner, ethical clearance was first obtained from the GIBS Ethics Committee before any data was collected. Once clearance was given, the research survey content was not modified in any way. In addition, data was only collected from individuals who gave such consent. Furthermore, all participants were advised that participation was voluntary and that they had the right to opt out of the survey at any point without penalty.

As the survey was delivered through an online platform, the landing page presented each participant with a brief outline of the study as well as the purpose of the research. The intent of this was to inform the potential respondent of the scope of the study so that informed consent could be given. Finally, to ensure anonymity and confidentiality, all personal information that could be used to identify respondents was strictly excluded from the survey. Throughout the research, honesty and integrity was maintained by the researcher by explicitly following the process as outlined above. In addition, all the raw data and analysis thereof was provided freely in its entirety. Furthermore, no data editing, modification, manipulation or fabrication was conducted to intentionally mislead. Finally, within this research scope, the researcher remained independent of the data observed and that no conflict of interest existed in any potential findings.

4.8. Limitations

In all research, limitations of the methodology and the resultant insights are inevitable purely based on the fact that research decisions are made to increase the reliability and validity of the research. These decisions introduce bias and are typically made in the research method, sampling and other design elements (Given, 2008).

4.8.1. Population and Sampling

The first noteworthy limitation to this study can be found in the population and sampling approach. As the sampling frame was not known to the researcher, non-probability purposive and snowball sampling was utilised. In this decision, judgement was made in selecting participants for the study. As such, representativeness in the study is unknown (Kraemer & Pinsonneault, 1993; Salkind, 2010). While many efforts were made to select a sample that fits the population, the method of sampling prevents the statistical generalisability of this study.

4.8.2. Sample Size

The actual sample size tested comprised of 192 valid responses. While this level of respondents is in line with the work conducted by Green (1991) for statistical analysis to be valid, the number of respondents fell below the minimum 200 responses required for confirmatory factor analysis (Frey, 2018). As such, the influence of the researcher, in conducting the principal component analysis, may impact the robustness of the findings. In mitigating this risk, the researcher followed theoretical literature when forming new factors.

4.8.3. Data Collection

Within the fields of participative decision-making, organisational culture and transformational leadership, a dynamic relationship exists between the three constructs. As an online survey was deployed, the data collection method was cross-sectional. As a result, the study was only able to capture a snapshot of the environment. While this was acceptable for the research objectives, this method of data collection is incapable of observing the dynamics of the relationships (Allen, 2017). Furthermore, as the measurement instrument was operationalised into an English online survey, self-selection bias is inevitable in the data collection process, which ultimately leads to bias in the results (Lavrakas, 2008).

4.9. Conclusion

The research design and methodology formed the central pillar of this research in providing reliability and validity to the inferences drawn. To this end, a survey methodology was utilised in a mono-method quantitative explanatory study in order to perform hypotheses testing. 192 useable and valid data points were collected utilising standardised construct scales such that statistical regression analysis could be undertaken. The results of the study will be presented in Chapter five.

5. CHAPTER 5: Results

5.1. Introduction

In this chapter, an analysis of the data collected from this survey is presented as outlined in Chapter four. To begin with, the survey response rate is presented to give an overview of the data collection process. The data preparation required for analysis is subsequently outlined such that any exclusions, modification or simplifications of the data can be noted in order to provide visibility of any potential bias.

Furthermore, descriptive statistics will then be presented in order to simplify and clarify the sample distribution. The aim of which is to provide the researcher with a clear understanding of the actual sample. Finally, in order to address the research objectives and hypotheses, inferential statistical testing was outlined.

5.2. Survey Response Rate

Figure 5 below outlines the stages of data collection as well as the changes in response frequency based on efforts from the researcher to stimulate responses. Phase one outlines the data collected during the pilot study. The primary data collection was covered by phases two to five. As the response rates began to wane per phase, follow up messaging spiked the response rate as expected. As the study progressed, the survey was distributed through different channels to further increase the response rate.

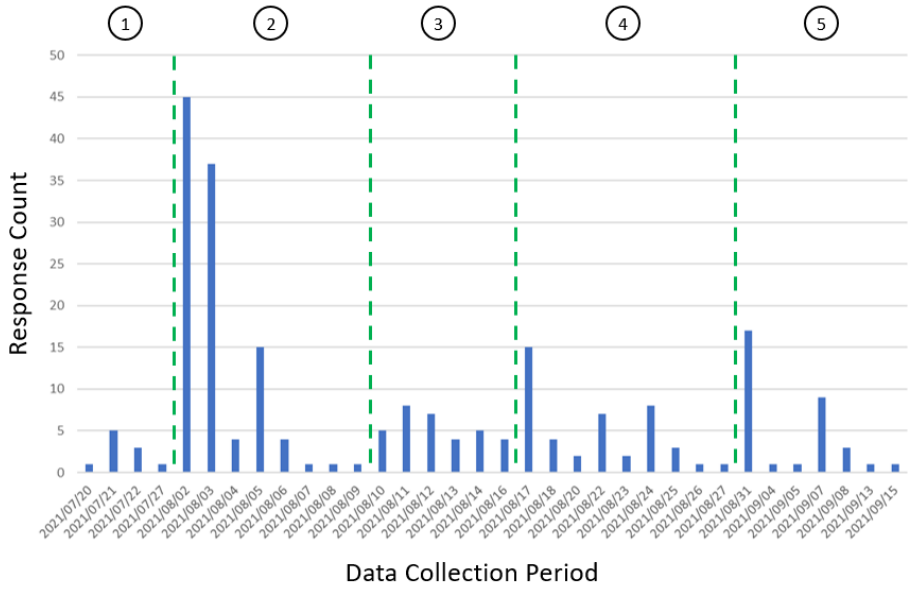

Figure 5: Response Rate to Survey

In total, the survey hyperlink was distributed to over 1000 individuals within the target sample with an unknown number of individuals forwarding the link to potential respondents. As such, the response rate cannot be determined accurately. The total number of responses received was 227. From the data editing process, two respondents declined to take part in the survey and 16 respondents answered no to Q2 of the study and thus did not qualify for the survey. As such, 18 responses were removed from the data set and the final data set for analysis consisted of 209 responses with a total of 13794 individual data points.

5.3. Outliers

Once the data was edited and coded into Microsoft Excel, the construct measures were checked for outliers as outlined in section 4.6.1. Table 2 below presents the z-score analysis per iteration.

Table 2: Outlier Analysis and Removal Iterations

Iteration	Z-Score Range	Quantity of Responses Removed	Responses removed	Sample size after deletion
1	-3.86 ≤ z-score ≤ 2.09	14	5, 30, 66, 95, 126, 128, 140, 146, 160, 166, 178, 187, 201, 202	195
2	-3.34 ≤ z-score ≤ 2.07	3	33, 136, 193	192
3	-2.99 ≤ z-score ≤ 2.10	0	0	192

From the first iteration of the outliers check, a total of 14 outliers were identified with all outlying values found within the participative decision-making construct. The entire response set from the 14 responders was removed from the data set. The process was repeated with a further 3 outliers found within the participative decision-making construct. Similarly, the respective response sets were trimmed. A final check was conducted with no outliers residing within the construct data. As such, the final data set, for analysis, contained a total of 192 valid responses.

5.4. Reliability and Validity

In verifying the reliability of the scales used, the Cronbach's alpha values were determined as outlined in section 4.6.2. Cronbach's alpha values were calculated per scale and per individual question. Table 3 below indicates and confirms the internal consistency of the three scales used with no questions needing deletion as all alpha values were all greater than 0.7.

Table 3: Construct Reliability through Cronbach's Alpha

Construct	Scale Cronbach's alpha	Cronbach's alpha range per question	Questions Deleted	Level of consistency
Transformational Leadership	0.948	0.934 - 0.95	0	Very good
Organisational Culture	0.900	0.891 - 0.907	0	Very good
Participative Decision-Making	0.894	0.885 – 0.895	0	Very good

In measuring the validity of the data set, a bivariate analysis in SPSS was conducted on the scales in order to measure the Pearson's r value. Results for both convergent and discriminant validity can be found in Appendix E. From a convergent validity point of view, every construct question had a greater than $r = 0.3$ value with at least one other question in that construct, with all max values being statistically significant ($p < 0.05$). Thus, the convergent validity of all three scales was verified. From a discriminant validity point of view, all construct r values, with relation to other scale questions, were measured and found to be less than 0.75. Thus, discriminant validity is verified. As both convergent and discriminant validity have been verified, it can be concluded that the scale has construct validity.

5.5. Factor Analysis

A confirmatory factor analysis of the survey scales was initially run, in order to confirm the theorised intercorrelation fit. Based on the requirements for good fit as outlined in section 4.6.3, the results highlighted that none of the hypothesised relationships were within the indices provided. As such, the conclusion drawn from this analysis was that the model fit was poor and thus confirmatory factor analysis could not be used. Poor fit can be attributed to the misalignment between the measured data and

the hypothesised model or a smaller sample size not sufficient for confirmatory factor analysis. Based on the 200-response requirement for confirmatory factor analysis, this is argued to be the cause of poor fit. The results of the confirmatory factor analysis can be found in Appendix F.

As the confirmatory factor analysis was not successful, a principal component analysis was conducted on the three scales as detailed below. The principal component analysis results for the transformational leadership scale can be seen in Table 4. The values for KMO and BTS confirm a marvelous suitability for the scale data to undergo factor analysis. As such, the scale was factorised into a single variable that explained 76.21% of the variance in the original scale.

Table 4: Principal Factor Analysis – Transformational Leadership Scale

Construct	KMO	Barlett's test of Sphericity			Number of factors extracted	Percentage of Variance Explained
		Chi-Square	df	Sig.		
Transformational Leadership	0.923	1274.379	21	0.000	1	76.21%

As per Table 5 below, a single dimension of the transformational leadership scale was extracted which combined the seven questions of the original scale by calculating the mean value of the original scale questions. Furthermore, the component matrices can be found in Appendix G.

Table 5: New Constructs Extracted for the Transformational Leadership Scale

Construct	Original Factor Name	Original Factor Structure	New Factor Name	New Factor Structure
Transformational Leadership	Transformational Leadership	Q33, Q34, Q35, Q36, Q37, Q38, Q39	Transformational Leadership	Q33, Q34, Q35, Q36, Q37, Q38, Q39

In Table 6, the results of the principal component analysis conducted on the organisational culture scale can be found. The values for KMO and BTS confirm a meritorious suitability for the scale data to undergo factor analysis. As such, the scale was factorised into five variables that explained 65.34% of the variance in the original scale.

Table 6: Principal Factor Analysis – Organisational Culture Scale

Construct	KMO	Barlett's test of Sphericity			Number of factors extracted	Percentage of Variance Explained
		Chi-Square	df	Sig.		
Organisational Culture	0.891	2447.599	276	0.000	5	65.34%

Based on the rotated component matrix, five dimensions of the organisational culture scale were extracted which combined the respective questions of the original scale by calculating the mean value of the original scale questions. The formation of the new scales followed a similar trend as the original scale and can be found in Table 7 below.

The first factor extracted is defined as a clan culture. The addition of questions 10, 20, 22, 26 and 28 to the original six variables was deemed an acceptable extraction as the four new variables are in line with the clan culture characteristics of collaboration, development and efficiency in driving effectiveness (Cameron & Quinn, 2006).

The adhocracy culture factor was reduced down to two questions with a specific view on the external focus theorised for this culture type in producing innovative results. Similarly, the market culture was reduced down to five of the original six questions with a focus on the control measures required to achieve organisational competitiveness. Both of these extractions are acceptable based on the alignment with the original construct theory (Cameron & Quinn, 2006).

Finally, the hierarchy culture type was factorised and split into two new dimensions of organisational culture. To begin with, the renaming of a new hierarchy type culture factor with a focus on conformity and efficiency, henceforth known as Hierarchy Culture – Conformity, was extracted. This factor includes questions focusing on obeying the rules and procedures in achieving success. This type of organisational would be typical of one that is more established and larger in nature. The second new hierarchy type culture factor extracted has a focus on predictability of outcomes, henceforth known as Hierarchy Culture – Predictability. This new factor optimises the original hierarchy culture sub-scale it that is focuses exclusively on operating

principles that ensure stability and smooth operating conditions. Based on the alignment with the theory of organisational culture, the two new factors extracted are accepted (Cameron & Quinn, 2006).The results of the rotated component matrices can be found in Appendix G.

Table 7: New Constructs Extracted for the Organisational Culture Scale

Construct	Original Factor Name	Original Factor Structure	New Factor Name	New Factor Structure
Organisational Culture	Clan Culture	Q9, Q13, Q17, Q21, Q25, Q29	Clan Culture	Q9, Q10, Q13, Q17, Q20, Q21, Q22, Q25, Q26, Q28, Q29
	Adhocracy Culture	Q10, Q14, Q18, Q22, Q26, Q30	Adhocracy Culture	Q14, Q15
	Marketing Culture	Q11, Q15, Q19, Q23, Q27, Q31	Marketing Culture	Q11, Q19, Q23, Q27, Q31
	Hierarchical Culture	Q12, Q16, Q20, Q24, Q28, Q32	Hierarchical Culture – Conformity	Q18, Q24, Q30, Q32
			Hierarchical Culture – Predictability	Q12, Q16

In Table 8, the results of the principal component analysis conducted on the participative decision-making scale can be found. The values for KMO and BTS confirm a meritorious suitability for the scale data to undergo factor analysis. As such, the scale was factorised into five variables that explained 66.44% of the variance in the original scale.

Table 8: Principal Factor Analysis – Participative Decision-Making Scale

Construct	KMO	Barlett's test of Sphericity			Number of factors extracted	Percentage of Variance Explained
		Chi-Square	df	Sig.		
Participative Decision-Making	0.822	2909.212	351	0.000	6	66.44%

Based on the rotated component matrix, results of which can be found in Appendix G, the participative decision-making scale was factorised into six new factors as opposed to the original five. The original scale factors were Asks1, Asks2, Wants1, Wants2, and Control, with the main differentiators being non-co-worker decisions, co-worker decisions, and levels of job control questions (Kahnweiler & Thompson, 2000). The six new factors were extracted based on the principal component analysis conducted and renamed as shown in Table 9.

The first two factors, namely; “Asks – Individual impact” and “Asks - Organisational impact”, were split from the Asks1 factor from the original scale. The central theme of the Asks factors is that these are the decisions whereby a manager includes the employee in the decision. The differential between the two new factors is that the impact of the decisions is either on the individual or the organisation. Of particular note, Q50 and Q66 were added to the Asks – Individual impact factor. Question 50 involves asking for an opinion from an employee regarding the hiring of a new co-worker. While this would be expected to be located in a separate factor, the implication is that the co-worker has no relationship with the current employee and as such is seen only as having an impact on the individual. Furthermore, question 66 involves the receiving of credit for idea which too falls within the scope of individual impact. As the questions making up the new factors are in line with the theoretical makeup of the scale, the new factors can be accepted (Buil et al., 2019; Jacobsen et al., 2021).

The third and fourth factors were split from the original Wants1 factor and were named “Wants – Individual impact” and “Wants - Organisational impact”. The central theme of the Wants factors is that these are the decisions whereby an employee wants to be included in the manager’s decision and actively seeks participation. The differential between the two new factors is that the impact of the decisions is either on the individual or the organisation. As the questions making up the new factors are in line with the theoretical makeup of the scale, the new factors can be accepted (Buil et al., 2019; Jacobsen et al., 2021).

The fifth factor, named “Asks/Wants – Co-worker impact”, is the combination of two factors of the original scale that had an impact on the co-worker. The only difference is the removal of Q50 as noted above. This raises the question as to why Q51 was not removed, as it represents an employees want to be involved before the hiring of

a co-worker. The significant difference is that the impact of the decision in the want category will impact the co-worker as opposed to the employee.

The final factor extracted, named “Control – Perceived level of job control”, incorporates an employee’s sense of control of their work. The only change to this factor from the original factor is the removal of Q66. This is noteworthy as the new factor is more focused on the control of deciding how a job is done and comfort that it gets serious consideration. As found with Q66, the concept of getting credit for one’s idea would be more suited in an individual impact scenario from the manager to the employee, and as such confirms the transition to factor one, Asks – Individual impact.

Table 9: New Constructs Extracted for the Participative Decision-Making Scale

Construct	Original Factor Name	Original Factor Structure	New Factor Name	New Factor Structure
Participative Decision-Making	Asks1 – Individual and organisational impact	Q40, Q42, Q44, Q46, Q48, Q56, Q58, Q60, Q62	Asks – Individual impact	Q40, Q42, Q44, Q46, Q48, Q50, Q56, Q60, Q66
			Asks - Organisational impact	Q58, Q62
	Wants1 – Individual and organisational impact	Q41, Q43, Q45, Q47, Q49, Q57, Q59, Q61, Q63	Wants – Individual impact	Q41, Q43, Q45, Q47, Q49
			Wants – Organisational impact	Q57, Q59, Q61, Q63
	Asks2 – Co-worker	Q50, Q52, Q54	Asks/Wants – Co-worker impact	Q51, Q52, Q53, Q54, Q55
	Wants2 – Co-worker	Q51, Q53, Q55		
	Control – Perceived level of job control	Q64, Q65, Q66	Control – perceived level of job control	Q64, Q65

Based on the new construct factors extracted above, the SPSS data was modified to re-model the constructs as per the principal component analysis. The new construct factors incorporated a calculated mean of the contributing measures from the original scale.

5.6. Normality

One of the assumptions of statistical testing is that the data set is normally distributed. A Shapiro-Wilk analysis was run on the factored scales with the results shown in Table 10 below. The Shapiro-Wilk test determined that only hierarchy culture – conformity had a p value greater than 0.05 and thus failed to reject the alternate hypothesis. As such, the sub-construct was deemed to have a normal distribution. The remainder of the sub-constructs are not normally distributed as the p value was less than 0.05 and thus the null hypothesis was rejected. From a skewness point of view, Table 10 highlights that the majority of the data is negatively skewed with no single construct outside the parameters for approximate normality. In addition, as the outliers have been removed and the sample size can be considered large, the data can be assumed to be close to normal and thus valid for statistical analysis.

Table 10: Shapiro-Wilk Test for Normality

Tests of Normality					
	Shapiro-Wilk			Skewness	
	Statistic	df	Sig.	Statistic	Std. Error
Clan Culture	0.978	192	0.004	-0.247	0.175
Adhocracy Culture	0.935	192	0.000	-0.518	0.175
Market Culture	0.969	192	0.000	-0.549	0.175
Hierarchy Culture – Conformity	0.981	192	0.011	0.259	0.175
Hierarchy Culture – Predictability	0.946	192	0.000	-0.570	0.175
Transformational leadership	0.919	192	0.000	-0.602	0.175
Asks – Individual impact	0.980	192	0.009	-0.242	0.175
Asks/Wants – Co-worker impact	0.975	192	0.002	0.114	0.175
Wants – Individual impact	0.957	192	0.000	-0.188	0.175
Wants – Organisational impact	0.953	192	0.000	-0.421	0.175
Asks - Organisational impact	0.929	192	0.000	0.185	0.175
Control – Perceived level of job control	0.911	192	0.000	-0.687	0.175
a. Lilliefors Significance Correction					

5.7. Descriptive Statistics

5.7.1. Demographic Statistics

Section A of the survey contained a total of 6 questions that enabled an analysis of the sample to provide the researcher with a simplified view of the actual sample. Based on the 209 respondents, the descriptive statistics of the demographic variables are outlined below.

Gender

The actual sample consisted of a fairly equal split between male (112 respondents or 54% of the sample) and female (97 respondents or 46% of the sample) respondents with a 4% bias either way, see Figure 6 below.

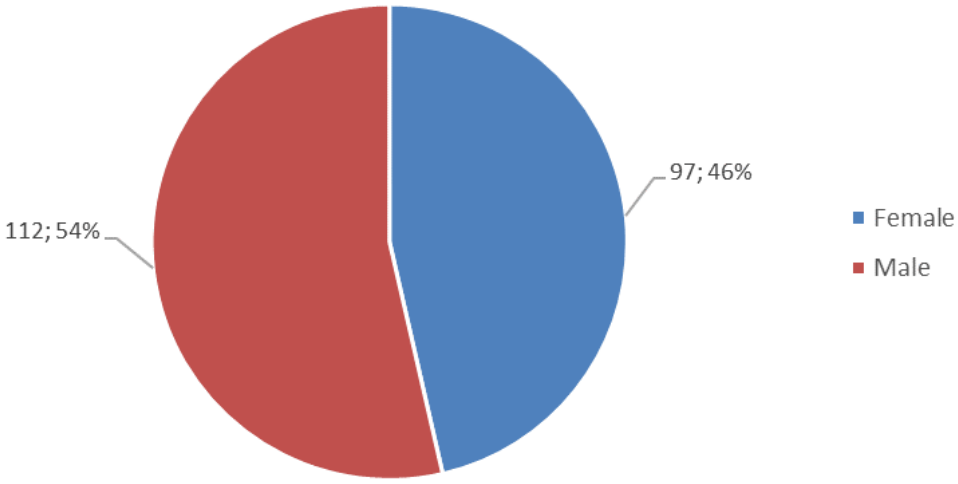

Figure 6: Respondents by Gender

Age

The respondents predominantly resided in the 30 – 39 age group, with 120 responses, or 58% of the sample falling into this group. Followed by 40 – 49, 20 – 29 and finally 50 or older. The frequencies and percentages by respondent age are shown below in Figure 7.

