

**INTERGROUP strategic consensus and performance: The moderating effect of
intergroup leadership**

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ABSTRACT

Organisational performance is dependent on the effective coordination between the different and more often competing groups that make up most organisations of today. Yet, achieving effective coordination remains an on-going business challenge. Prior work on strategic consensus and social identification suggests that their combination would be positive for intergroup coordination which will then drive organisational performance. Further, work on leadership posits that intergroup leadership is different from ordinary leadership. Intergroup leadership is only effective if it is able to foster intergroup coordination based on collaborative relationships. The underlying argument is that leader's primary responsibility is to coordinate activities between different organisational groups. Building on strategic management process, social identity, and intergroup leadership theories, the aim of this study was to empirically test the influence of intergroup strategic consensus on organisational performance. Further, the study aimed to test the relationship between intergroup relational identity, intergroup effectiveness, and organisational performance.

Data was collected from a sample of multinational pharmaceutical companies in South Africa which resulted in a sample size of 114 respondents with a realised 50.4% response rate. The findings were that there was no statistically significant correlation between organisational identification and intergroup strategic consensus. However, intergroup strategic consensus was partially found to be related to firm performance. Other findings were that intergroup effectiveness directly impacts firm performance. Organisational identification was moderately and positively related to both intergroup relational identity and intergroup effectiveness. Intergroup relational identity was strongly associated with intergroup effectiveness.

Keywords: organisational identification, intergroup strategic consensus, intergroup leadership, intergroup relational identity

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 Philosophy in Corporate Strategy 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 conduct this research.

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CHAPTER 1 – INTRODUCTION TO THE RESEARCH PROBLEM

1.1 Introduction

This study sought to ascertain if intergroup strategic consensus when moderated by intergroup leadership that promoted an intergroup relational identity had a positive effect on organisational or firm performance. The focus was on organisations that operated with multiple interdependent groups.

This chapter provides details of the research problem, the research aims, the business and academic relevance thereof. The chapter also lays out the rest of the paper with a brief explanation of each section.

1.2 Background to the problem

Today's organisations are mostly made up of interdependent and disparate teams who are charged with executing against strategy in a coordinated and collaborative manner to realise the organisation's stated objectives (Gibson et al., 2019; Greer et al., 2017; Hogg et al., 2012; Porck et al., 2020). The need for horizontal collaboration has become even more critical in the new world order characterised by rapid innovation, increasing competition, internationalization, changes to customer demands and expectations (Casciaro et al., 2019; Kwan, 2019). The importance of coordination and collaboration across teams to achieve effective strategy execution underlines the fact that no team is insulated from the actions of other teams (Carter et al., 2020; Porck et al., 2020). Whilst the coordination/collaborative imperative is not a novel idea, organisations continue to face challenges in getting their interdependent teams to effectively collaborate to maximize value creation (Casciaro et al., 2019; Jin et al., 2019; Schaubroeck et al., 2016; Sull et al., 2015). Sull et al., (2015) found that only 9% of managers counted on other functions to actively cooperate with their functions during the strategy execution process.

Leading interdependent teams comes with unique challenges that are quite different from those prevalent in single team situations (Jin et al., 2019; Porck et al., 2020; Porck & Van Knippenberg, 2022). The majority of the challenges emanate from the social identities that define the different teams. These include divergent group priorities, intergroup conflict/competition, group superiority and identity threat which all lead to adoption of less cooperative attitudes (Carter et al., 2020; Kwan, 2019; Porck et al., 2020; Van Knippenberg & Van Schie, 2000). To further complicate the situation, the dominant functional structures in organisations invoke self-distinctiveness for teams and this tends

to promote in-group bias and silo mentality (Jin et al., 2019; Porck & Van Knippenberg, 2022).

The challenge for top management teams (TMT) who are responsible for strategy formulation and are ultimately accountable for overall firm results is how to get their different teams to effectively work together to deliver on the priorities (Greer et al., 2017). Incidentally, achieving intergroup coordination has long been identified as a key activity where there are interdependencies between teams, as it is a way to secure access to resources and information required for successful execution (Xie et al., 2022). Collaboration is a way of reimagining how work groups discharge their duties and manage cross team relations (Jin et al., 2019).