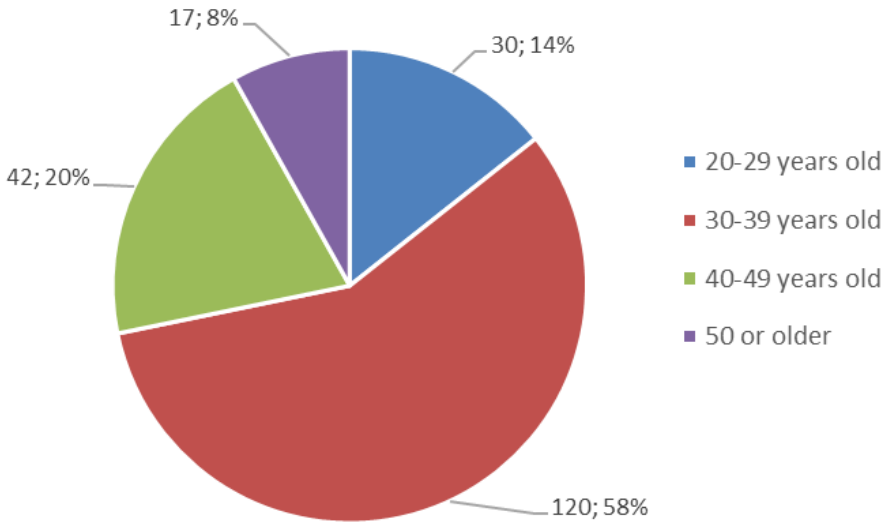

Figure 7: Respondents by Age

Education Level

The education level of the respondents primarily resided with those holding a Bachelor's degree with 99 respondents or 47% of the sample reporting as such. This was followed by Master's degree holders, Certificate/Diploma holders, Other and then Ph.D. holders. The frequencies and percentages by respondent education level are shown below in Figure 8.

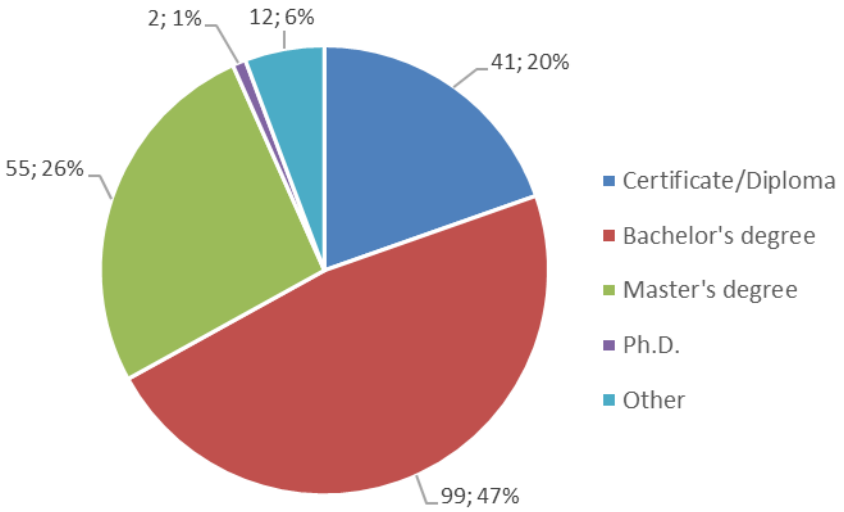

Figure 8: Respondents by Education Level

Organisation Size

The majority of the organisation sizes in the sample consisted primarily of organisations containing 101 – 500 and larger than 1000 employees, with 33% and 31% respectively. This was followed by organisations containing 501 –1000, 51 – 100 and less than 50 employees, with 13%, 12% and 11% of the sample respectively. The sample can be summarised as organisations predominantly in the medium to large categories with a total representation of 77% of the sample. The frequencies and percentages by respondent organisation size are shown below in Figure 9.

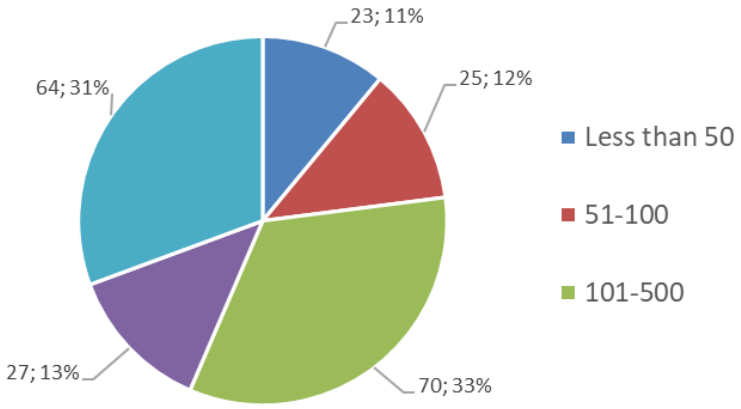

Figure 9: Respondents by Organisation Size

Position in Organisation

The respondent position of the sample consisted predominantly of senior and middle managers, with 30% and 29% respectively. This was followed by general staff, junior managers and executive respondents with 21%, 11% and 9% respectively. The frequencies and percentages by respondent position are shown below in Figure 10.

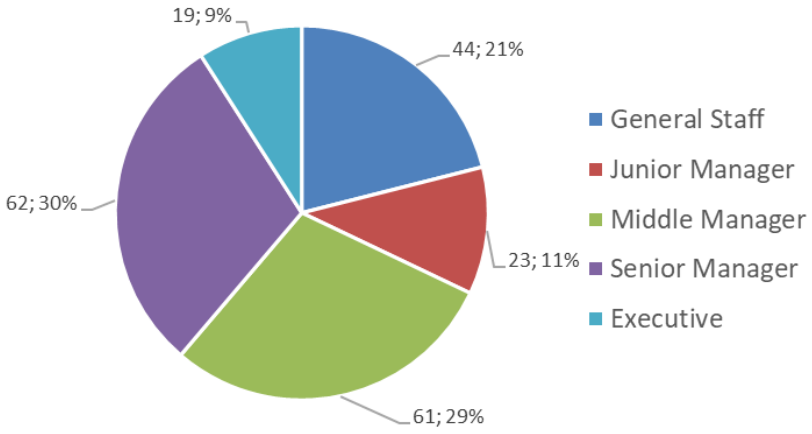

Figure 10: Respondents by Position

Tenure in Position

The respondent tenure in the sample consisted primarily of those in the 1–5 years category or 52% of the sample. This was followed by 6-10 years, less than 1 year, 11-15 years and more than 15 years, with 20%, 18%, 6% and 4% respectively. The frequencies and percentages by respondent tenure are shown below in Figure 11.

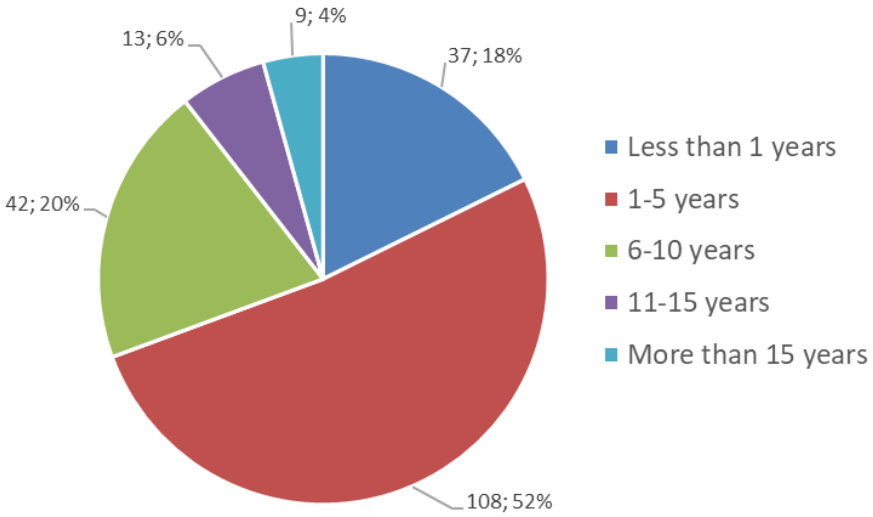

Figure 11: Respondents by Tenure

5.7.2. Scale Statistics

The descriptive statistics for the three factorised scales, from section B-D of the survey, were calculated and presented. For the organisational culture scale, Table 11 below presents the mean, median, mode, skewness and standard deviation values per factor of the scale. The mean values range from 3.11 to 3.59 with a standard deviation range of 0.672 – 1.128. In addition, the skewness values all greater than -1 and less than 1. This is indicative of a negatively skewed but practically normal data set.

Table 11: Factorised Organisational Culture Descriptive Statistics

Descriptive Statistics – Organisational Culture						
	N	Mean	Median	Mode	Skewness	Std. Deviation
Clan Culture	192	3.27	3.36	3.73	-0.247	0.853
Adhocracy Culture	192	3.40	3.5	3.50	-0.518	1.128
Market Culture	192	3.59	3.6	4.2	-0.549	0.846
Hierarchy Culture - Conformity	192	3.11	3.00	3.00	-0.259	0.672
Hierarchy Culture - Predictability	192	3.47	3.50	4.00	-0.570	0.897
Valid N (listwise)	192					

For the transformational leadership scale, Table 12 below presents the mean, median, mode, skewness and standard deviation values per factor of the scale. The mean value for this scale is 3.68 with a standard deviation range of 1.073. In addition, the skewness value is greater than -1 and less than 1. This is indicative of a negatively skewed but practically normal data set.

Table 12: Factorised Transformational Leadership Descriptive Statistics

Descriptive Statistics – Transformational Leadership						
	N	Mean	Median	Mode	Skewness	Std. Deviation
Transformational Leadership	192	3.68	4.00	5.00	-0.602	1.073
Valid N (listwise)	192					

For the participative decision-making scale, Table 13 below presents the mean, median, mode, skewness and standard deviation values per factor of the scale. The mean values range from 2.71 to 3.99 with a standard deviation range of 0.665 – 1.257. In addition, the skewness values all greater than -1 and less than 1. This is indicative of a negatively skewed but practically normal data set.

Table 13: Factorised Participative Decision-Making Descriptive Statistics

Descriptive Statistics – Participative Decision-Making						
	N	Mean	Median	Mode	Skewness	Std. Deviation
Asks – Individual impact	192	3.25	3.30	3.89	-0.242	0.952
Asks/Wants – Co-worker impact	192	3.01	3.00	3.2	0.114	1.044
Wants – Individual impact	192	3.99	4.00	4.00	-0.188	0.665
Wants – Organisational impact	192	3.94	4.00	4.00	-0.421	0.720
Asks - Organisational impact	192	2.71	3.00	1.00	0.185	1.257
Control – Perceived level of job control	192	3.93	4.00	4.00	-0.687	0.809
Valid N (listwise)	192					

5.8. Assumption Testing

5.8.1. Research Objective One

In order to conduct statistical analysis, the underlying assumptions were first verified to ensure that the statistical methodology was the correct approach in testing the variables. In research objective one, a simple linear regression analysis was used. As such, six fundamental assumptions were confirmed and detailed below (Allen, 2017; Frey, 2018). The assumptions are as follows;

Assumption One: Both dependent and independent variables were measured on a continuous scale. This was accurate for all statistical tests conducted.

Assumption Two: The relationship between the dependent and independent variable/s is linear. The linearity between variables is best tested through scatter plot analysis. As can be found in Appendix H, all calculated relationships are linear in nature.

Assumption Three: There are no significant outliers in the data of the independent variable in terms of the dependant variable. As outlined in section 4.6.1 and section 5.3, all outliers were removed from the data.

Assumption Four: The dependant variable, of each independent variable, is normally distributed. As outlined in section 4.6.4 and section 5.6, the data sets for analysis are practically normal in distribution.

Assumption Five: Homoscedasticity - There is homogeneity of variances. Regression scatterplots, plotting standardised residuals vs standardised predictors can be visually inspected for patterns (Lewis-Beck et al., 2004). This was conducted and can be found in Appendix H. No obvious patterns were observed.

Assumption Six: Independence of Observations. Observed data should not be correlated and thus independent of each other. This is tested through the Durbin-Watson statistic. For no correlation to exist the Durbin-Watson statistic can varying between 0 and 4 but for no correlation it should be closer to 2 (Lewis-Beck et al., 2004). Values for Durbin-Watson are presented in the analysis for research objective one and in Appendix I for research objective two. No areas of concern were found in this regard.

5.8.2. Research Objective Two

The assumptions for this statistical analysis for research objective two are typical to that of a simple linear regression as listed above. However, for a hierarchical regression analysis, in addition to the above, the below assumption was also tested.

Assumption Seven: No existence of multicollinearity. This is typically measured through tolerance and variance inflation factors (VIF). The range of VIF for no multicollinearity is 1 to 10 with greater than 10 indicating high multicollinearity. The range of tolerance is 0 to 1 with values less than 0.1 indicating high multicollinearity (Allen, 2017). Values for VIF and tolerance are presented in Appendix I with all values within acceptable range.

5.9. Inferential Statistics

5.9.1. Research Objective One

Research objective one intended to verify the relationship between the organisational culture construct as well as the transformational leadership construct with participative decision-making. In doing so it was broken down into five hypotheses.

Hypothesis One

According to hypothesis one, clan culture has an effect on the occurrence of participative decision-making. The results for Pearson's r coefficient, statistical significance and regression coefficients can be found in Table 14. With all assumptions confirmed, the results from the regression analysis indicated that clan culture has a statistically significant relationship with asks – individual impact, wants – organisational impact, asks - organisational impact and control – perceived level of job control. No statistically significant relationship was found between clan culture and asks/wants – co-worker impact and wants – individual impact.

Table 14: Clan Culture vs Participative Decision-Making Analysis

PREDICTOR: Clan Culture			
Dependent Variable	**r**	**Sig**	**Durbin-Watson**
Asks – individual impact	**0.472***	0.000	2.052
Asks/wants – co-worker impact	0.126	0.082	1.944
Wants – individual impact	0.045	0.535	1.823

Wants – organisational impact	**0.162***	0.025	2.148
Asks - organisational impact	**0.291***	0.000	2.057
Control – Perceived Level of Job Control	**0.327***	0.000	2.057

Hypothesis Two

According to hypothesis two, adhocracy culture has an effect on the occurrence of participative decision-making. The results for Pearson's r coefficient, statistical significance and regression coefficients can be found in Table 15. With all assumptions confirmed, the results from the regression analysis indicated that adhocracy culture has a statistically significant relationship with Asks – Individual Impact and Control – Perceived Level of Job Control. No statistically significant relationship was found between adhocracy culture and asks/wants – co-worker impact, wants – individual impact, wants – organisational impact and asks - organisational impact.

Table 15: Adhocracy Culture vs Participative Decision-Making Analysis

PREDICTOR: Adhocracy Culture			
Dependent Variable	**r**	**Sig**	**Durbin-Watson**
Asks – individual impact	**0.192***	0.008	1.992
Asks/wants – co-worker impact	0.030	0.676	1.956
Wants – individual impact	0.005	0.944	1.812
Wants – organisational impact	0.101	0.164	2.122
Asks - organisational impact	0.141	0.051	2.102
Control – perceived level of job control	**0.173***	0.016	2.009

Hypothesis Three

According to hypothesis three, market culture has no effect on the occurrence of participative decision-making. The results for Pearson's r coefficient, statistical significance and regression coefficients can be found in Table 16. With all assumptions confirmed, the results from the regression analysis indicated that market culture has a statistically significant relationship with asks - organisational

impact. No statistically significant relationship was found between market culture and asks – individual impact, asks/wants – co-worker impact, wants – individual impact, wants – organisational impact and control – perceived level of job control.

Table 16: Market Culture vs Participative Decision-Making Analysis

PREDICTOR: Market Culture			
Dependent Variable	**r**	**Sig**	**Durbin-Watson**
Asks – individual impact	0.121	0.095	2.000
Asks/wants – co-worker impact	0.022	0.762	1.952
Wants – individual impact	0.028	0.696	1.809
Wants – organisational impact	0.017	0.814	2.128
Asks - organisational impact	**0.200***	0.005	2.061
Control – perceived level of job control	0.037	0.612	1.983

Hypothesis Four

According to hypothesis four, hierarchical culture has no effect on the occurrence of participative decision-making. The results for Pearson's r coefficient, statistical significance and regression coefficients can be found in Table 17 and Table 18 for both factors of hierarchy culture respectively.

With all assumptions confirmed, the results from the regression analysis indicated that hierarchy culture - conformity has a statistically significant relationship with Asks – Individual Impact and asks - organisational impact. No statistically significant relationship was found between hierarchy culture - conformity and asks/wants – co-worker impact, wants – individual impact, wants – organisational impact and control – perceived level of job control.

Table 17: Hierarchy Culture - Conformity vs Participative Decision-Making Analysis

PREDICTOR: Hierarchy Culture - Conformity			
Dependent Variable	**r**	**Sig**	**Durbin-Watson**
Asks – individual impact	**0.307***	0.000	1.937
Asks/wants – co-worker impact	0.135	0.061	1.947
Wants – individual impact	0.067	0.354	1.803

Wants – organisational impact	0.004	0.959	2.128
Asks - organisational impact	**0.297***	0.000	2.068
Control – perceived level of job control	0.141	0.051	1.995

With all assumptions confirmed, the results from the regression analysis indicate that hierarchy culture - predictability has a statistically significant relationship with asks – individual impact, asks/wants – co-worker impact, asks - organisational impact and control – perceived level of job control. No statistically significant relationship was found between hierarchy culture - predictability and wants – individual impact and wants – organisational impact.

Table 18: Hierarchy Culture - Predictability vs Participative Decision-Making Analysis

PREDICTOR: Hierarchy Culture - Predictability			
Dependent Variable	**r**	**Sig**	**Durbin-Watson**
Asks – individual impact	**0.218***	0.002	1.991
Asks/wants – co-worker impact	**0.179***	0.013	1.910
Wants – individual impact	0.027	0.711	1.808
Wants – organisational impact	0.009	0.903	2.127
Asks - organisational impact	**0.151***	0.037	2.112
Control – perceived level of job control	**0.226***	0.002	1.913

Hypothesis Five

According to hypothesis five, transformational leadership has an effect on the occurrence of participative decision-making. The results for Pearson's r coefficient, statistical significance and regression coefficients can be found in Table 19. With all assumptions confirmed, the results from the regression analysis indicated that transformational leadership has a statistically significant relationship with asks – individual impact, asks/wants – co-worker impact, asks - organisational impact and control – perceived level of job control. No statistically significant relationship was found between transformational leadership and wants – individual impact, wants – organisational impact.

Table 19: Transformational Leadership vs Participative Decision-Making Analysis

PREDICTOR: Transformational Leadership			
Dependent Variable	**r**	**Sig**	**Durbin-Watson**
Asks – individual impact	**0.742***	0.000	2.223
Asks/wants – co-worker impact	**0.149***	0.008	1.908
Wants – individual impact	0.016	0.822	1.817
Wants – organisational impact	0.121	0.095	2.171
Asks - organisational impact	**0.411***	0.000	1.990
Control – perceived level of job control	**0.548***	0.000	1.970

Summary of Research Objective One

In summarising the results found in research objective one, support was found for H1, H2 and H5. However, H3 and H4 were rejected. Table 20 below shows a summary of the hypotheses, results and explanation for research objective one.

Table 20: Research Objective One Results Summary

Hypothesis	Results	Explanation
H1: Clan culture has an effect on the occurrence of participative decision-making.	Supported	The effect of clan culture on the occurrence for participative decision-making is supported as some factors of the participative decision-making scale have a statistically significant relationship with clan culture. In particular, significant relationships were identified with; • Asks – individual impact • Wants – organisational impact • Asks - organisational impact • Control – perceived level of job control
H2: Adhocracy culture has an effect on the occurrence of participative decision-making.	Supported	The effect of an adhocracy culture on the occurrence of participative decision-making supported as some factors of the participative decision-making scale have a statistically significant relationship with adhocracy culture. In particular, significant relationships were identified with; • Asks – individual impact • Control – perceived level of job control

H3: Market culture has no effect on the occurrence of participative decision-making.	Rejected	No effect of a market culture on the occurrence of participative decision-making is rejected as some factors of the participative decision-making scale have a statistically significant relationship with market culture. In particular, significant relationships were identified with; • Asks - organisational impact
H4: Hierarchy culture has no effect on the occurrence of participative decision-making.	Rejected	No effect of a hierarchy culture on the occurrence of participative decision-making is rejected as some factors of the participative decision-making scale have a statistically significant relationship with both hierarchy culture – conformity as well as hierarchy culture – predictability. In particular, Hierarchy culture – conformity, significant relationships were identified with; • Asks – individual impact • Asks - organisational impact Hierarchy culture – predictability, significant relationships were identified with; • Asks – individual impact • Asks/wants – co-worker impact • Asks - organisational impact • Control – perceived level of job control
H5: Transformational leadership has an effect on the occurrence of participative decision-making.	Supported	The effect of transformational leadership on the occurrence of participative decision-making is only partially supported as some factors of the participative decision-making scale have no statistically significant relationship with transformational leadership. In particular, significant relationships were identified with; • Asks – individual impact • Asks/wants – co-worker impact • Asks - organisational impact • Control – perceived level of job control

5.9.2. Research Objective Two

Research objective two intended to determine the moderating effect of a transformational leadership style on the relationship between organisational culture and participative decision-making. Model 1 represents the testing of the relationship between the organisational culture and participative decision-making. Model 2 represents the addition of the transformational leadership construct and the respective prediction on participative decision-making.

Hypothesis Six

In testing hypothesis six, the testing was broken down into two hypotheses for testing, $H6_a$ and 6_b, see Table 21 below.