Three schools of thought provide an insight into how organisations can achieve desired performance outcomes from interdependent groups working together. The three areas are organisational identification, strategic consensus, and intergroup leadership.

Social identity theory depicts organisational identification as a situation where individual members of an organisation physically and emotionally identify themselves with an organisation (Ashforth et al., 2008; Conroy et al., 2017). It has been lauded for promoting behaviours that seek to produce positive organisational outcomes (Meleady & Crisp, 2017) and is said to enhance effectiveness in organisations (Ashforth et al., 2008). Porck et al. (2020) found in their study that strong organisational identification positively impacted intergroup strategic consensus. However, organisational identity is a superordinate identity (Gaertner et al., 1999; Kershaw et al., 2021b; Wenzel et al., 2007) which unfortunately has also been associated with an increase in intergroup conflict (Hogg et al., 2017; Rast et al., 2018) because it is perceived as de-emphasising group identities. Therefore, the state of organisational identity is of interest to leaders seeking to not only achieve intergroup strategic consensus but also effective intergroup collaborations (van der Stoep et al., 2020) which are central to strategy implementation and ultimately firm outcomes.

Strategy research has long acknowledged the positive effects of strategic consensus on firm performance as consensus is said to enhance coordination and cooperation (Kellermanns et al., 2011; Porck et al., 2020; Porck & Van Knippenberg, 2022). Strategic consensus is generally understood to refer to the shared comprehension by the different role players of the organisation's strategic priorities (Kellermanns et al., 2005). To date, most of the strategic consensus work has been within groups (González-Benito et al., 2012; Tarakci et al., 2014), however, there is growing interest to study strategic consensus in the context of interdependent groups as such settings present certain

nuances that are not present in within team context (Porck et al., 2020; Porck & Van Knippenberg, 2022). It is these nuances that require deeper understanding for both theory development and practice.

Achieving effective collaboration amongst groups has been found to be challenging (Casciaro et al., 2019; Jin et al., 2019; Schaubroeck et al., 2016; Sull et al., 2015). Leaders have the primary task of driving coordination, collaboration or cooperation between different groups (Rast et al., 2018). It has been argued that effective intergroup leadership is required to transcend organisational boundaries and drive value creating collaborations, whilst at the same time, recognising and preserving the salience of the different group identities (Hogg et al., 2012). This requires that leaders understand and appreciate the social identities prevalent in their organisations and ensure that they seek to strike a balance between effective cross team collaboration and team identity preservation.

Whilst organisational identification has been found to enhance organisational effectiveness (Ashforth et al., 2008), the subgroups nested within it hold different group identifications that tend to create tension between groups (Ambrose et al., 2018; Ashforth & Mael, 1989; Porck et al., 2020). Intergroup relational identity, which is group identity defined by the relationships with others is argued to be a more effective way to promote intergroup collaboration as it shies away from tampering with existing group identities (Hogg et al., 2012; Rast et al., 2018). It has also been suggested that in the complex world of today's organisations, cross team boundary coordination is no longer optional and nurturing relationships with other groups is paramount (Marrone, 2010). Therefore, understanding the existence and effect of an intergroup relational identity on collaboration in organisations is warranted.

The common theme across organisational identification, intergroup strategic consensus, intergroup leadership, and intergroup relational identity is collaboration amongst different organisational actors. Use of the word collaboration, which in simple terms means working together, dominates most business literature (e.g., Cross & Carboni, 2021; Gardner, 2017; Gino, 2019; Kiron, 2017; Kwan, 2019), whilst most academic literature talks to coordination and cooperation. These words have however tended to be used interchangeable with collaboration (Castañer & Oliveira, 2020; Jin et al., 2019). All of them are used to signify mechanisms for enabling effective ways of strategy implementation in multi-stakeholder group settings (Jin et al., 2019). Similar to prevailing usage, this study will continue to use the words interchangeably.

1.3 Business rationale for the research

Organisations that promote collaborative work amongst their teams tend to gain competitive advantage as demonstrated by higher revenue growth rates, profitability and market shares (Cross & Carboni, 2021). However most organisations are still struggling to achieve effective intergroup collaborations (Schaubroeck et al., 2016; D Sull et al., 2017). With over a decade working in a multinational company that is organised in functional but highly matrixed structures spread across geographies, this author has first-hand experience of how challenging it is to get all groups to work together without resorting to structural arrangements. Schaubroeck et al (2016) point out that it is not uncommon for multinational enterprises to struggle with achieving the right levels of collaboration to boost performance. Failure to align the different groups around common objectives, pursuit of common objectives in ways that maximise individual group and not collective outcomes, intergroup conflict, ingroup superiority and isolation of those perceived as weak are some of the challenges faced by organisations (Cross & Carboni, 2021; Kiron, 2017).

Various tools are applied by organisations to boost collaboration, for example, setting collaboration as a corporate value (Gino, 2019) and the redesign of business processes (Schaubroeck et al., 2016). However, all these efforts seem to be failing at achieving the right level of collaboration that drives sustained value creation. In fact, Gino (2019) argues that these tools are mostly cosmetic and urges an approach grounded on mental attitudes, for example, consideration of impact of one's actions on others and the organisation wide outcomes. Similarly, building of relationship skills to boost collaboration has been found to be weak across organisations (Mashek, 2022). The argument is, therefore, that to achieve collaboration, there needs to be a relationship between the different actors and actions taken by one group must always be in the context of actions of the other groups. Cross & Carboni (2021) argue that an inclusive and relationship based intergroup culture that focuses the different teams on the strategic priorities is one way of improving collaboration. It is the responsibility of leaders to recognise that in seeking to achieve intergroup collaborative working arrangements , group identity threats may be invoked and these need to be dealt with when looking for the right approach to intergroup leadership (Kwan, 2019).

From the aforementioned, it is deduced that collaboration is key to achieving desired firm outcomes using interdependent teams. To drive collaboration requires that all groups share a commonality of understanding of the strategic priorities which ensures that each team understand its role in the strategy execution. Secondly, leadership plays a key role

in creating conditions that do not invoke team identity threat and at the same time driving interteam mutually beneficial collaborations. It is therefore reasonable to conclude that there is a business need to understand the interplay of these factors on organisational effectiveness which reflects on and is measured by organisational performance.

1.4 Academic rationale for the research

It is said that organisations are a grouping of different but interdependent teams (Hogg et al., 2012) who need to exchange resources and information to deliver on their performance mandates (Xie et al., 2022). Teams are social entities with unique identities that give them meaning (Ashforth et al., 2008) and these identities result in different challenges not experienced in single team settings (Carter et al., 2020; Porck et al., 2020). However, despite this recognition, studies in intergroup dynamics have largely been limited (Carter et al., 2020; Tarakci et al., 2014). As an example, research on strategic consensus has predominantly been undertaken amongst top management teams (“TMTs”) based on them being custodians of strategy (González-Benito et al., 2012; Kellermanns et al., 2011). However, in reality strategy execution cuts across all levels (and different teams) of organisations (Greer et al., 2017), and is driven mostly by middle managers (Ateş et al., 2020; Porck & Van Knippenberg, 2022). Similarly, leadership theory on managing intergroup conflict remains under explored and yet, reducing the destructive conflict is a prerequisite for effective collaboration and coordination efforts (Carter et al., 2020).

This study is influenced by calls from Porck et al. (2020), to extend their finding that strong organisational identification was positive for intergroup strategic consensus by assessing impact of same on firm performance. It is also a response to a call from Carter et al., (2020) that leaders would benefit from enacting conditions that enable collaboration in inter-team contexts. Similarly, Rast et al. (2018) have advocated for the study of intergroup leadership as defined by its ability to foster collaboration and coordination across the different groups. They specifically advocate for the promotion of an intergroup relational identity as it balances delivery on shared objectives and the salience of group identities.

1.5 Research problem

Whilst it is acknowledged that organisations are now characterised by interdependent groups, each expected to work collaboratively to achieve common organisational goals (Desmidt & George, 2016; Greer et al., 2017), the broadly researched connection between strategic consensus and performance (González-Benito et al., 2012;

Kellermanns et al., 2011) has focused on within group consensus and mostly on top management teams (Tarakci et al., 2014).