According to hypothesis six, $H6_a$, organisational culture predicts the occurrence of participative decision-making and $H6_b$, transformational leadership moderates the relationship between organisational culture and participative decision-making.

It is important to note that organisational culture comprised of all factors of the scale, i.e., Clan Culture, Adhocracy Culture, Market Culture, Hierarchy Culture – Conformity, Hierarchy Culture – Predictability

As such, the model structure per test is as follows;

Model 1: Organisational culture vs Participative decision-making

Model 2: Organisational culture; Transformational leadership vs Participative decision-making

Table 21: Hypothesis Six - Hierarchical Regression Results

	Dependent Variable: Participative Decision-Making			
	Model 1		**Model 2**	
Independent Variables	**b**	**t**	**b**	**t**
Clan Culture	0.156*	2.525	-0.061	-0.951
Adhocracy Culture	-0.045	-0.934	-0.032	0.722
Market Culture	0.012	0.193	0.030	0.539
Hierarchy Culture - Conformity	0.144	1.822	0.114	1.580
Hierarchy Culture - Predictability	0.046	0.880	0.047	0.982
Transformational Leadership	-	-	0.277*	6.106
R^2	0.114		0.263	
Adjusted R^2	0.091		0.239	

ΔR^2	-	0.149*
F	4.804*	37.273*
* p <0.05		

With all the assumptions confirmed, the first analysis conducted confirms that organisational culture is a predictor of participative decision-making with a statistically significant model prediction and significant variance, $R^2 = 0.114$, $\Delta R^2 = 0.114$, $p = 0.000$. The regression analysis conducted in model 1 highlighted that clan culture ($b = 0.156$, $p < 0.05$) is the only significant predictor of participative decision making.

Furthermore, the second test conducted confirms that transformational leadership acts as a moderator on the relationship between organisational culture and the entire participative decision-making scale with a statistically significant model prediction and significant variance, $R^2 = 0.263$, $\Delta R^2 = 0.149$, $p = 0.000$. Furthermore, transformational leadership was found to moderate the relationship between organisational culture and participative decision-making.

Summary of Research Objective Two

In summarising the results found in research objective two, support was found for H6. Table 22 below shows a summary of the hypotheses, results and explanation for research objective two.

Table 22: Research Objective One Results Summary

Hypothesis	Results	Explanation
$H6_a$: Organisational culture predicts the occurrence of participative decision-making.	Supported	Organisational Culture has significant relationship in predicting participative decision-making.
$H6_b$: Transformational leadership style moderates the relationship between organisational culture and the occurrence of participative decision-making.	Supported	Transformational leadership acts as a moderator on the relationship between organisational culture and the entire participative decision-making scale

5.10. Conclusion

The results from both stages of regression analysis highlighted that organisational culture and transformational leadership have a statistically significant effect on the occurrence of participative decision-making and thus hypotheses one, two and five were supported. Furthermore, hypothesis two and three were rejected. In addition, the results of the analysis conducted in hypothesis six indicated that organisational culture predicts the occurrence of a participative decision-making and that transformational leadership moderates the relationship between organisational culture and participative decision-making. In the next chapter, a discussion of the findings will be presented.

6. CHAPTER 6: Discussion of Results

6.1. Introduction

In this chapter, the findings from this research are discussed in detail. The findings outline the relationships identified between organisational culture and transformational leadership with participative decision-making and shows how transformational leadership moderates the relationship between organisational culture and participative decision-making. Furthermore, the results are discussed comparatively with the literature review in Chapter two in order to answer the research objectives and gain insights into the findings. The format of this chapter will be guided by the research objectives and hypotheses outlined in Chapter three.

The discussion covered in this chapter contributes to the understanding of the dynamic relationship that organisational culture, transformational leadership and participative decision-making have with one another. Furthermore, the insights gained into the moderating effect that transformational leadership has on the relationship between organisational culture and participative decision-making assists in clarifying the gap in theory.

6.2. Research Objective One

The aim of the first research objective was to test and validate the theoretical relationships highlighted in chapter two between organisational culture and transformational leadership with participative decision-making. The intent of which was to verify the underlying assumptions within this research.

6.2.1. Hypothesis One

H1: Clan culture has an effect on the occurrence of participative decision-making.

The relationship a clan type organisational culture has with participative decision-making was tested against the six factors of the participative decision-making scale as outlined in Chapter five. Findings from the tests indicated support for hypothesis one, as the below relationships were identified;

i. Asks – individual impact: positive, fair and significant
ii. Asks/wants – co-worker impact: No significant relationship
iii. Wants – individual impact: No significant relationship
iv. Wants – organisational impact: positive, negligible and significant

v. Asks - organisational impact: positive, weak and significant
vi. Control – perceived level of job control: positive, weak and significant

In interpreting the results, literature on clan culture theory highlights a link to participative behaviours within an organisation, leading to the occurrence of participative decision-making. In particular, the theory supports an approach that drives open and trusting collaboration and communication through a team based perspective (Cameron & Quinn, 2006; Wiewiora et al., 2013; Zeb et al., 2021). This is further supported by the assumptions, values and artifacts of a clan culture which emphasises a human focus and a participative oriented approach (Hartnell et al., 2011).

The effects of a clan culture on the occurrence of participative decision-making are supported by the results of this study, as is evident by the positive relationships with a manager's propensity to actively include individuals in both individual and organisational decisions. In particular, the stronger correlation with individual oriented decisions over organisational ones highlights the theorised focus on the internal and individual aspects of a company in a clan culture (Cameron & Quinn, 2006). Furthermore, the relationship with an individual's perceived level of job control further supports the effects and importance of a clan culture in developing a participative environment. Through these insights the values portrayed by a clan culture are supportive of the theory in active initiating participative initiatives that result in individuals having a sense of control which results in them wanting to be engaged in the organisation (Cameron & Quinn, 2006; Glew et al., 1995; Kahnweiler & Thompson, 2000).

Two findings of interest were identified in this test, one was the lack of significant correlation with an individual's want to be included in both individual and organisational decisions. This is of interest as a clan culture is the only culture type theorised to actively drive participation and collaboration. This is an unexpected insight, into clan culture, as this is not supported by the literature. Clan culture theory presents substantial support for the likeliness of self-motivation and willingness to engage. Furthermore, the lack of correlations in this regard are typically to an individualist approach as opposed to a collectivist and collaborative approach as theorised (Cameron & Quinn, 2006; Hartnell et al., 2011; Wiewiora et al., 2013; Zeb et al., 2021). A potential explanation for this may be the method in which culture is

perceived within hierarchical organisations. As the culture of an organisation only represents the outcomes of the assumption's, values and artefacts, the relationship between the leader and the employee can be a contributor in determining an employee's willingness to engage (M. C. C. Lee et al., 2017).

The second finding of interest was the lack of correlation with an individual's being asked or wanting to be included in decisions regarding co-workers. This is a significant insight as a clan culture is based on trust and collaboration. In analysing the assumptions and values of a clan culture that focuses on the team dynamic, a possible explanation of this phenomena could be the unwillingness of individual's to want to be involved or ask other to be involved with decision regarding co-worker as it can be seen as a violation of the co-workers trust (Cameron & Quinn, 2006).

In summary, a clan culture has a statistically significant correlation with four of the six participative decision-making factors thus effecting the occurrence of participative decision-making. As such, the null hypothesis was rejected and the alternate hypothesis accepted.

6.2.2. Hypothesis Two.

H2: Adhocracy culture has an effect on the occurrence of participative decision-making.

The relationship an adhocracy type organisational culture has with participative decision-making was tested against the six factors of the participative decision-making scale as outlined in Chapter five. Findings from the tests indicated support for hypothesis two, as the below relationships were identified;

i. Asks – individual impact: positive, weak and significant
ii. Asks/wants – co-worker impact: No significant relationship
iii. Wants – individual impact: No significant relationship
iv. Wants – organisational impact: No significant relationship
v. Asks - organisational impact: No significant relationship
vi. Control – perceived level of job control: positive, negligible and significant

In interpreting the results, literature on adhocracy culture theory highlights a positive relationship to participative behaviours within an organisation, leading to the occurrence of participative decision-making. However, the strength of the relationship is underpinned by mediating and moderating variables. In particular,

levels of autonomy, individual ability and trust with the direct manager are highlighted as the largest contributors to predicting participative decision-making (Hartnell et al., 2011; Jones et al., 2005). These factors are critical as an adhocracy culture type is externally focused, thus the relational factors between the individual and the leader are often neglected. (Cameron & Quinn, 2006; Wiewiora et al., 2013; Zeb et al., 2021). This is further supported in the assumptions, values and artifacts of an adhocracy culture which emphasises a focus on task oriented beliefs in driving growth through innovation (Hartnell et al., 2011).

This theoretical relationship was supported by the results of this study, as is evident by the positive relationships with a manager asking for participation in decision-making that impacts the individual as well as the perceived level of control over the individual's job. In particular, the correlation with individuals being asked to partake in decisions regarding the individual highlights the theorised relationship that an adhocracy culture has with an externally focused culture in achieving the task (Hartnell et al., 2011; Jones et al., 2005). Furthermore, the significant correlation with the perceived level of job control highlights the propensity for an adhocracy culture to effect a participative environment (Cameron & Quinn, 2006; Sagie & Aycan, 2003).

Additional insights extracted from the results showed the lack of relationship with individual's wanting to be included in decisions involving either the individual or organisational aspects. Furthermore, the lack of individuals being asked to partake in decisions impacting the organisation as well as any decisions involving co-workers further supports the theory of an adhocracy culture. These relationships or lack thereof, highlights the importance of the mediating and moderating variables in this culture type. In this case, the most likely variable limiting participation in this culture type is the relationship with the manager as well as the manager's external task focus (Cameron & Quinn, 2006; Zeb et al., 2021).

In summary, an adhocracy culture has a statistically significant correlation with two of the six participative decision-making factors in effecting the occurrence of participative decision-making. As such, the null hypothesis was rejected and the alternate hypothesis accepted.

6.2.3. Hypothesis Three

H3: Market culture has no effect on the occurrence of participative decision-making.

The relationship a market type organisational culture has with participative decision-making was tested against the six factors of the participative decision-making scale as outlined in Chapter five. Findings from the tests indicated no support for hypothesis three and thus was rejected, as the below relationships were identified;

i. Asks – individual impact: No significant relationship
ii. Asks/wants – co-worker impact: No significant relationship
iii. Wants – individual impact: No significant relationship
iv. Wants – organisational impact: No significant relationship
v. Asks - organisational impact: positive, weak and significant
vi. Control – perceived level of job control: No significant relationship

In interpreting the results, literature on market culture theory highlights a potential relationship to participative behaviours within an organisation, leading to the occurrence of participative decision-making. However, the likeliness in practice is extremely unlikely due to centralised decision-making and aggressive internal competitiveness (Cameron & Quinn, 2006; Hartnell et al., 2011; Jones et al., 2005). This is further supported in the assumptions, values and artifacts of a market culture which emphasises a focus on competition and market share (Hartnell et al., 2011).

While a participative environment is theorised to be practically unlikely, it is still plausible in theory. The findings of this test support the possibility of this notion as is highlighted a positive and significant relationship with a manager asking for participation in decisions involving the organisation. It is important to note that despite the existence of a relationship, the relationship is weak in strength. The main contributing factor in causing this weak relationship would be based on the extrinsic and intrinsic rewards implemented by the manager that drives a collectivist approach (Hartnell et al., 2011; Jones et al., 2005).A potential explanation for this unlikely relationship is due to the leadership style of the manager most likely playing a role in decentralising the decision-making process, thus allowing the potential for participation. This would be a typical trait of a transformational leader (Anderson & Sun, 2017; Jacobsen et al., 2021).

In summary, a market culture has a statistically significant correlation with one of the six participative decision-making factors in effecting the occurrence of participative decision-making. As such, the alternate hypothesis was rejected and the study failed to reject the null hypothesis.

6.2.4. Hypothesis Four

H4: Hierarchy culture has no effect on the occurrence of participative decision-making.

The relationship a hierarchy type organisational culture has with participative decision-making was tested against the six factors of the participative decision-making scale as outlined in Chapter five. Furthermore, as stated in Chapter 5, two sub-constructs of the hierarchy culture were extracted, namely hierarchy culture - conformity and hierarchy culture – predictability and as such were tested separately.

In interpreting the results, general hierarchy culture theory, highlights no relationship to participative behaviours within an organisation, leading to the unlikeliness in effecting the occurrence of participative decision-making. This is typically due to the rigidity and structure within the organisation that depersonalises roles and norms. This is further supported in the assumptions, values and artifacts of a hierarchy culture which emphasises conformity by adhering to rules and regulations with limits the input from individuals (Hartnell et al., 2011; Reis et al., 2016; Zeb et al., 2021).

<u>Hierarchy Culture – Conformity</u>

In the hierarchy culture – conformity test, the relationship this organisational culture type has with participative decision-making was tested against the six factors of the participative decision-making scale as outlined in Chapter five. Findings from the tests indicated no support for hypothesis four and thus was rejected, as the below relationships were identified;

i. Asks – individual impact: positive, weak and significant
ii. Asks/wants – co-worker impact: No significant relationship
iii. Wants – individual impact: No significant relationship
iv. Wants – organisational impact: No significant relationship
v. Asks - organisational impact: positive, weak and significant
vi. Control – perceived level of job control: No significant relationship

As is evident by the positive relationship with a manager's propensity to ask for participation in decisions involving the individual and the organisation, participative decision-making is affected by a conformity hierarchical culture. While this is not in support of the theory, the potential for such a relationship can be justified through the extent to which the roles, rules and procedures are defined and clarified in the organisation (Hartnell et al., 2011). This deficiency in definition, in processes and rules, is then typically supported by the leadership style of the manager in order to provide the structure to the organisation. However, in so doing, enabling participation in both task and organisational decisions as the processes are improved (Cameron & Quinn, 2006). As a result of this relationship, an insight of significance is the lack of correlation with individuals feeling a perceived level of control over their job despite being asked to partake in decision-making. This would be expected as individuals in this culture type were included in both individual and organisational decisions. Possible explanations for this could be down to the cultural artefacts within the environment that influence the individuals' assumptions, such that, the individual believes the organisation in general is typical of a hierarchy culture whereby rules and procedures govern an individual's job (Cameron & Quinn, 2006; Wiewiora et al., 2013; Zeb et al., 2021).

Hierarchy Culture – Predictability

In the hierarchy culture – predictability test, the relationship this organisational culture type has with participative decision-making was tested against the six factors of the participative decision-making scale as outlined in Chapter five. Findings from the tests indicated no support for hypothesis four and thus was rejected, as the below relationships were identified;

i. Asks – individual impact: positive, weak and significant
ii. Asks/wants – co-worker impact: positive, negligible and significant
iii. Wants – individual impact: No significant relationship
iv. Wants – organisational impact: No significant relationship
v. Asks - organisational impact: positive, negligible and significant
vi. Control – perceived level of job control: positive, weak and significant

The theoretical relationship that a hierarchical culture has in effecting the occurrence of participative decision-making was not supported by the results of this study, as is notably evident by the positive relationship with a manager's propensity to ask

individuals to partake in individual and organisational based decisions as well as the perceived level of job control. Similar to a conformity style hierarchical culture, the level of clarification of the processes and rules within an organisation can result in varying participation initiatives and engagement. In the case of a predictability style hierarchical culture, the correlation coefficients indicate that a more participative leadership style is most applicable due to the relationship with an individual's perceived level of job control when compared to a conformity styled hierarchical culture. (Cameron & Quinn, 2006; Kahnweiler & Thompson, 2000). Furthermore, this is supported by the positive relationship with being asked by a manager and the individual wanting to be involved with decisions regarding co-workers. This is expected as within a developing system, a manager may include individuals in decisions concerning their fellow co-workers in order to refine the processes and roles. Again, this would be typical of a transformational leadership style (Anderson & Sun, 2017).

In summary, both hierarchy cultures have a statistically significant correlation with the participative decision-making factors in effecting the occurrence of participative decision-making. As such, the alternate hypothesis was rejected and the study failed to reject the null hypothesis.

6.2.5. Hypothesis Five

H5: Transformational leadership has an effect on the occurrence of participative decision-making.

The relationship a clan type organisational culture has with participative decision-making was tested against the six factors of the participative decision-making scale as outlined in Chapter five. Findings from the tests indicated support for hypothesis five, as the below relationships were identified;

i. Asks – individual impact: positive, moderate and significant
ii. Asks/wants – co-worker impact: positive, negligible and significant
iii. Wants – individual impact: No significant relationship
iv. Wants – organisational impact: No significant relationship
v. Asks - organisational impact: positive, fair and significant
vi. Control – perceived level of job control: positive, fair and significant

In interpreting the results, transformational leadership theory through the implementation of the four I's, is expected to yield a positive relationship to participative behaviours within an organisation, leading to an effect in the occurrence of participative decision-making. Furthermore, a transformational leader is expected to drive self-motivation and collaboration through the building of trust (Jacobsen et al., 2021; Kahnweiler & Thompson, 2000). Most notably, this is expected due to the alignment of the four I's as the central drivers of a transformational leader with the six dimensions of participative decision-making (Black & Gregersen, 1997; Buil et al., 2019; Carless et al., 2000).

In particular, this is evident in the moderate and fair relationship with a manager's propensity to actively include individuals in both individual and organisational decisions. This highlights the focus of a transformational leader's participative initiatives in both task and organisational decision-making that subsequently elicits a sense of control by the employee (Carless et al., 2000; Kahnweiler & Thompson, 2000). Furthermore, the negligible relationship to decisions involving co-workers is significant in that a transformational leadership style is able to affect the occurrence of individuals engaging in discussions around co-workers, which has not been a common occurrence across the four types of cultures (Kahnweiler & Thompson, 2000).

In conclusion, a transformational leadership style has a statistically significant relationship with four of the six participative decision-making factors in effecting the occurrence of participative decision-making. As such, the null hypothesis was rejected and the alternate hypothesis accepted.

6.2.6. Summary and Insights of Research Objective One

In summarising the results and insights found in research objective one, it is evident that from hypothesis one to four, organisational culture has a statistically significant effect on the occurrence of participative decision making. In addition, hypothesis five highlights a statistically significant correlation between transformational leadership and participative decision-making. A model of the extracted relationships can be found below in Figure 12.

The insights that can be drawn from the model highlights that all organisational culture types have a relationship to at least one participative decision-making construct. Furthermore, the most supported participative decision-making constructs in this study are those concerning the manager asking for participation in both task and organisational decision-making that subsequently elicits a sense of job control by the employee.

When comparing the correlations of a clan culture with a conformity hierarchy culture in being able to effect the propensity for a manager to include individuals in decisions related to the organisation, clan culture does not yield the highest correlation as is suggest by literature (Cameron & Quinn, 2006). Possible explanations from this insight can point to the existence of a transformational leader acting within the conformity hierarchy culture type. This would be the resultant outcome as while both culture types are internally focused, a hierarchy culture focuses more on the organisational effectiveness where a clan culture focuses on individual effectiveness (Anderson & Sun, 2017; Cameron & Quinn, 2006).

Furthermore, the lack of relationships linked to individuals wanting to be included in decisions involving themselves as well as the organisation is also a significant insight, specifically in the cases of clan cultures and transformational leadership, as it is theorised to be an predictable relationship (Buil et al., 2019; Cameron & Quinn, 2006; Zeb et al., 2021). In addition, these insights are critical in understanding the specific relationships in this study, as they form the underpinnings of research objective two.

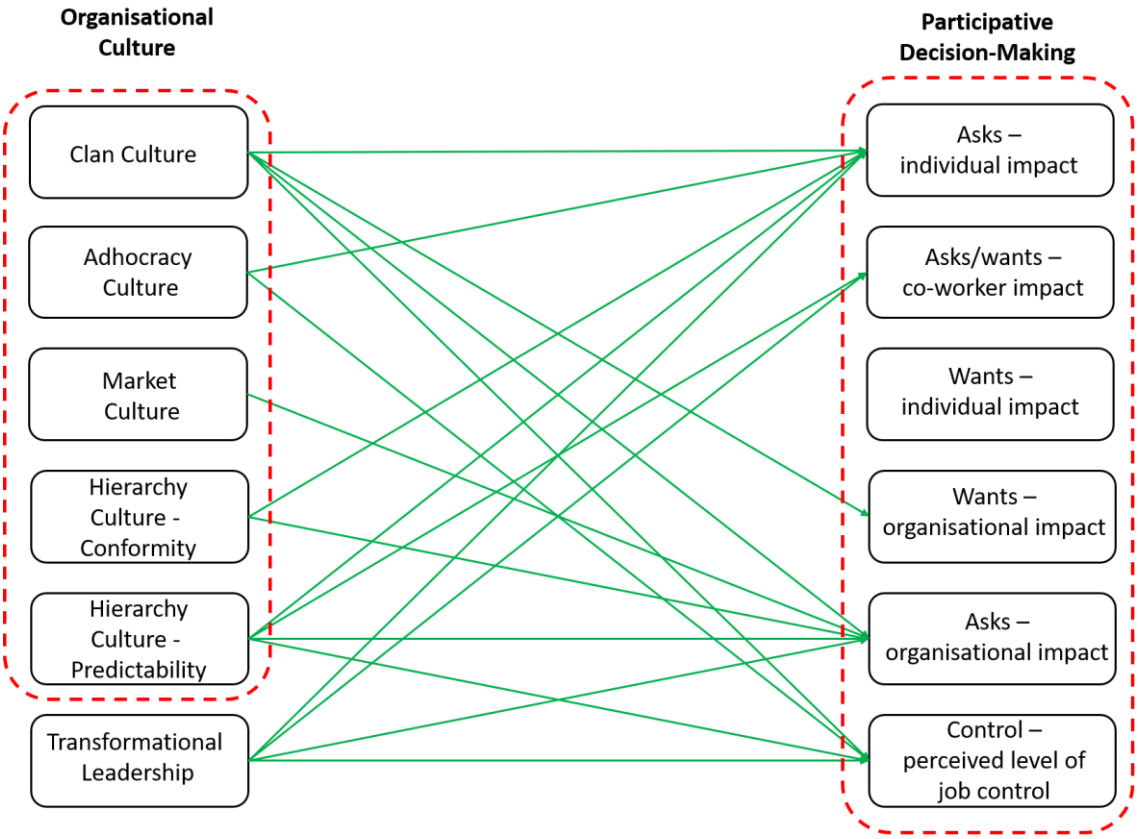

Figure 12: Research Objective One Model

6.3. Research Objective Two

The aim of the second research objective was to determine if a transformational leadership style acts as a moderator on the relationship between organisational culture and participative decision-making. In this research objective, transformational leadership was introduced in a hierarchical regression analysis as a moderating variable on the relationship between the organisational culture types and participative decision-making. As a result of the existence of non-significant correlations between organisational culture and transformational leadership with some of the of participative decision-making factors, as found in research objective one, a moderation regression on the sub-constructs of the participative decision-making scale could be conducted. As such, a single consolidated scale representing the average of all the participative decision-making scales was formed and a hierarchical regression analysis was conducted, as found in the test conducted in hypothesis six.

In understanding the insights gained from research objective one, transformation as an approach to leadership style, is fundamentally predicated on driving the four I's by focusing on the individual, task and organisational aspects of company decision-making. The aim of which is to influence, inspire, intellectually stimulate and provide individualised consideration for each individual. In doing so, driving a collaborative and inclusive working environment. Furthermore, it is important to understand that organisational culture is not a single type of culture but more a blend of the four types (Cameron & Quinn, 2006).

6.3.1. Hypothesis Six

$H6_a$: Organisational culture predicts the occurrence of participative decision-making.

$H6_b$: Transformational leadership style moderates the relationship between organisational culture and the occurrence of participative decision-making.

Hypothesis six, specifically $H6_a$, tested the relationship between organisational culture types as independent variables in the regression against a single consolidated dimension of the participative decision-making construct. $H6_b$, tested the moderating effect of transformational leadership on the relationship between organisational culture and participative decision-making.

The results of both tests highlighted that organisational culture predicts the occurrence of participative decision-making. Furthermore, transformational leadership moderates the relationship between organisational culture and participative decision-making. The insights from these results are significant in the context of this research as they address the key research objective. The relationship between organisational culture and participative decision-making highlighted in this research is supported by organisational culture and participative decision-making theory. The values and assumptions within an organisations culture specifically act on the six dimensions of participative decision making and thus the results are expected (Black & Gregersen, 1997; Cameron & Quinn, 2006; Schein, 2010). Furthermore, from a cultural value point of view, the internal versus external focus of an organisation is also found to produce a significant effect on the propensity of participative decision-making (Sagie & Aycan, 2003).

Within the organisational culture framework, a clan culture was identified as the only culture type to predict the occurrence of participative decision-making. This is a significant insight as this is in support of theory. The collaborative orientation of a clan culture, through commitment and communication in developing individuals, is the only clan culture type theorised to result in participative decision-making without the need of additional mediating and moderating variables (Cameron & Quinn, 2006; Reis et al., 2016; Wiewiora et al., 2013). In addition, the alignment of the drivers of a clan culture with the six dimensions of participative decision-making, confirms the organisational factors that influence the efficacy of the process between intended and actual participation (Black & Gregersen, 1997; Glew et al., 1995). Furthermore, that lack of prediction in the remainder of the culture types is significant in highlighting the importance of focusing on the effectiveness of individuals in order to convert intended initiatives to actual participation (Glew et al., 1995; Kahnweiler & Thompson, 2000).

When reviewing literature on transformational leadership, the four I methodology is central to understanding the results of $H6_b$. Specifically, when comparing the four I's to the six dimensions of participative decision-making, the alignment thereof drives a strong theoretical connection (Anderson & Sun, 2017; Black & Gregersen, 1997). $H6_b$ brings to the fore an important view point when assessing an organisation for cultural type. As an organisational culture is no single type of culture, but more a blend of the four cultures, the balance between the culture dynamics is difficult to manage. Furthermore, in managing the cultural aspects of a company the introduction of a transformational leader further supports the participation process model, Figure 2, in further justifying the importance of managing the relational factors influencing the efficacy of the process. In this, and the results of this test, highlighting the important role a transformational leader plays in moderating the relationship between organisation culture and participative decision-making.

This is a significant finding as, while the focus of the culture may shift from internal to external and the stability of the organisation may fluctuate, a transformational leader is able to navigate this environment and continuously yield participative decision-making (Anderson & Sun, 2017; Bass & Riggio, 2006; Cameron & Quinn, 2006). Furthermore, the ability for a transformational leader to shift the organisational culture is supported by these findings as a transformational leader will influence

participative decision-making which impacts the assumptions of the culture which ultimately impacts the values and artefacts (Ogbonna & Harris, 2000; Schein, 2010; Sun & Wang, 2017).

6.3.2. Summary and Insights of Research Objective Two

Based on the regression tests conducted in determining the moderating effect transformational leadership has on the relationship between the five organisational culture types and participative decision-making, the following insights can be extracted. Organisational culture predicts the occurrence of participative decision-making. Furthermore, transformational leadership as a moderating variable in the regression is able to moderate the relationship between the individual organisational culture types and participative decision making irrespective of the culture type.

Three significant insights can be extracted from the results of research objective two. The ability for any culture to be effected by transformational leadership at the artefacts, values and assumption levels of culture is important in confirming that a transformational leader is able to shift the organisational culture towards a more participative environment (Ogbonna & Harris, 2000; Sun & Wang, 2017). As such, the first insight highlights the importance of studies focused on transformational leadership and the antecedence thereof in creating more inclusive environments through future organisational training initiatives in developing transformational leaders.

The second insight was gained through the integration with the participation process model in Chapter two. As noted by the process, three key factors influence the efficacy in translating intended participation into actual result that yield both individual and organisation outcomes. The results of this study can confirm that the organisational factors as well as the relational factor play a significant role in yielding actual participation. Furthermore, the key finding of this study is that the relation factor between the manager and the employee plays a significantly more important role in moderating the organisational effects on the process (Glew et al., 1995; Kahnweiler & Thompson, 2000).

In addition to these insights, the regression test conducted provides a clear linkage between organisational culture, as a varying mix of all five culture types, and the relationship it has in effecting participative decision-making. Furthermore, the

moderating effect of transformational leadership on this relationship is a pivotal understanding that informs theory and business of the importance of leadership. Through this insight, the research model developed in Chapter three has been revised and confirmed, as can be found in Figure 13.

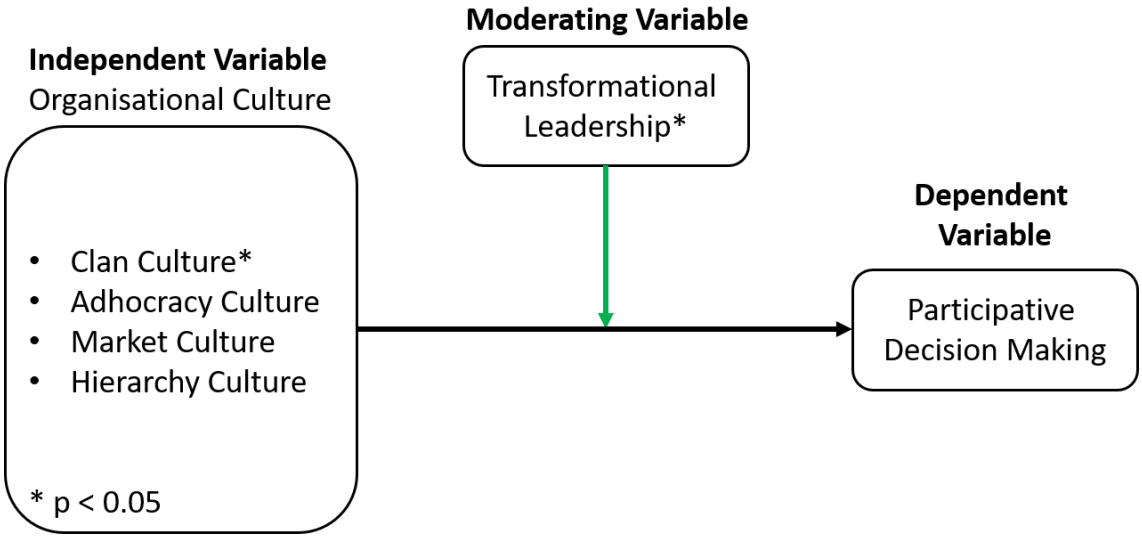

Figure 13: Research Findings

6.4. Conclusion

Based on the two research objectives, the first five tests were conducted in determining the relationship between organisational culture and transformational leadership with participative decision-making. A further two tests were conducted to establish the relationship organisational culture plays in predicting participative decision-making as well as the moderating effect of transformational leadership on the relationship between organisational culture and participative decision-making.

Three insights were extracted from the two research objectives. Firstly, transformational leadership moderates the relationship between organisational culture and the propensity for participative decision-making scale, irrespective of the culture type.

Secondly, the role of a transformational leadership style in managing the cultural dynamics of an organisation in shifting the culture to a more inclusive and participative environment. Finally, the confirmation of two significant factors in the participative process model. Thus, it further highlights the importance of managing relationships with individuals through a transformational leadership approach.

7. CHAPTER 7: Conclusions and Recommendations

7.1. Introduction

Chapter one highlighted an urgent focus to be placed on employee retention, attrition and turnover and argued that research into the drivers of job satisfaction are crucial in building and growing the South African economy (Cook, 2021; Kelly, 2021; Republic of South Africa, 2020). In support of this, organisational culture, leadership style and participative decision-making were highlighted as three key areas of focus in addressing this concern (Groysberg et al., 2018; Warrick, 2017).

To this end, this research investigated the moderating effect of transformational leadership on the relationship between organisational culture and participative decision-making. The aim of which was to highlight the importance of transformational leadership is improving the levels of participative decision-making in order to increase job satisfaction and consequently, organisational competitiveness.

In providing support to this research, literature in the three key areas of focus was explored in Chapter two to gain an understanding of the research in this field. Furthermore, through comparison and contrast of the three focus areas, insights into the potential relationships which may exist were identified and operationalised into two research objectives and six hypotheses in Chapter three.

Research objective one set out to confirm the theoretical relationships posed in the literature. In particular, the relationship organisational culture has with the propensity for participative decision-making as well as the relationship transformational leadership has with the propensity for participative decision-making. This was key as they formed the underlying assumptions of this research. Research objective two outlined the central purpose of this research in further understanding the moderating effect transformational leadership has on the relationship between organisational culture and participative decision-making.

Through a systematic research methodology posed in Chapter four, both research objectives were met in extracting significant insights that contributed to a new perspective in participative decision making and transformational leadership theory. Furthermore, the impetus for management development in organisations was further supported.

In offering a conclusion to this research, this chapter presents the principal findings of the study. In addition, based on the insights gained from the principal findings, the contribution to the theoretical body of knowledge as well as the implications for business stakeholders will be discussed. Furthermore, the limitations related to this study will be presented and suggestions for future research will be proposed.

7.2. Principal Conclusions

This section aims to provide the conclusions per research objective in order to extract the principal findings of the study.

7.2.1. Research Objective One

The first research objective set out to determine the relationship between organisational culture and transformational leadership style with participative decision-making. The aim of which was to confirm the theoretical relationships posited in Chater two as these relationships formed the underlying assumptions of the study.

The variations displayed by different organisational culture types was typically identified at the artefacts, values and assumptions of culture. Further to this, the majority variations found lay within the values of an organisational culture (Schein, 2010). Through the variations in cultural values, significantly varying outcomes were seen in the relationship in effecting the occurrence of participative decision-making. Furthermore, variations in the effects on the participative decision-making sub-constructs per culture type were of significance.

The majority of the theoretical relationships, proposed by literature, were demonstrated by a clan culture which is known for its internally oriented focus on driving collaboration and trust among individuals. Of the four culture types, a clan culture was found to have the highest effect of a manager's propensity to ask for participation in decisions that have an impact on the individual, an employees want to be included in decision-making relating to organisational outcomes as well as the in predicting the individual's level of perceived job control (Cameron & Quinn, 2006). This insight significantly highlights the value of a clan culture in being able to manage the three contributing factors in transforming participative initiatives into actual participation (Glew et al., 1995).

While the characteristics of a clan culture was highlighted to have a significant relationship in effecting a manager's propensity to include individuals in decisions related to the organisation. An opportunity for improvement in this area can be seen as it did not yield the highest effective relationship of the four clan cultures as would be expected. This highlights potential improvement into transformational leadership definitions in not only focusing on the individuals of an organisation but on the organisation itself, as support by the calls for research into new leadership styles (Anderson & Sun, 2017)a.

The results of the test conducted for an adhocracy culture gave further insight into the value leadership style plays in effecting the participative decision-making outcomes. As theorised, adhocracy culture displayed a significant relationship in effecting a manager's propensity to ask for participation in decisions that have an impact on the individual which yielded a significant effect on the perceived level of job control an individual experiences (Cameron & Quinn, 2006). In contrast to theory, an adhocracy culture was expected to effect participation, particularly in a manager's propensity to ask for participation in decisions that have an impact on the organisation (Hartnell et al., 2011; Jones et al., 2005). This insight, speaks to the mediating and moderating variables, such as transformational leadership, in effecting the relational factors impacting the transition from intended to actual participation (Glew et al., 1995).

A similar result was identified in the market culture test. Generally, theory was supported in an unlikely effect of a market culture on participative decision-making. However, the significant relationship found with a manager's propensity to ask for participation in decisions that have an impact on the organisation challenges this viewpoint. Typical to an adhocracy culture, the role of the manager and the external focus of the company is suggested as the possible cause for an unlikely but plausible effect on participative decision-making to occur.

In the hierarchy culture analysis, it is important to highlight that, in the context of this study, the theorised dimension of hierarchy culture was factorised into a hierarchy culture based on conformity and another based on predictability. The results for the test conducted in a hierarchy culture yielded uncharacteristic properties in effecting participative outcomes.

The nature of a hierarchy culture is clearly defined in literature as having a strict follow the roles, rules and procedures culture in getting the job done (Cameron & Quinn, 2006). Contrarily, both hierarchy culture factors displayed multiple significant relationships with participative decision-making factors. Most notably, both culture types effected the propensity for a manager to include employees in decisions that were both individual and organisation focused. The differential between the two types was that a predictability focused hierarchy culture was able to effect individuals being asked to partake and those wanting to partake in decisions regarding co-workers. Furthermore, a relationship with employees perceiving to have a level of job control was also found. Insights extracted from these findings pointed to the level and clarity of the definition of the roles, rules and procedures and the subsequent importance of a manager in being able to facilitate this shortfall to drive the cultural goals of the organisation as well as improve participation levels (Anderson & Sun, 2017).

The final test in research objective one investigated the relationship between transformational leadership and participative decision-making. The findings of the test were in support of a transformational leadership style theory as being able to elicit participation as well as drive engagement and trust (Anderson & Sun, 2017; Bass & Riggio, 2006). This was most notably identified with the significant moderate and fair relationships in predicting a manager's propensity to ask for participation in decisions that have an impact on the individual and the organisation respectively. Furthermore, a participative environment was supported, as a result of transformational leadership, by the fair relationship found with the perceived level of job control (Anderson & Sun, 2017; Kahnweiler & Thompson, 2000).

The most significant finding in research objective one was the inability for culture type and transformational leadership style to affect a want from individuals to be included in decisions of either the individual or organisational perspective. This is an important insight, particularly for a clan culture and transformational leadership, as theory in both fields supports the ability to generate self-motivation and a drive for collaboration and participation (Anderson & Sun, 2017; Bass & Riggio, 2006; Cameron & Quinn, 2006; Reis et al., 2016).

In conclusion, the results from research objective one indicates that all culture types and transformational leadership, effect the propensity for participative decision-making. In particular the relationship of a clan culture in effecting the occurrence of participative decision-making significantly exceeds that of any other culture type.

7.2.2. Research Objective Two

The second research objective set out to determine if a transformational leadership style acts as a moderator on the relationship between organisational culture and participative decision-making. The aim of which was to test the moderating effect transformational leadership has on the relationship between organisational culture and participative decision-making.

The insights in research objective two are most notably found at two levels. The first and most important insight, at the macro level, was that organisational culture significantly predicts participative decision-making and that transformational leadership moderates the relationship between organisational culture and participative decision-making. In particular, only a clan culture was found to predict the outcome of participative decision-making. In reviewing the concept of organisational culture and how it is generated within an organisation a key insight is that culture is not a clan or adhocracy or market or hierarchy type. In fact, an organisation is typically made up of a collection of different facets of each type of culture. (Cameron & Quinn, 2006; Reis et al., 2016).

This is a significant angle to view organisational culture from, specifically when investigating the predictability it has on participative decision-making. The alignment of the assumptions and values of the multiple facets of organisational culture with the dimensions of participative decision-making is key. The significance of this is that, typically, the individual actors within the organisation can shift their focus between internal and external stakeholders, which ultimately impacts the structure and form in which decision-making takes place (Black & Gregersen, 1997; Schein, 2010). Which in turn has a knock-on effect in impacting the assumptions and values of the culture. This continuous shift in culture type further impacts the efficacy of the process of converting intended participation into actual participation as an employee's level of trust in the culture is not consistent. (Glew et al., 1995; Sagie & Aycan, 2003).

With this in mind, when looking at the relationship transformational leadership has on organisation dynamics, it is clear to see that the alignment of the four I methodology in driving the six dimensions of participative decision-making and the five factors driving participation process efficacy are key factors in yielding a participative environment (Anderson & Sun, 2017; Black & Gregersen, 1997; Sagie & Aycan, 2003). As such, through the moderating effect of transformational leadership, the process of developing a participative environment is irrespective of the culture in the organisation. Furthermore, this research would argue that a transformational leader will positively impact the culture of the organisation by influencing the assumptions and values that ultimately turn into artefacts (Anderson & Sun, 2017; Bass & Riggio, 2006; Ogbonna & Harris, 2000; Sun & Wang, 2017).

The second insight, at a micro level, is that in developing and implementing participative decision-making initiatives, the importance of focusing on managing the relationship between the manager and the employee is crucial in moderating the organisational culture such that actual participation is obtained. Through this effect of a transformational manager, the underlying assumptions of a culture that is not typical of participation begin to shift. This inherently changes the values of the culture, which then results in participative cultural artefacts (Schein, 2010). As such, it provides further support for the ability of a transformational leader to shape the culture (Ogbonna & Harris, 2000).

7.3. Theoretical Contributions

The significance of this study in adding to the theoretical body of knowledge is three-fold. The first and most important addition to theory is that the discussion involving the dynamic relationship between organisational culture and transformational leadership can be further clarified and challenged through empirically tested research. The moderating effect that transformational leadership has on the relationship between organisational culture and participative decision-making is in line with the work conducted by Sun and Wang, (2017), this however challenges work in this field as typically the relationship between transformational leadership and organisational outcomes is argued to be mediated and moderated by organisational culture (Lok & Crawford, 2004; Ogbonna & Harris, 2000). As a result of this study, future discourse into the dynamic relationship between organisational culture and transformational leadership can be enhanced.

The second insight this study contributes to theory pertaining to the effect that transformational leadership has in driving self-motivation. As was identified in hypothesis five, extant theory highlights the ability of a transformational leader to drive collaboration and individualised consideration that generates passive engagement from employees (Bass & Riggio, 2006; Jacobsen et al., 2021). However, the results of this study challenge this position by demonstrating the inability of a transformational leader to influence an individuals' want to be involved in decisions regarding themselves or the organisation. This insight aligns with the call for more research into unique leadership style approaches that go beyond a transformational approach (Anderson & Sun, 2017; Antonakis & House, 2014).

Finally, this study adds to the gap in the body of knowledge covering the fields of organisational culture, transformational leadership and participative decision-making. By adding empirically tested findings where all three constructs were tested in a single study. Thus, it provides a starting point and base understanding from which new research can be explored.

7.4. Implications for Management and Other Relevant Stakeholders

The significance of this study provides the impetus for business to revamp their human capital management strategies. This study provides a strong argument in the realm of culture versus leadership development initiatives in organisations. The argument this study puts forward is that a focus on developing skills in proven leadership techniques, such as a transformational leadership style, is empirically proven to yield participative decision-making, which in turn impacts job satisfaction and employee turnover (Anderson & Sun, 2017; Pacheco & Webber, 2016; van der Westhuizen et al., 2012). Moreover, transformational leadership is argued to improve the assumptions and values leading to improve cultural traits. Thus, the findings of this study offer a two birds with one stone approach to addressing both organisational culture as well as job satisfaction. The benefit for business is such that participation decision-making yields a 6.8 times effect on decision-making quality and speed which directly impacts organisational competitiveness (Aminov et al., 2019).

7.5. Limitations of the Research

The limitations in this study are predominantly located in the research design and methodology approach taken.

The first and most significant limitation in this study is outlined by the sampling methodology. A purposive, non-probability sampling technique was employed which limits the findings of this study to the contextual factors inherent therein. Furthermore, through this approach, the judgement of the researcher was applied in pre-qualifying individuals for the study. The use of snowball sampling moved the locus of control somewhat in identifying candidates applicable to this research.

The time horizon which guided the method for data collecting was also identified as a limitation in this study as a cross sectional approach limited the ability to investigate the process of culture development as well as providing further insights into the dynamic relationship between organisational culture and transformational leadership.

The last methodological limitation is with regard to the sample size achieved in this study. While the sample size achieved was in line with the work conducted in the key areas of study, the number of respondents fell short of the minimum requirement for a confirmatory factor analysis to be conducted (Green, 1991; Kahnweiler & Thompson, 2000; Reis et al., 2016). As a result, judgement by the researcher was applied in factorising the scales, which can influence the findings thereof. In performing judgement in this study, the researcher ensured that all decisions were documented in the research design and methodology sections as well as ensuring that all decisions were in line with the theory in this field (Beavers et al., 2013).

The final limitation in this research involves the global environmental factors that may have influenced the responses received. As the study was conducted during a pandemic, the responses and resultant study findings need to be read with caution when reading in conjunction with other studies that were not conducted in such high pressure and extreme scenarios.

7.6. Suggestions for Future Research

The first suggestion for future research would be to replicate the testing conducted in this research in order to validate the findings in a different environmental setting such that the results can be generalised. The importance in adding research in this regard is to further add to a new area of research identified within the literature of transformational leadership, organisational culture and participative decision-making. Furthermore, research that incorporates more mediating and moderating variables into the current model that influence the propensity for participative decision-making is suggested, in order to improve the predictability of the research model.

Finally, research into identifying and testing the drivers of participative decision-making are crucial in evolving the theory. Specific focus should be placed on understanding what factors influence an individuals want to be involved in decisions of both an individual and organisation orientation such that participative decision-making can organic without the need for transformational leaders.

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APPENDIX A – Survey Questionnaire

Participative decision-making: The Influence of organisational culture and leadership style

Consent Letter

I am currently a student at the University of Pretoria's Gordon Institute of Business Science and completing my research in partial fulfilment of an MBA.

I am conducting research to determine the moderating effect of a managers leadership style between organisational culture and participative decision-making. In order to achieve this, you will be presented with a survey covering your demographics as well as the three core areas of the study, namely; organisational culture, your managers leadership style and participative decision making in your organisation. Your insights will help in understanding whether your managers leadership style moderates the relationship between organisational culture and participative decision-making. The survey should take no more than 10 minutes of your time.

Your participation is voluntary and you can withdraw at any time without penalty. Your participation is anonymous and only aggregated data will be reported. By completing the survey, you indicate that you voluntarily participate in this research. If you have any concerns, please contact my supervisor or myself. Our details are provided below.

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*Required

1. Do you give consent? *

Mark only one.

( ) I agree
( ) I disagree

Qualifying Criteria

2. Are you currently working within an organisation with at least one level of management above you? If no, unfortunately you do not fall within the scope of the research. Your time thus far is much appreciated. *

Mark only one.

( ) Yes

( ) No

Section A: Demographics

This section contains six questions about you and your organisation. The section is important as it helps in identifying if different type of people respond to the survey differently. These questions are in no way used to identify you as an individual. Mark only one per category.

3. Gender: *

( ) Female

( ) Male

4. Age: *

( ) Less than 20 years old

( ) 20-29 years old

( ) 30-39 years old

( ) 40-49 years old

( ) 50 or older

5. Education Level: *

( ) Certificate/Diploma

( ) Bachelor's degree

( ) Master's degree

( ) Ph.D.

( ) Other

6. Organisation Size: *

( ) Less than 50

( ) 51-100

( ) 101-500

( ) 501-1000

( ) Larger than 1000

7. Position in present organisation: *

( ) General Staff

( ) Junior Manager

( ) Middle Manager

( ) Senior Manager

( ) Executive

8. Tenure in current position: *

Mark only one.

( ) Less than 1 years

( ) 1-5 years

( ) 6-10 years

( ) 11-15 years

( ) More than 15 years

Section B: Culture

This section probes the culture of your organisation. Please answer all items on this answer sheet.

24 descriptive statements are listed, score your organisation on how strongly you agree or disagree with the statement. Mark only one per statement. Use the following rating scale;

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

9. The management style in the organization is characterized by teamwork, ` consensus, and participation. *

	1	2	3	4	5	
Strongly Disagree	( )	( )	( )	( )	( )	Strongly Agree

10. The management style in the organization is characterized by individual risk taking, innovation, freedom, and uniqueness. *

	1	2	3	4	5	
Strongly Disagree	( )	( )	( )	( )	( )	Strongly Agree

11. The management style in the organization is characterized by hard-driving competitiveness, high demands, and achievement. *

	1	2	3	4	5	
Strongly Disagree	( )	( )	( )	( )	( )	Strongly Agree

12. The management style in the organization is characterized by security of employment, conformity, predictability, and stability in relationships. *

	1	2	3	4	5	
Strongly Disagree	( )	( )	( )	( )	( )	Strongly Agree

13. The organization defines success on the basis of the development of human resources, teamwork, employee commitment, and concern for people. *

	1	2	3	4	5	
Strongly Disagree	( )	( )	( )	( )	( )	Strongly Agree

14. The organization defines success on the basis of having the most unique or newest products. It is a product leader and innovator. *

	1	2	3	4	5	
Strongly Disagree	( )	( )	( )	( )	( )	Strongly Agree

15. The organization defines success on the basis of winning in the marketplace and outpacing the competition. Competitive market leadership is key. *

	1	2	3	4	5	
Strongly Disagree	( )	( )	( )	( )	( )	Strongly Agree

16. The organization defines success on the basis of efficiency. Dependable delivery, smooth scheduling, and low-cost production are critical. *

	1	2	3	4	5	
Strongly Disagree	( )	( )	( )	( )	( )	Strongly Agree

17. The leadership in the organization is generally considered to exemplify mentoring, facilitating, or nurturing. *

	1	2	3	4	5	
Strongly Disagree	( )	( )	( )	( )	( )	Strongly Agree

18. The leadership in the organization is generally considered to exemplify entrepreneurship, innovation, or risk taking. *

	1	2	3	4	5	
Strongly Disagree	( )	( )	( )	( )	( )	Strongly Agree

19. The leadership in the organization is generally considered to exemplify a no-nonsense, aggressive, results-oriented focus. *

	1	2	3	4	5	
Strongly Disagree	( )	( )	( )	( )	( )	Strongly Agree

20. The leadership in the organization is generally considered to exemplify coordinating, organizing, or smooth-running efficiency. *

	1	2	3	4	5	
Strongly Disagree	( )	( )	( )	( )	( )	Strongly Agree

21. The glue that holds the organization together is loyalty and mutual trust. Commitment to this organization runs high. *

	1	2	3	4	5	
Strongly Disagree	( )	( )	( )	( )	( )	Strongly Agree

22. The glue that holds the organization together is commitment to innovation and development. There is an emphasis on being on the cutting edge. *

	1	2	3	4	5	
Strongly Disagree	( )	( )	( )	( )	( )	Strongly Agree

23. The glue that holds the organization together is the emphasis on achievement and goal accomplishment. *

	1	2	3	4	5	
Strongly Disagree	( )	( )	( )	( )	( )	Strongly Agree

24. The glue that holds the organization together is formal rules and policies. Maintaining a smooth-running organization is important. *

	1	2	3	4	5	
Strongly Disagree	( )	( )	( )	( )	( )	Strongly Agree

25. The organization emphasizes human development. High trust. openness, and participation persist. *

	1	2	3	4	5	
Strongly Disagree	( )	( )	( )	( )	( )	Strongly Agree

26. The organization emphasizes acquiring new resources and creating new challenges. Trying new things and prospecting for opportunities are valued. *

	1	2	3	4	5	
Strongly Disagree	( )	( )	( )	( )	( )	Strongly Agree

27. The organization emphasizes competitive actions and achievement. Hitting stretch targets and winning in the marketplace are dominant. *

	1	2	3	4	5	
Strongly Disagree	( )	( )	( )	( )	( )	Strongly Agree

28. The organization emphasizes permanence and stability. Efficiency, control, and smooth operations are important. *

	1	2	3	4	5	
Strongly Disagree	( )	( )	( )	( )	( )	Strongly Agree

29. The organization is a very personal place. It is like an extended family. People seem to share a lot of themselves. *

	1	2	3	4	5	
Strongly Disagree	( )	( )	( )	( )	( )	Strongly Agree

30. The organization is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks. *

	1	2	3	4	5	
Strongly Disagree	( )	( )	( )	( )	( )	Strongly Agree

31. The organization is very results-oriented. A major concern is with getting the job done. People are very competitive and achievement-oriented. *

	1	2	3	4	5	
Strongly Disagree	( )	( )	( )	( )	( )	Strongly Agree

32. The organization is a very controlled and structured place. Formal procedures generally govern what people do. *

	1	2	3	4	5	
Strongly Disagree	( )	( )	( )	( )	( )	Strongly Agree

Section C: Leadership

This section probes the leadership style of the individual you directly report to. Please answer all items on this answer sheet.

7 descriptive statements are listed, score your direct manager on how frequently each statement fits the person you are describing. Mark only one per statement. Use the following rating scale;

1	2	3	4	5
Never	Rarely	Sometimes	Very Frequently	Always

33. My manager communicates a clear and positive vision of the future. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

34. My manager treats staff as individuals, supports and encourages their development. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

35. My manager gives encouragement and recognition to staff. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

36. My manager fosters trust. involvement and cooperation among team members. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

37. My manager encourages thinking about problems in new ways and questions assumptions. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

38. My manager is clear about his/her values and practices what he/she preaches. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

39. My manager instills pride and respect in others and inspires me by being highly competent. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

Section D: Participative Decision Making

This section probes how decisions are made by your direct manager. Please answer all items on this answer sheet.

27 descriptive statements are listed, score your direct manager on how frequently each statement fits the person you are describing. Mark only one per statement. Use the following rating scale;

1	2	3	4	5
Never	Rarely	Sometimes	Very Frequently	Always

40. My supervisor/manager asks for my opinion about how the work gets done. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

41. I want my supervisor/manager to ask for my opinion about how the work gets done. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

42. My supervisor/manager asks for my opinion about how to monitor quality. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

43. I want my supervisor/manager to ask for my opinion about how to monitor quality. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

44. My supervisor/manager asks for my opinion about how fast the work gets done. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

45. I want my supervisor/manager to ask my opinion about how fast the work gets done. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

46. My supervisor/manager asks for my opinion about how work is assigned. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

47. I want my supervisor/manager to ask for my opinion about how work is assigned. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

48. My supervisor/manager asks for my opinion about when the work gets done. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

49. I want my supervisor/manager to ask for my opinion about when the work gets done. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

50. My supervisor/manager asks for my opinion before hiring a co-worker. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

51. I want my supervisor/manager to ask for my opinion before hiring a co-worker. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

52. My supervisor/manager asks for my opinion before disciplining a co-worker. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

53. I want my supervisor/manager to ask for my opinion before disciplining a co-worker. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

54. My supervisor/manager asks for my opinion before evaluating the performance of a co-worker. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

55. I want my supervisor/manager to ask for my opinion before evaluating the performance of a co-worker. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

56. My supervisor/manager asks for my opinion about training needs. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

57. I want my supervisor/manager to ask for my opinion about training needs. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

58. My supervisor/manager asks for my opinion before making important purchases. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

59. I want my supervisor/manager to ask for my opinion before making important purchases. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

60. My supervisor/manager asks for my opinion about organizational goals. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

61. I want my supervisor manager to ask for my opinion about organizational goals. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

62. My supervisor/manager asks for my opinion about organizational policies and rules. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

63. I want my supervisor/manager to ask for my opinion about organizational policies and rules. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

64. I decide how to do my job. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

65. My ideas get serious consideration. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

66. I get credit for my ideas. *

	1	2	3	4	5	
Never	( )	( )	( )	( )	( )	Always

APPENDIX B – Ethical Clearance Approval

GIBS ETHICAL CLEARANCE APPLICATION FORM 2021/22

G. APPROVALS FOR/OF THIS APPLICATION

When the applicant is a student of GIBS, the applicant must please ensure that the supervisor and co-supervisor (where relevant) has signed the form before submission

STUDENT RESEARCHER/APPLICANT:

29. I affirm that all relevant information has been provided in this form and its attachments and that all statements made are correct.

Student Researcher's Name in capital letters:	ROBERTO DA SILVA
Date:	16 Jul 2021
Supervisor Name in capital letters:	CHARLENE LEW
Date:	19 Jul 2021
Co-supervisor Name in capital letters:	
Date:	16 Jul 2021

Note: GIBS shall do everything in its power to protect the personal information supplied herein, in accordance to its company privacy policies as well the Protection of Personal Information Act, 2013. Access to all of the above provided personal information is restricted, only employees who need the information to perform a specific job are granted access to this information.

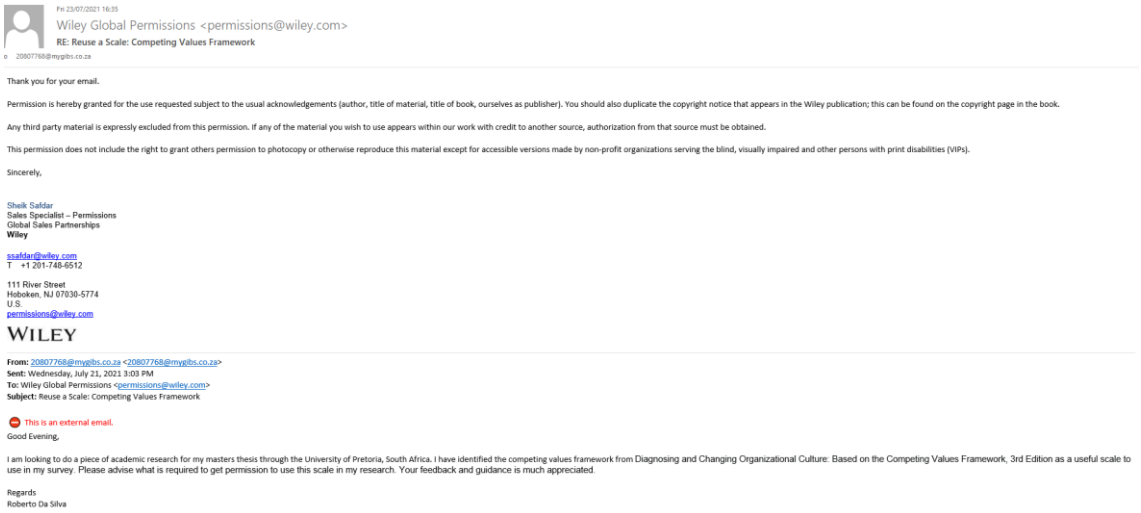
Decision:

Approved

REC comments:

Date: 20 Jul 2021

APPENDIX C – Permission to use CVF Scale



Fri 23/07/2021 16:35

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RE: Reuse a Scale: Competing Values Framework

o 20807768@mygibs.co.za

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From: 20807768@mygibs.co.za <20807768@mygibs.co.za>
Sent: Wednesday, July 21, 2021 3:03 PM
To: Wiley Global Permissions <permissions@wiley.com>
Subject: Reuse a Scale: Competing Values Framework

This is an external email.

Good Evening,

I am looking to do a piece of academic research for my masters thesis through the University of Pretoria, South Africa. I have identified the competing values framework from Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework, 3rd Edition as a useful scale to use in my survey. Please advise what is required to get permission to use this scale in my research. Your feedback and guidance is much appreciated.

Regards
Roberto Da Silva

APPENDIX D – Coding Key

Gender		
Variable	Female	Male
Code	1	2

Age						
Variable	Less than 20 years old	20-29 years old	30-39 years old	40-49 years old	50 or older	Other
Code	1	2	3	4	5	6

Education Level					
Variable	Certificate/Diploma	Bachelor's degree	Master's degree	Ph.D.	Other
Code	1	2	3	4	5

Organisation Size					
Variable	Less than 50	51-100	101-500	501-1000	Larger than 1000
Code	1	2	3	4	5

Position in present organisation:					
Variable	General Staff	Junior Manager	Middle Manager	Senior Manager	Executive
Code	1	2	3	4	5

Tenure in current position:					
Variable	Less than 1 years	1-5 years	6-10 years	11-15 years	More than 15 years
Code	1	2	3	4	5

Culture Scale					
Variable	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Code	1	2	3	4	5

Leadership Scale					
Variable	Never	Rarely	Sometimes	Very Frequently	Always
Code	1	2	3	4	5

PDM Scale					
Variable	Never	Rarely	Sometimes	Very Frequently	Always
Code	1	2	3	4	5

APPENDIX E – Construct Validity

Question	Convergent Validity, Pearson's (r)		Discriminant Validity, Pearson's (r)
	MIN	MAX	MAX
9	-0.09	0.72	0.56
10	-0.19	0.52	0.29
11	0	0.51	0.12
12	-0.05	0.302	0.21
13	-0.2	0.67	0.48
14	-0.06	0.62	0.31
15	0.04	0.69	0.24
16	-0.02	0.44	0.26
17	-0.22	0.72	0.56
18	-0.21	0.72	0.32
19	-0.22	0.47	0.11
20	0	0.57	0.38
21	-0.07	0.63	0.53
22	-0.02	0.64	0.41
23	0.05	0.56	0.39
24	-0.17	0.61	0.21
25	-0.18	0.7	0.53
26	-0.11	0.52	0.47
27	-0.01	0.69	0.27
28	0.07	0.54	0.33
29	-0.16	0.55	0.44
30	-0.24	0.72	0.37
31	0.03	0.55	0.21
32	-0.24	0.61	0.16
33	0.66	0.72	0.72
34	0.6	0.85	0.63
35	0.58	0.85	0.63
36	0.6	0.83	0.62
37	0.58	0.67	0.58
38	0.31	0.84	0.63
39	0.64	0.84	0.68
40	-0.08	0.66	0.58
41	-0.01	0.59	0.15
42	-0.03	0.66	0.54
43	0.01	0.59	0.15
44	-0.03	0.70	0.54
45	-0.11	0.57	0.16
46	-0.05	0.64	0.54
47	-0.07	0.54	0.10

48	0.01	0.70	0.44
49	-0.10	0.57	0.12
50	-0.01	0.55	0.43
51	-0.03	0.57	0.20
52	-0.09	0.72	0.41
53	-0.03	0.74	0.12
54	0.03	0.72	0.36
55	-0.06	0.74	0.15
56	-0.01	0.61	0.57
57	-0.04	0.45	0.07
58	0.00	0.60	0.30
59	-0.05	0.49	0.08
60	-0.01	0.64	0.58
61	-0.02	0.49	0.13
62	0.04	0.64	0.44
63	-0.09	0.49	0.11
64	-0.11	0.42	0.27
65	-0.05	0.68	0.58
66	-0.09	0.68	0.68

APPENDIX F – Confirmatory Factor Analysis Fits

Construct	Theorised Sub-Construct	X^2	CFI	RMSEA	SRMR
Organisational Culture	Clan Culture	0.001	0.970	0.104	0.055
	Adhocracy Culture	0.000	0.906	0.157	0.089
	Market Culture	0.000	0.912	0.144	0.090
	Hierarchy Culture	0.000	0.629	0.230	0.168
Transformational Leadership		0.000	0.957	0.143	0.050
Participative Decision-Making	Ask1	0.000	0.862	0.156	0.136
	Ask2	-	1.000	0.599	0.000
	Wants1	0.000	0.739	0.156	0.090
	Wants2	-	1.000	0.631	0.000
	Control	-	1.000	0.522	0.000

APPENDIX G – Component Matrices

Organisational Culture

Rotated Component Matrix[a]					
	Component				
	1	2	3	4	5
29: The organization is a very personal place. It is like an extended family. People seem to share a lot of themselves.	0.613	0.103	-0.092	-0.195	0.244
17: The leadership in the organization is generally considered to exemplify mentoring, facilitating, or nurturing.	0.756	0.338	-0.160	0.026	0.128
9: The management style in the organization is characterized by teamwork, consensus, and participation.	0.766	0.373	0.065	0.003	0.019
21: The glue that holds the organization together is loyalty and mutual trust. Commitment to this organization runs high.	0.808	-0.030	0.126	-0.128	0.149
25: The organization emphasizes human development. High trust, openness, and participation persist.	0.806	0.207	-0.065	0.099	0.064
13: The organization defines success on the basis of the development of human resources, teamwork, employee commitment, and concern for people.	0.764	0.181	-0.119	0.048	0.081
30: The organization is a very dynamic and entrepreneurial place. People are willing to stick their necks out and take risks.	0.383	0.395	0.158	-0.518	0.258
18: The leadership in the organization is generally considered to exemplify entrepreneurship, innovation, or risk taking.	0.287	0.460	0.193	-0.487	0.397
10: The management style in the organization is characterized by individual risk taking, innovation, freedom, and uniqueness.	0.553	0.202	0.190	-0.366	-0.048
22: The glue that holds the organization together is commitment to innovation and development. There is an emphasis on being on the cutting edge.	0.586	0.544	0.199	-0.053	-0.031
26: The organization emphasizes acquiring new resources and creating new challenges. Trying new things and prospecting for opportunities are valued.	0.472	0.377	0.170	-0.199	0.296
14: The organization defines success on the basis of having the most unique or newest products. It is a product leader and innovator.	0.278	0.804	0.091	-0.034	-0.014
31: The organization is very results-oriented. A major concern is with getting the job done. People are very competitive and achievement-oriented.	0.000	0.276	0.700	0.119	0.174
19: The leadership in the organization is generally considered to exemplify a no-nonsense, aggressive, results-oriented focus.	-0.196	-0.060	0.804	-0.023	0.019
11: The management style in the organization is characterized by hard-driving competitiveness, high demands, and achievement.	0.132	0.279	0.684	0.054	-0.182
23: The glue that holds the organization together is the emphasis on achievement and goal accomplishment.	0.367	0.360	0.540	-0.004	0.172
27: The organization emphasizes competitive actions and achievement. Hitting stretch targets and winning in the marketplace are dominant.	0.130	0.585	0.586	0.061	0.052
15: The organization defines success on the basis of winning in the marketplace and outpacing the competition. Competitive market leadership is key.	0.117	0.781	0.337	0.033	0.090
32: The organization is a very controlled and structured place. Formal procedures generally govern what people do.	-0.013	-0.023	0.149	0.794	0.061
20: The leadership in the organization is generally considered to exemplify coordinating, organizing, or smooth-running efficiency.	0.735	0.018	0.283	0.105	0.084
12: The management style in the organization is characterized by security of employment, conformity, predictability, and stability in relationships.	0.142	-0.011	-0.107	0.247	0.773
24: The glue that holds the organization together is formal rules and policies. Maintaining a smooth running organization is important.	0.140	0.165	0.083	0.809	0.202
28: The organization emphasizes permanence and stability. Efficiency, control, and smooth operations are important.	0.540	-0.102	0.308	0.332	0.241
16: The organization defines success on the basis of efficiency. Dependable delivery, smooth scheduling, and low-cost production are critical.	0.275	0.146	0.392	-0.041	0.579
Extraction Method: Principal Component Analysis.					
a. Rotation converged in 7 iterations.					

Participative Decision-Making

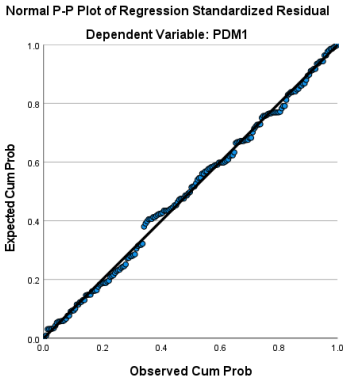
Rotated Component Matrix[a]						
	Component					
	1	2	3	4	5	6
40: My supervisor/manager asks for my opinion about how the work gets done.	0.725	-0.062	0.001	0.120	0.114	0.350
41: I want my supervisor/manager to ask for my opinion about how the work gets done.	-0.106	0.089	0.722	-0.006	0.225	0.370
42: My supervisor/manager asks for my opinion about how to monitor quality.	0.791	0.023	-0.029	0.092	0.157	0.072
43: I want my supervisor/manager to ask for my opinion about how to monitor quality.	0.034	0.070	0.732	0.221	0.207	0.145
44: My supervisor/manager asks for my opinion about how fast the work gets done.	0.847	0.044	0.073	0.054	-0.043	-0.062
45: I want my supervisor/manager to ask my opinion about how fast the work gets done.	0.056	-0.028	0.764	0.079	-0.001	-0.189
46: My supervisor/manager asks for my opinion about how work is assigned.	0.793	0.221	0.142	-0.081	0.002	-0.046
47: I want my supervisor/manager to ask for my opinion about how work is assigned.	0.110	0.249	0.596	0.253	-0.170	-0.211
48: My supervisor/manager asks for my opinion about when the work gets done.	0.759	0.097	0.169	0.012	-0.019	0.097
49: I want my supervisor/manager to ask for my opinion about when the work gets done.	0.237	0.034	0.654	0.206	-0.194	-0.238
50: My supervisor/manager asks for my opinion before hiring a co-worker.	0.531	0.511	-0.060	0.049	0.229	0.096
51: I want my supervisor/manager to ask for my opinion before hiring a co-worker.	-0.075	0.689	0.090	0.214	0.120	0.024
52: My supervisor/manager asks for my opinion before disciplining a co-worker.	0.307	0.728	-0.047	-0.029	0.237	0.270
53: I want my supervisor/manager to ask for my opinion before disciplining a co-worker.	0.017	0.843	0.069	0.155	-0.029	0.039
54: My supervisor/manager asks for my opinion before evaluating the performance of a co-worker.	0.308	0.717	0.055	-0.108	0.109	0.062
55: I want my supervisor/manager to ask for my opinion before evaluating the performance of a co-worker.	0.005	0.857	0.144	0.137	-0.123	-0.056
56: My supervisor/manager asks for my opinion about training needs.	0.685	0.165	-0.006	-0.058	0.367	-0.022
57: I want my supervisor/manager to ask for my opinion about training needs.	0.111	0.132	0.386	0.462	-0.321	-0.016
58: My supervisor/manager asks for my opinion before making important purchases.	0.456	0.210	-0.039	0.261	0.602	-0.037
59: I want my supervisor/manager to ask for my opinion before making important purchases.	0.024	0.317	0.081	0.672	0.268	-0.202
60: My supervisor/manager asks for my opinion about organizational goals.	0.631	-0.011	0.085	0.030	0.516	0.123
61.: I want my supervisor manager to ask for my opinion about organizational goals.	0.023	0.025	0.240	0.760	-0.035	0.177
62: My supervisor/manager asks for my opinion about organizational policies and rules.	0.409	0.150	0.067	0.198	0.698	0.108
63: I want my supervisor/manager to ask for my opinion about organizational policies and rules.	-0.101	0.103	0.247	0.683	0.358	0.035
64: I decide how to do my job.	0.236	0.145	-0.167	0.131	-0.021	0.704
65: My ideas get serious consideration.	0.568	0.146	0.061	-0.120	0.149	0.580
66: I get credit for my ideas.	0.676	0.029	-0.026	-0.132	0.099	0.403
Extraction Method: Principal Component Analysis.						
a. Rotation converged in 8 iterations.						

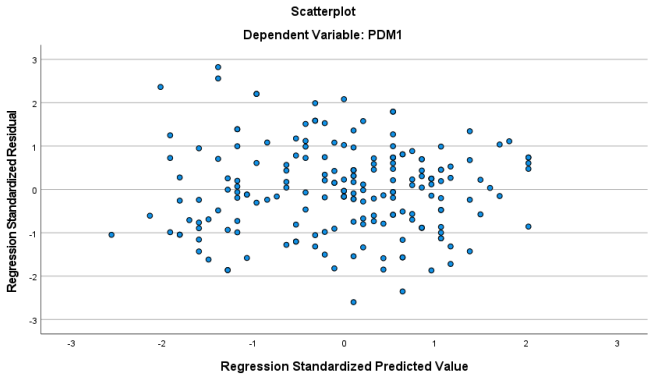
Transformational Leadership

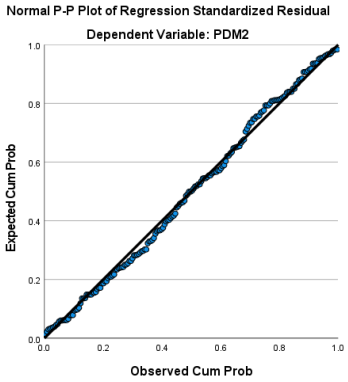
Component Matrix[a]	
	Component
	1
33: My manager communicates a clear and positive vision of the future.	0.838
34: My manager treats staff as individuals, supports and encourages their development.	0.903
35: My manager gives encouragement and recognition to staff.	0.897
36: My manager fosters trust, involvement and cooperation among team members.	0.909
37: My manager encourages thinking about problems in new ways and questions assumptions.	0.759
38: My manager is clear about his/her values and practices what he/she preaches.	0.875
39: My manager instills pride and respect in others and inspires me by being highly competent.	0.919
Extraction Method: Principal Component Analysis.	
a. 1 components extracted.	

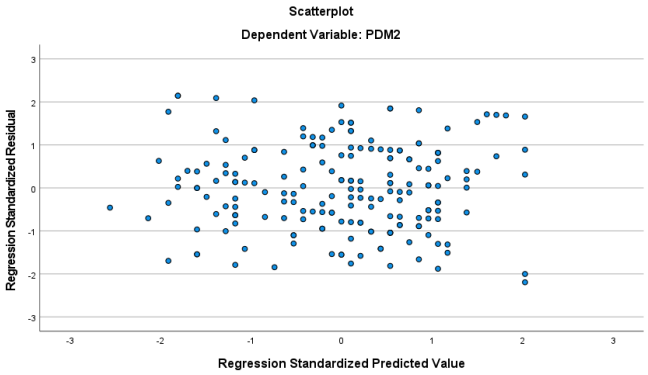
APPENDIX H – Regression Linearity and Homoscedasticity

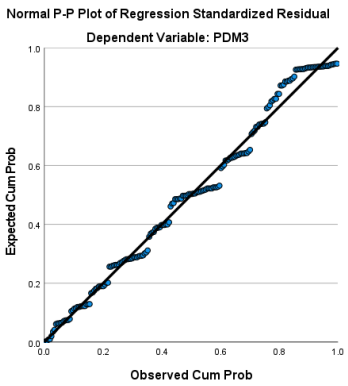
Clan Culture Effecting Participative Decision-Making

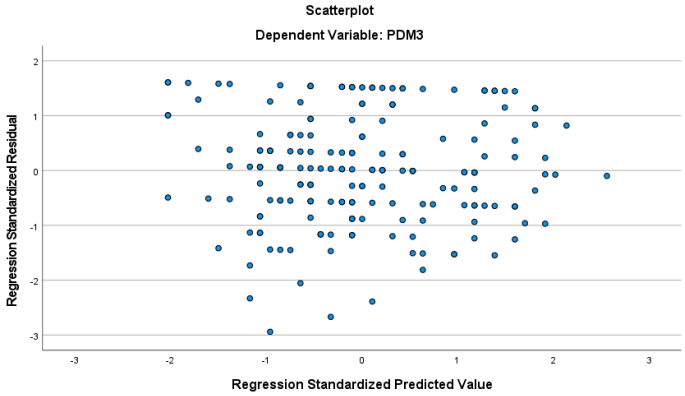


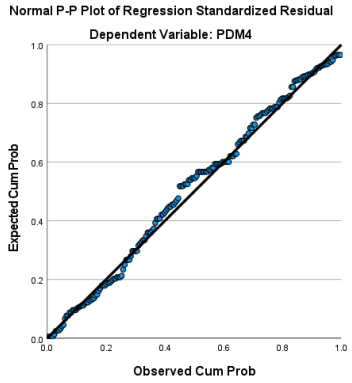








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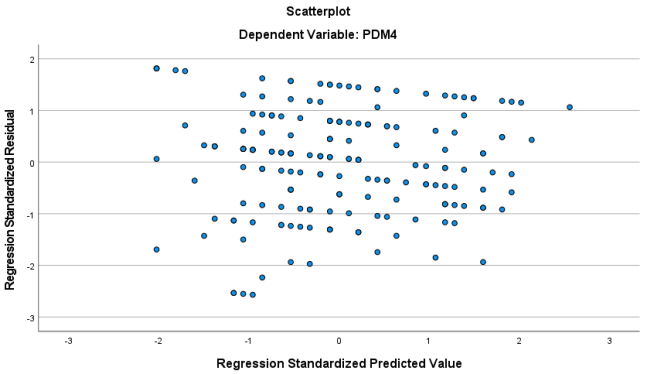
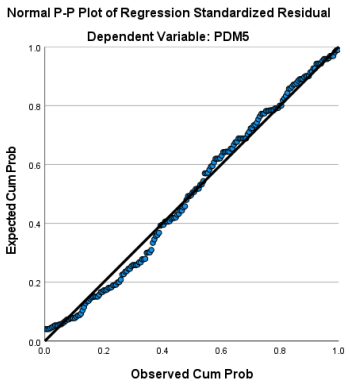
Dependent Variable: PDM4
Expected Cum Prob
Observed Cum Prob


Scatterplot
Dependent Variable: PDM4
Regression Standardized Residual
Regression Standardized Predicted Value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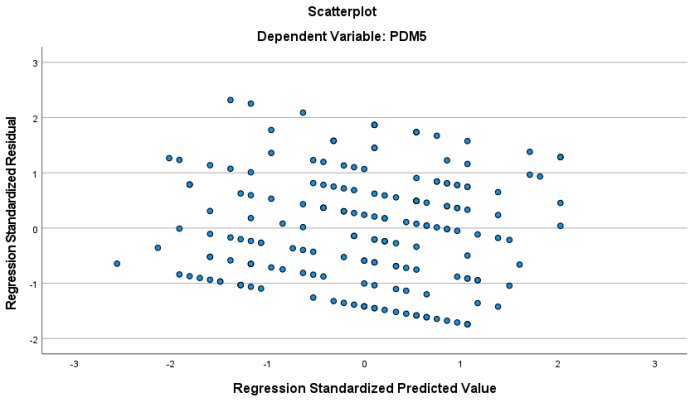
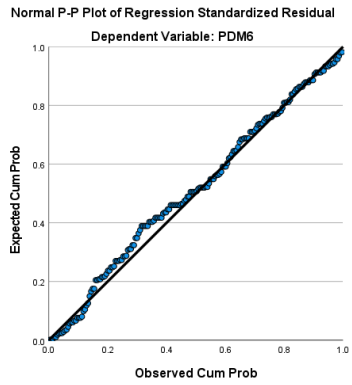
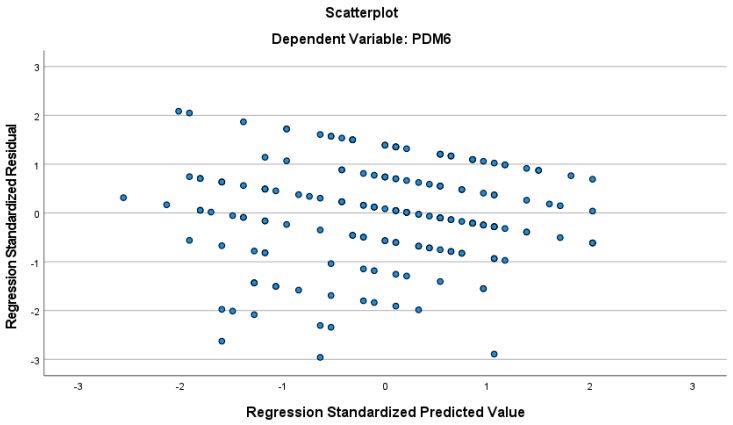
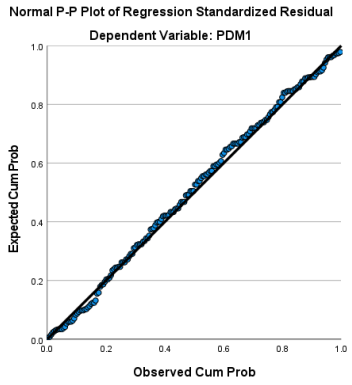
Dependent Variable: PDM5
Expected Cum Prob
Observed Cum Prob

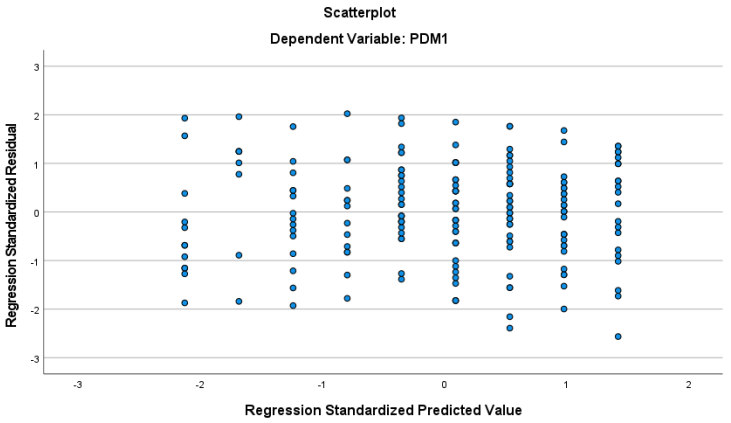

Scatterplot
Dependent Variable: PDM5
Regression Standardized Residual
Regression Standardized Predicted Value

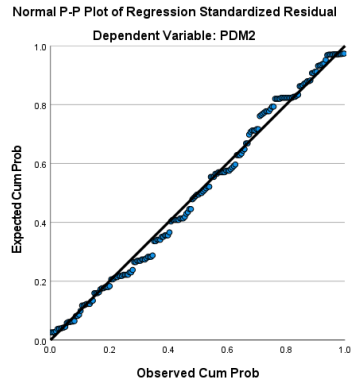

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: PDM6
Expected Cum Prob
Observed Cum Prob

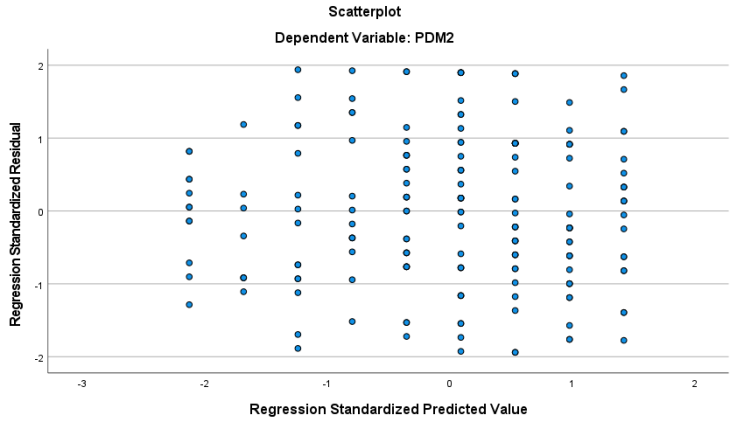

Scatterplot
Dependent Variable: PDM6
Regression Standardized Residual
Regression Standardized Predicted Value

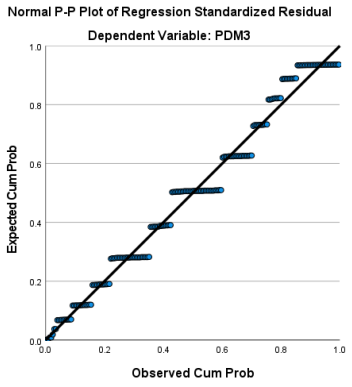
Adhocracy Culture Effecting Participative Decision-Making

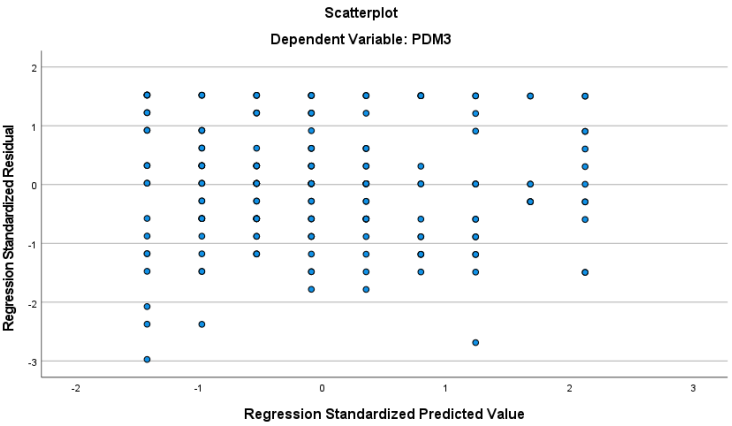


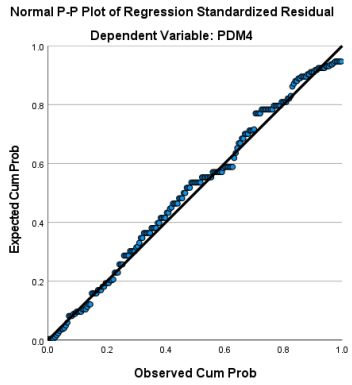


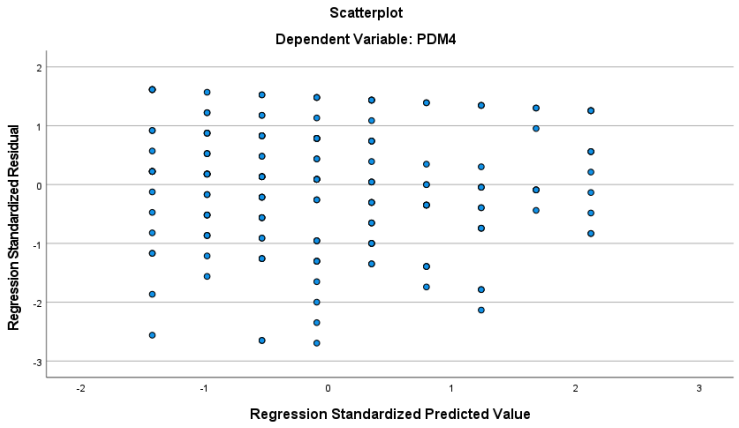


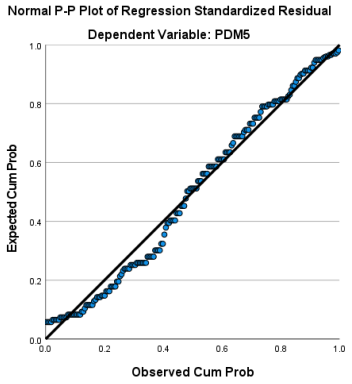


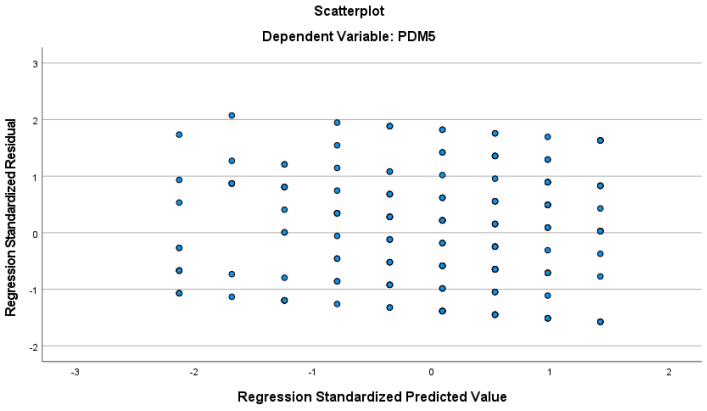


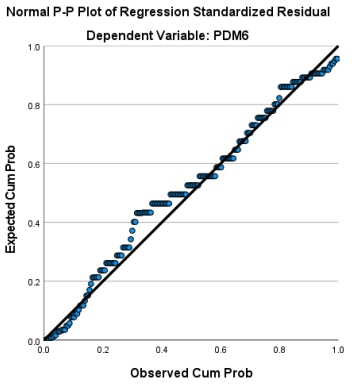


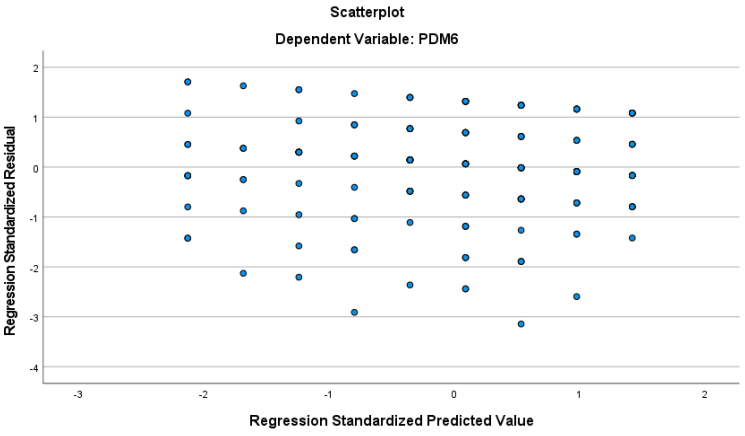

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: PDM4
Expected Cum Prob
Observed Cum Prob

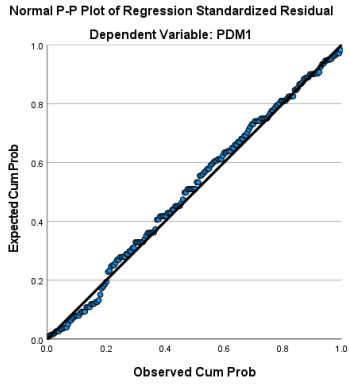

Scatterplot
Dependent Variable: PDM4
Regression Standardized Residual
Regression Standardized Predicted Value

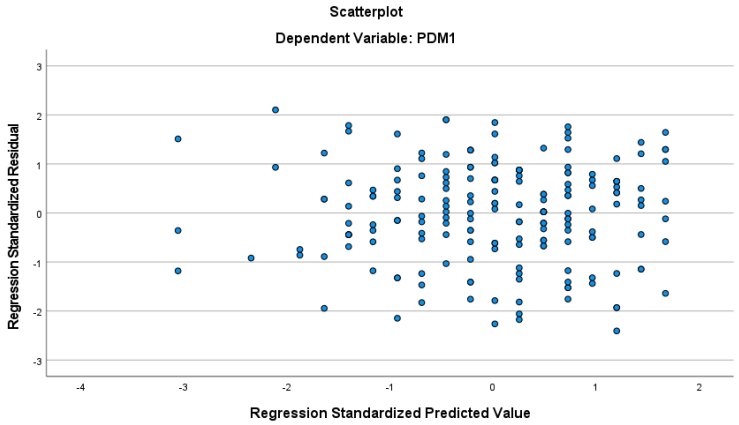

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: PDM5
Expected Cum Prob
Observed Cum Prob

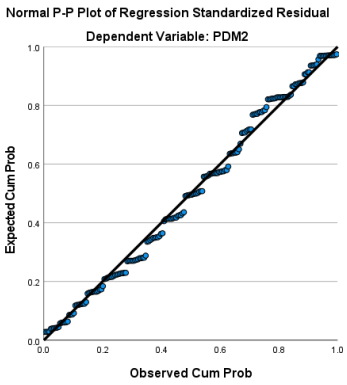

Scatterplot
Dependent Variable: PDM5
Regression Standardized Residual
Regression Standardized Predicted Value

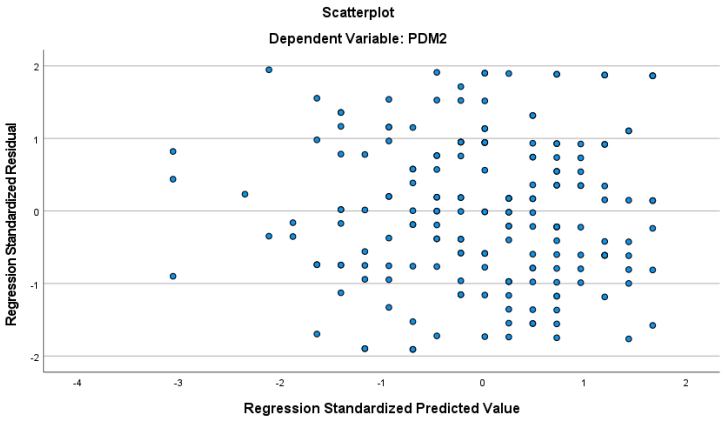

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: PDM6
Expected Cum Prob
Observed Cum Prob

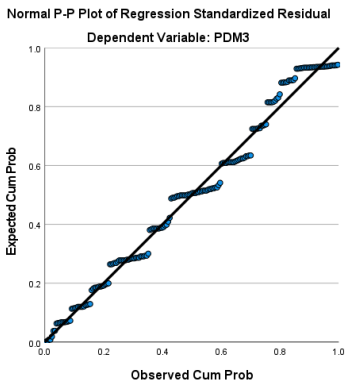

Scatterplot
Dependent Variable: PDM6
Regression Standardized Residual
Regression Standardized Predicted Value

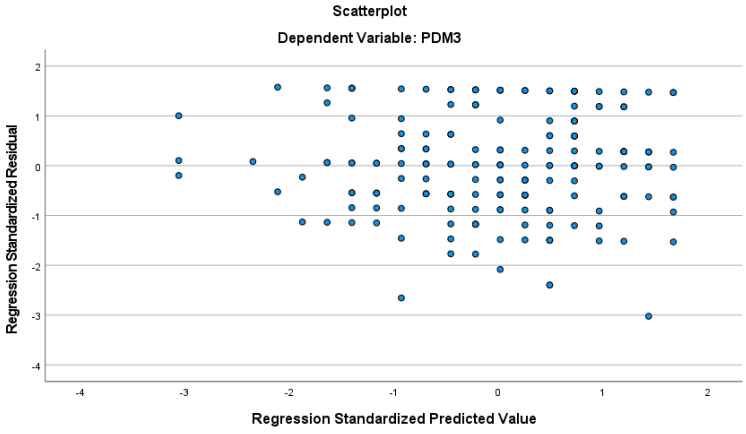

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: PDM1
Expected Cum Prob
Observed Cum Prob

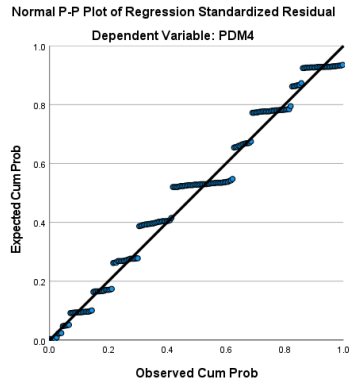

Scatterplot
Dependent Variable: PDM1
Regression Standardized Residual
Regression Standardized Predicted Value

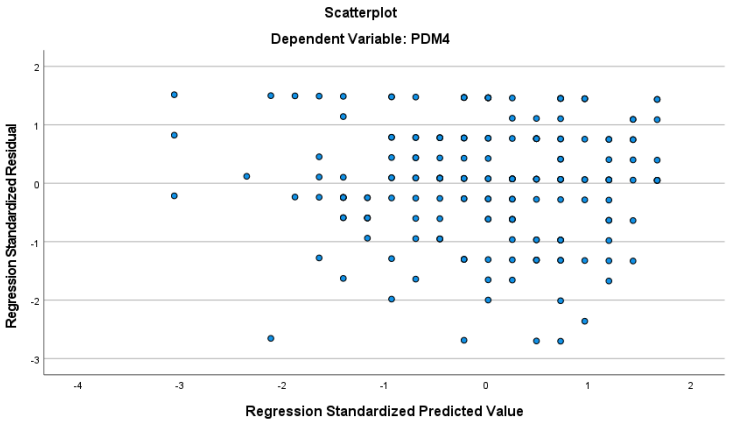

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: PDM2
Expected Cum Prob
Observed Cum Prob

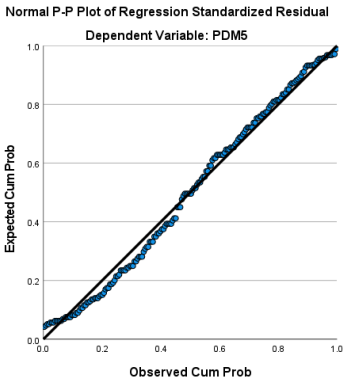

Scatterplot
Dependent Variable: PDM2
Regression Standardized Residual
Regression Standardized Predicted Value

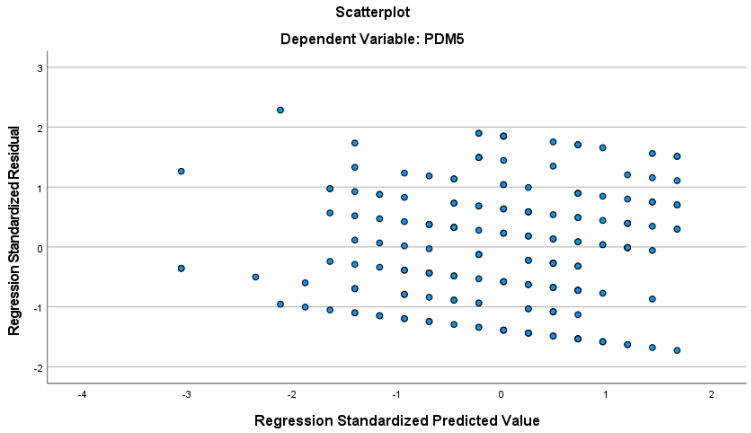

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: PDM3
Expected Cum Prob
Observed Cum Prob

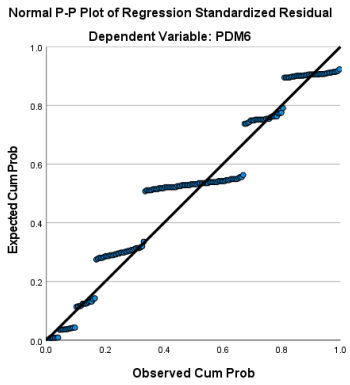

Scatterplot
Dependent Variable: PDM3
Regression Standardized Residual
Regression Standardized Predicted Value

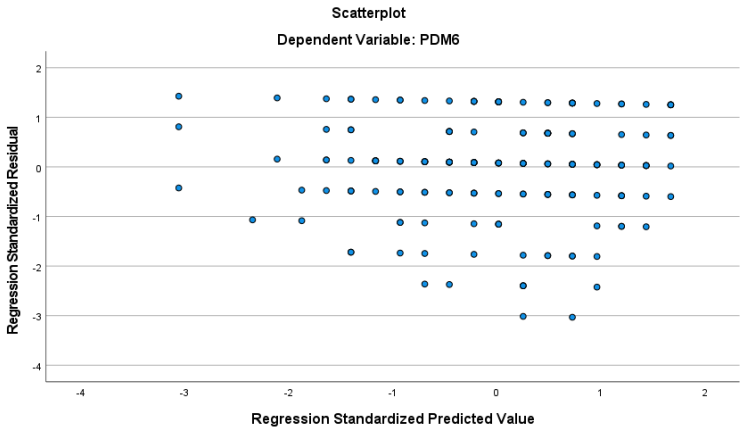

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: PDM4
Expected Cum Prob
Observed Cum Prob


Scatterplot
Dependent Variable: PDM4
Regression Standardized Residual
Regression Standardized Predicted Value

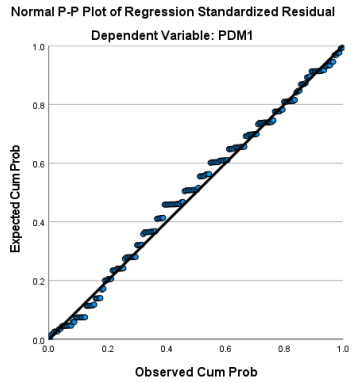

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: PDM5
Expected Cum Prob
Observed Cum Prob

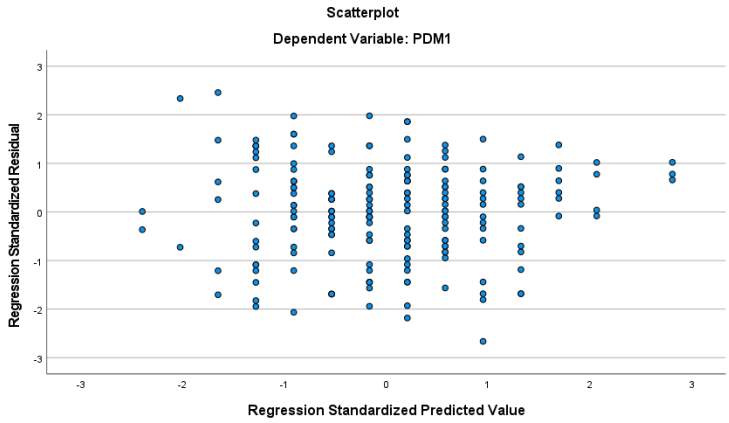

Scatterplot
Dependent Variable: PDM5
Regression Standardized Residual
Regression Standardized Predicted Value

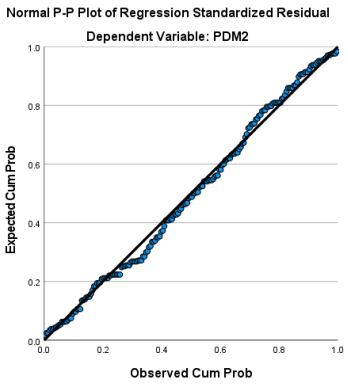

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: PDM6
Expected Cum Prob
Observed Cum Prob

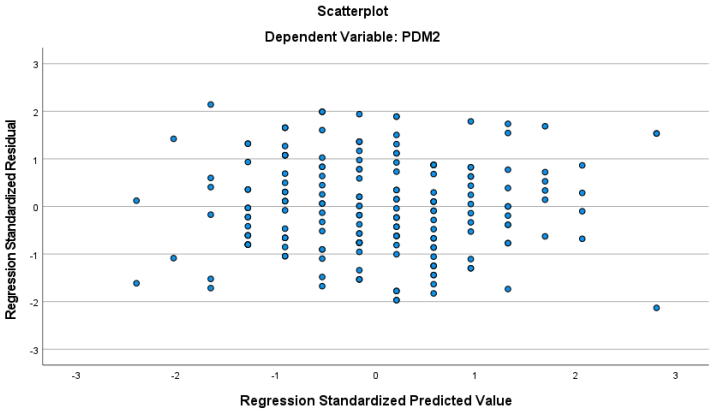

Scatterplot
Dependent Variable: PDM6
Regression Standardized Residual
Regression Standardized Predicted Value

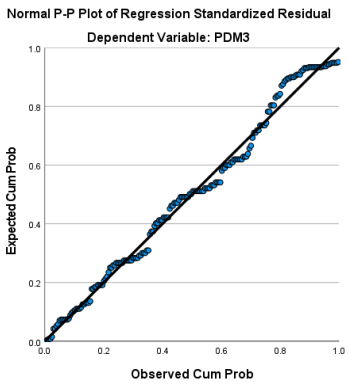
Hierarchy Culture - Conformity Effecting Participative Decision-Making

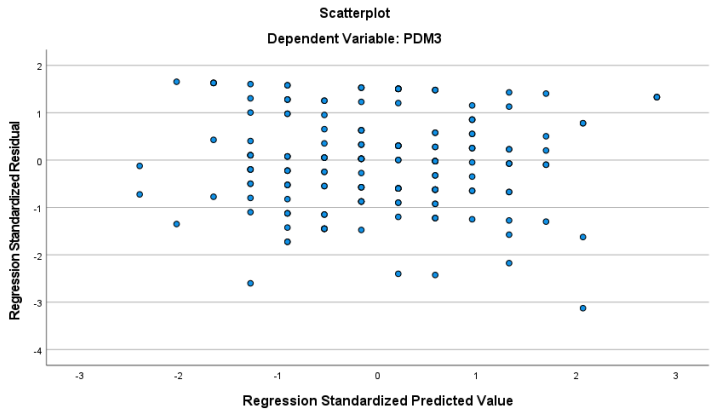


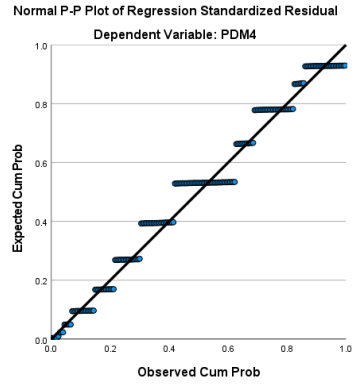


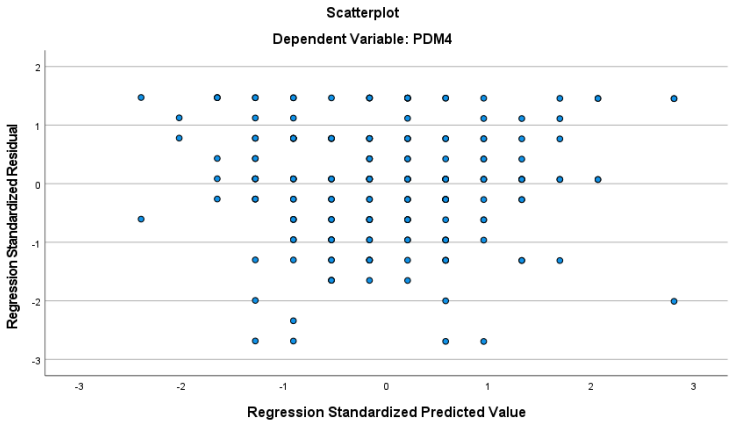


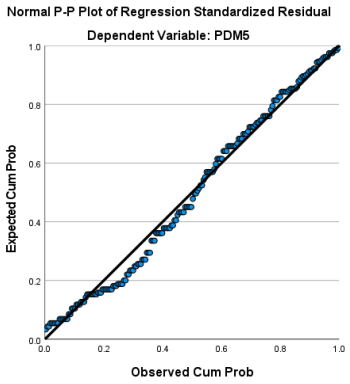


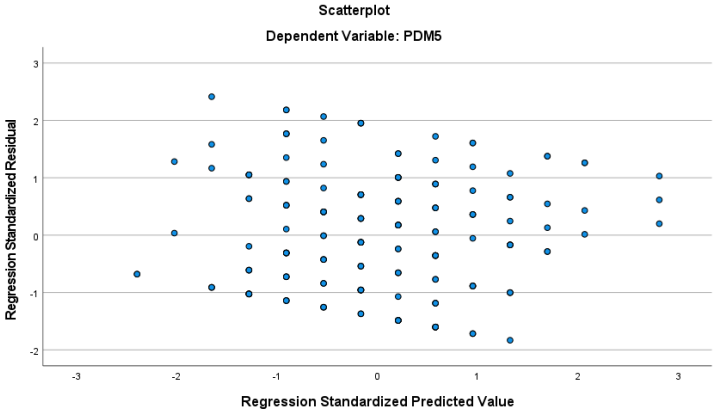


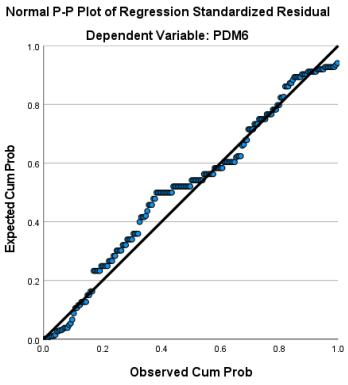


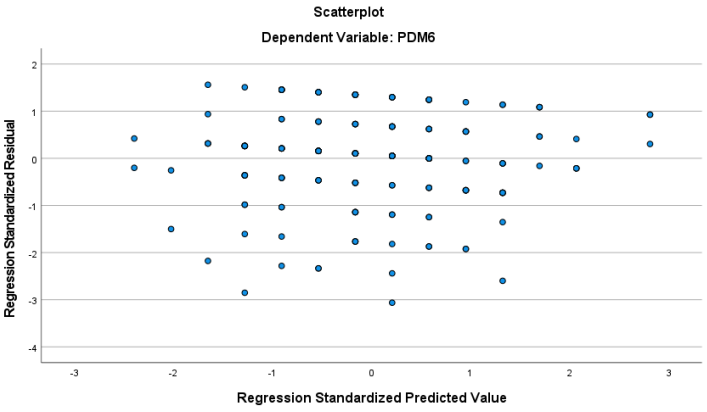

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: PDM4
Expected Cum Prob
Observed Cum Prob


Scatterplot
Dependent Variable: PDM4
Regression Standardized Residual
Regression Standardized Predicted Value

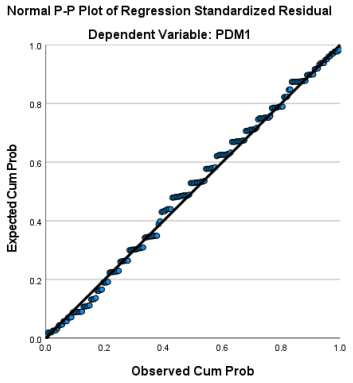

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: PDM5
Expected Cum Prob
Observed Cum Prob

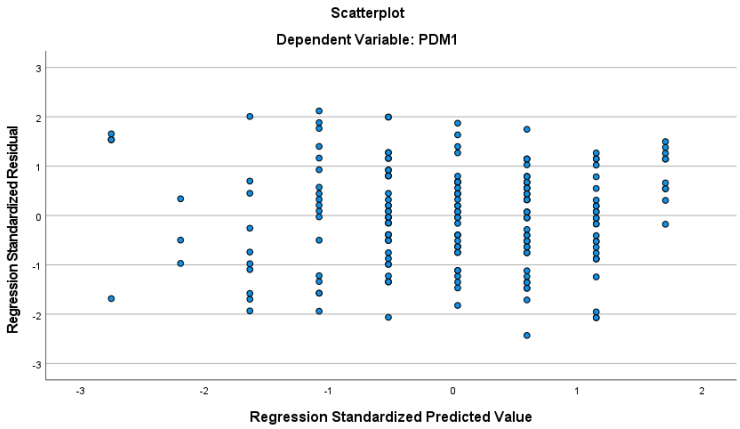

Scatterplot
Dependent Variable: PDM5
Regression Standardized Residual
Regression Standardized Predicted Value

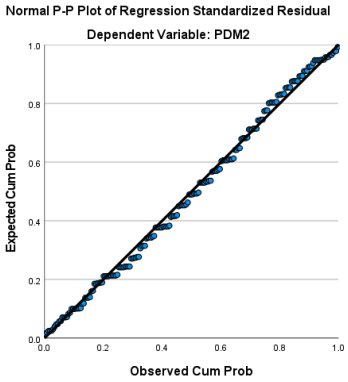

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: PDM6
Expected Cum Prob
Observed Cum Prob

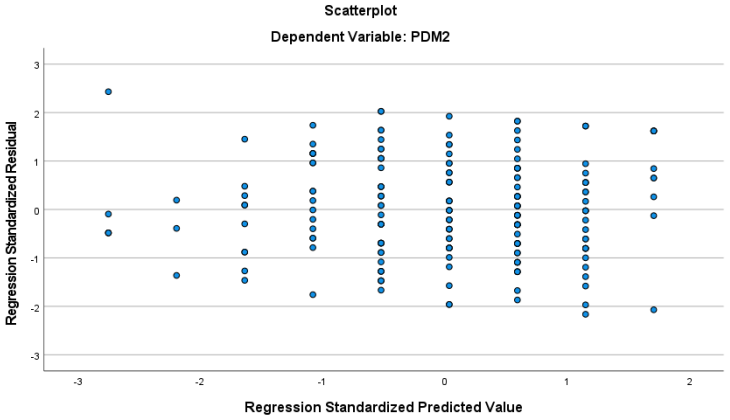

Scatterplot
Dependent Variable: PDM6
Regression Standardized Residual
Regression Standardized Predicted Value

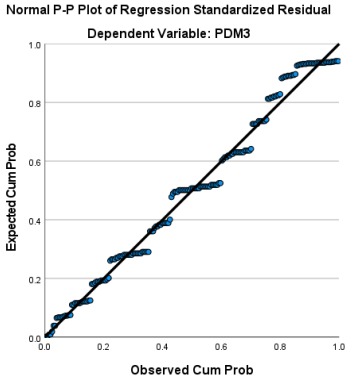
Hierarchy Culture - Predictability Effecting Participative Decision-Making

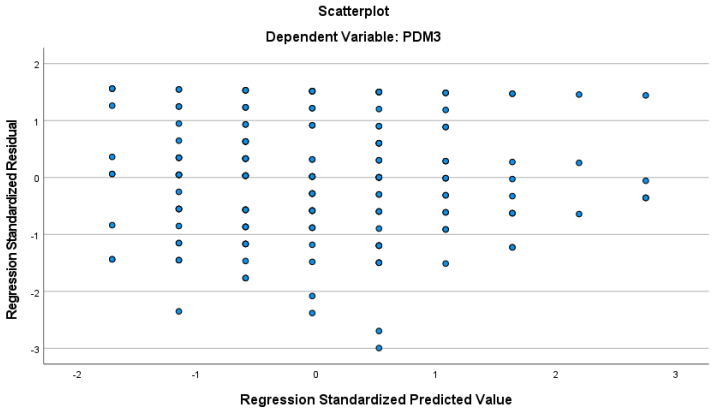


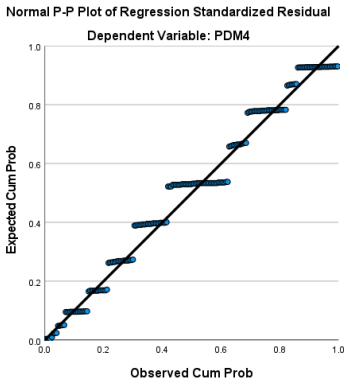


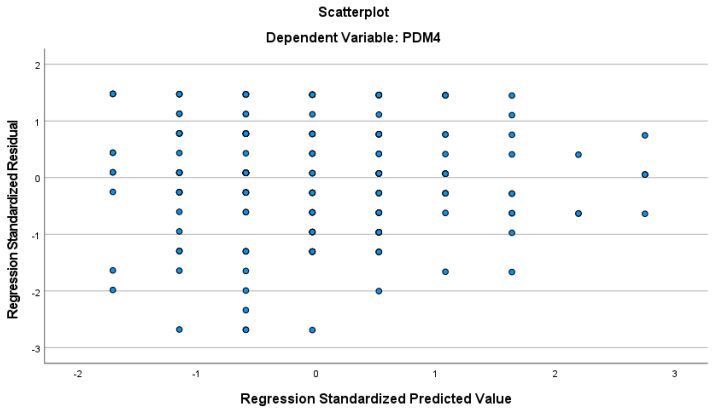


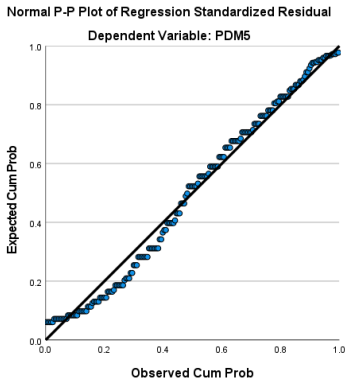


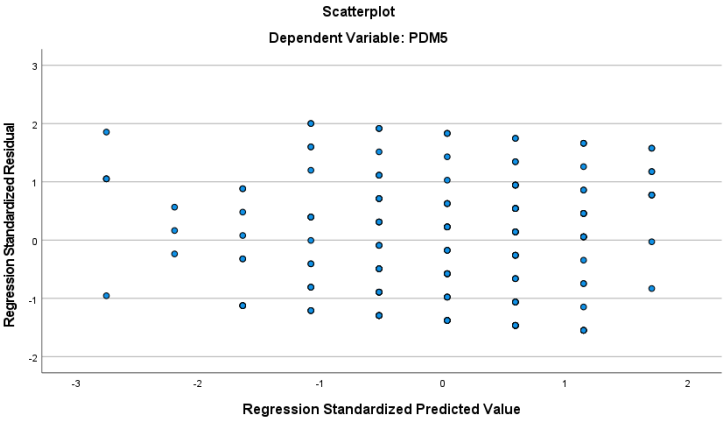


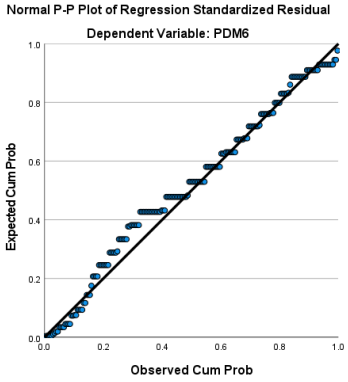


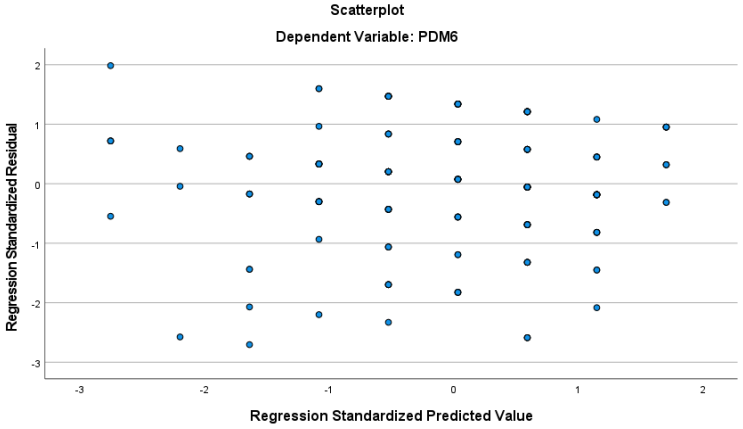

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: PDM4
Expected Cum Prob
Observed Cum Prob

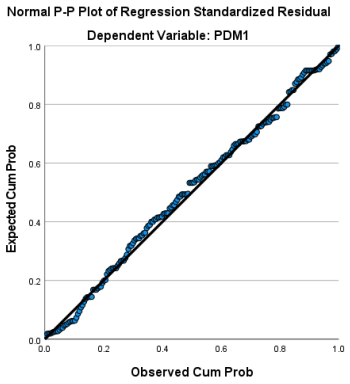

Scatterplot
Dependent Variable: PDM4
Regression Standardized Residual
Regression Standardized Predicted Value

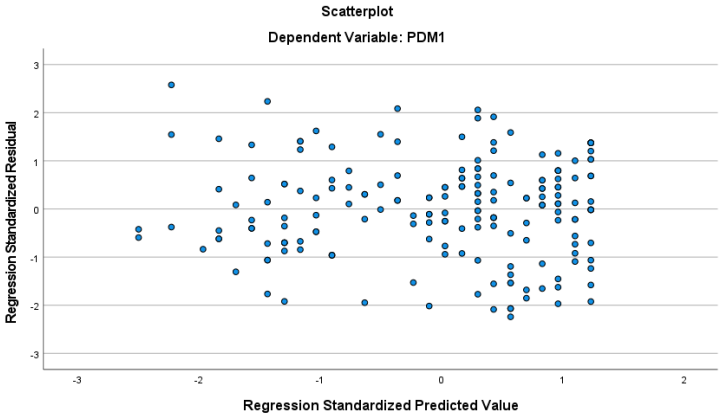

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: PDM5
Expected Cum Prob
Observed Cum Prob

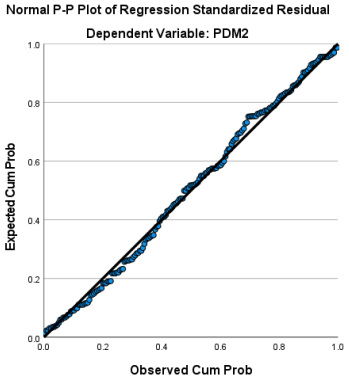

Scatterplot
Dependent Variable: PDM5
Regression Standardized Residual
Regression Standardized Predicted Value

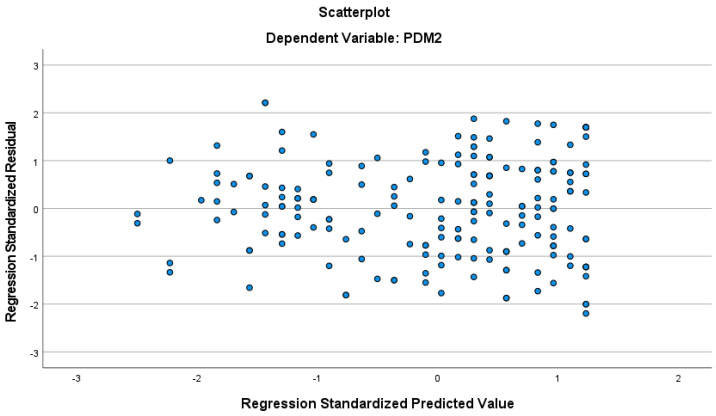

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: PDM6
Expected Cum Prob
Observed Cum Prob

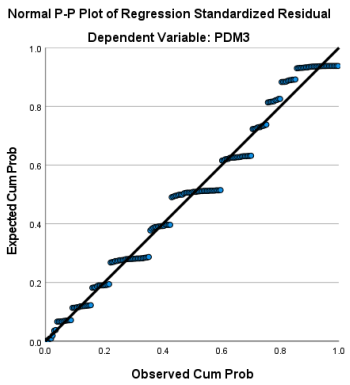

Scatterplot
Dependent Variable: PDM6
Regression Standardized Residual
Regression Standardized Predicted Value

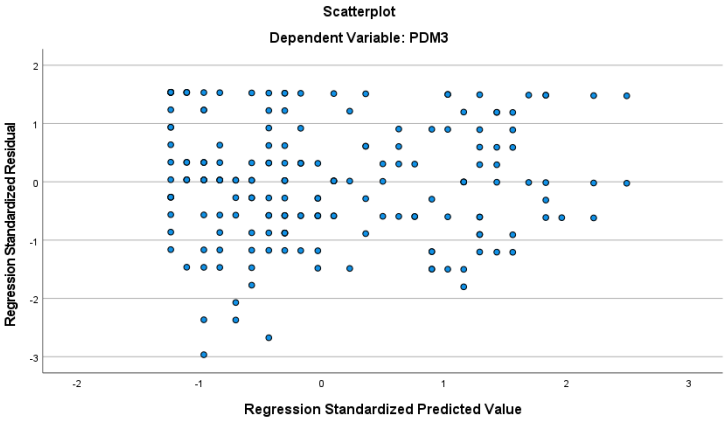

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: PDM1
Expected Cum Prob
Observed Cum Prob

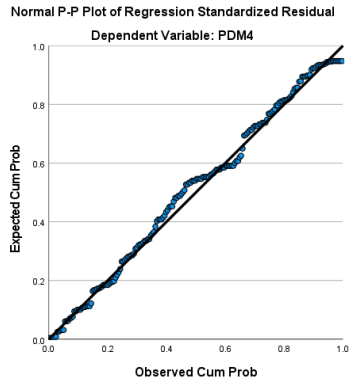

Scatterplot
Dependent Variable: PDM1
Regression Standardized Residual
Regression Standardized Predicted Value

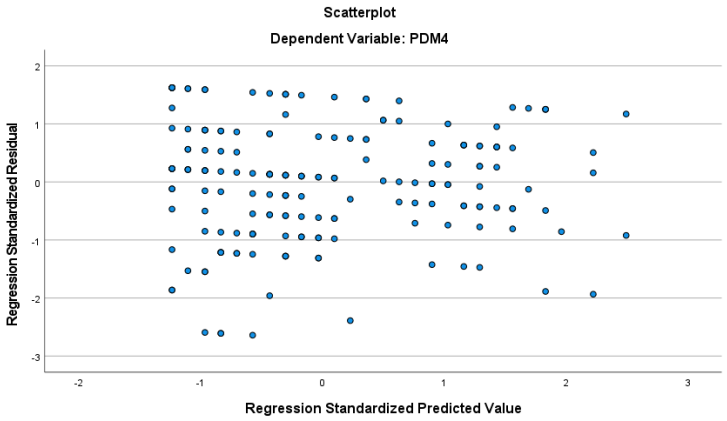

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: PDM2
Expected Cum Prob
Observed Cum Prob

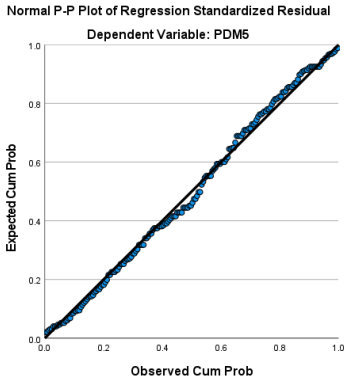

Scatterplot
Dependent Variable: PDM2
Regression Standardized Residual
Regression Standardized Predicted Value

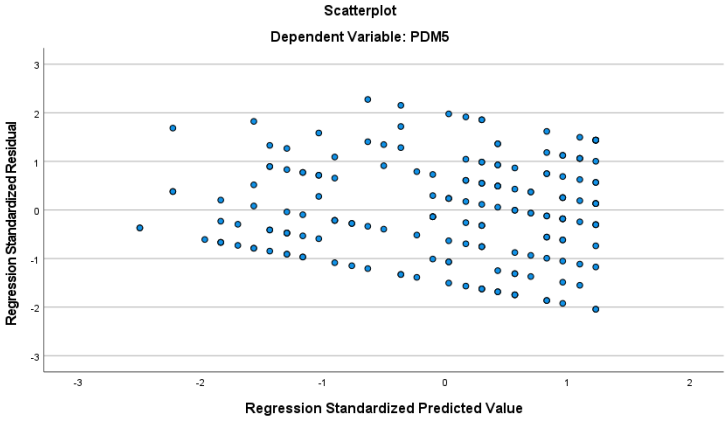

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: PDM3
Expected Cum Prob
Observed Cum Prob

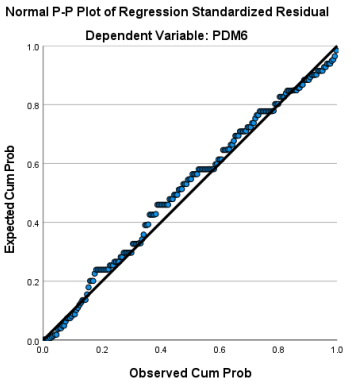

Scatterplot
Dependent Variable: PDM3
Regression Standardized Residual
Regression Standardized Predicted Value

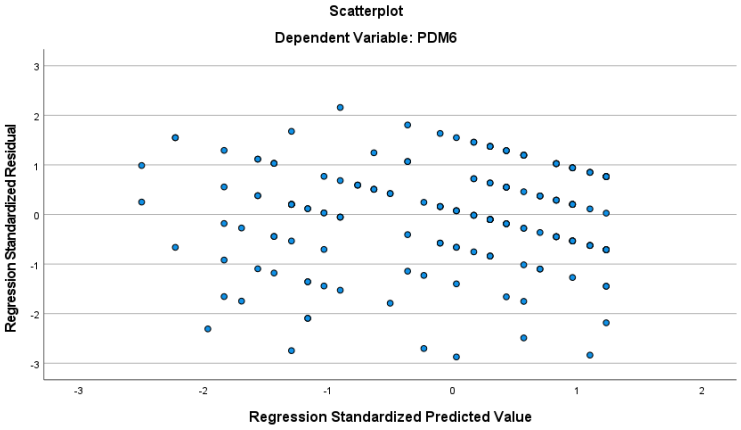

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: PDM4
Expected Cum Prob
Observed Cum Prob


Scatterplot
Dependent Variable: PDM4
Regression Standardized Residual
Regression Standardized Predicted Value

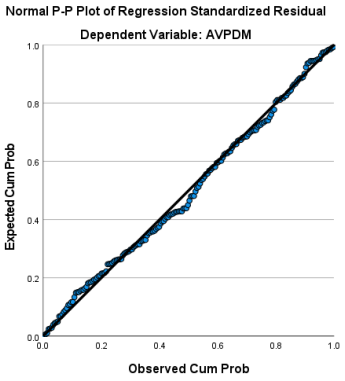

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: PDM5
Expected Cum Prob
Observed Cum Prob

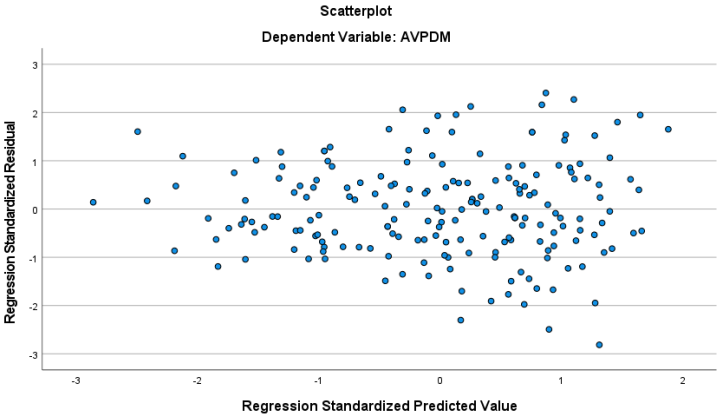

Scatterplot
Dependent Variable: PDM5
Regression Standardized Residual
Regression Standardized Predicted Value


Normal P-P Plot of Regression Standardized Residual
Dependent Variable: PDM6
Expected Cum Prob
Observed Cum Prob


Scatterplot
Dependent Variable: PDM6
Regression Standardized Residual
Regression Standardized Predicted Value

Moderating Effect of Transformational Leadership Regression





APPENDIX I – Regression Multicollinearity

PREDICTOR: Organisational Culture					
Dependent Variable			**Durbin-Watson**	**Tolerance**	**VIF**
Participative Decision-Making	Model 1	Clan Culture	2.045	0.618	1.618
		Adhocracy Culture		0.570	1.756
		Market Culture		0.664	1.506
		Hierarchy Culture - Conformity		0.607	1.647
		Hierarchy Culture - Predictability		0.774	1.292
	Model 2	Clan Culture	1.954	0.440	2.274
		Adhocracy Culture		0.568	1.760
		Market Culture		0.662	1.510
		Hierarchy Culture - Conformity		0.605	1.654
		Hierarchy Culture - Predictability		0.774	1.292
		Transformational Leadership		0.606	1.651