Porck et al., (2020) found that strong organisational identification enhanced intergroup strategic consensus. It is a reasonable assumption to argue that, similar to previous research focused on within team settings, a positive relationship exists between intergroup strategic consensus and firm performance (Porck & Van Knippenberg, 2022). This is because the presumed benefits of consensus remain the same, with the only difference being the how to realise them. Porck et al. (2020) did not go further to assess the impact of intergroup strategic consensus on firm performance which is the gap that this study seeks to fill.

Further, past research on the strategic consensus and performance have not been conclusive, yielding different results, (Homburg et al., 1999; Kellermanns et al., 2011; Ramos-Garza, 2009; Walter et al., 2013). It has been suggested that this inconsistency could be a result of the fact that the relationship is not direct but is subject to other interacting influences, i.e., mediators and moderators and that the choice of these is important for the understanding of the relationship (Bragaw & Misangyi, 2019; González-Benito et al., 2012).

Leadership has been aptly defined as an exercise of influence designed to get the different actors in an organisation to align on strategic priorities and to work together constructively in the furtherance of organisation level objectives (Ateş et al., 2020; Behrendt et al., 2017; Carter et al., 2020; Yukl, 2012). It is argued that effective intergroup leadership that emphasises intergroup relational identity enhances collaboration and consequently advances goal attainment (Hogg et al., 2012; Rast et al., 2020). Intergroup relational identity is defined as self-definition in terms of the collaborative relations with non-group members i.e., outgroups (Rast et al., 2020). Similar to strategic consensus studies, leadership studies have also largely been limited to within teams (Carter et al., 2020; Pittinsky & Simon, 2007). Carter et al. (2020) suggests that the challenges to the study of interdependent groups is because of the complexity brought about by the fact that these teams are typically constituent parts of other interdependent systems, for example, the organisation itself. In their paper titled "Intergroup relational identity: Development and validation of scale and construct", Rast et al. (2020) pointed out that the absence of a measurement tool for intergroup relational identity has meant no empirical tests have been done which has obscured the potential value of this phenomena.

This study sees an opportunity to empirically test the interplay between organisational identity, intergroup strategic consensus, intergroup leadership emphasising intergroup relational identity and how this impacts firm performance. This study will argue that intergroup relational identity is an enabler for the realisation of the collaborative benefits of organisational identification and intergroup strategic consensus on performance.

1.6 Research questions

The research questions that arise from the research problem explained in preceding paragraphs are:

RQ1: Does organisational identification enhance intergroup strategic consensus?

RQ2: Does organisational identification improve firm performance?

RQ3: Does intergroup strategic consensus improve firm performance?

RQ4: Does intergroup leadership affect the relationship of intergroup strategic consensus and firm performance or that of organisational identification and firm performance?

RQ5: Does intergroup effectiveness affect firm performance?

1.7 Research aims

The purpose of this study was to contribute to the knowledge base on intergroup dynamics as far as they relate to strategy implementation. Specifically, it aimed to add to existing social identity, intergroup leadership as well as strategy process theory by empirically evaluating the relationship of organisational identification, intergroup strategic consensus, intergroup leadership, and firm performance. These aims were directly derived from the research gaps identified in existing literature as elaborated on in section 1.5 above.

1.8 Implications for practice and academic

Achieving cross team collaboration requires a combination of intergroup strategic consensus to drive a mutual understanding of organisational priorities. It also requires effective intergroup leadership that fosters an environment that is conducive for teams to effectively work together and avoid destructive intergroup behaviours. Further, the practitioners have alluded to the challenges faced by organisations in fostering constructive teamwork across distinct and often conflictual and competitive groups. There was therefore an apparent gap in understanding the dynamics involved in fostering collaboration. This paper sought to add a voice to the understanding of the interplay of intergroup strategic consensus and intergroup leadership on firm outcomes. This study contributed to practice by highlighting the potential of promoting a relationship grounded

form of identification that builds on existing group identities as a means of building sustainable intergroup collaboration.

From a theory perspective, this study contributed to intergroup leadership theory, behavioural coordination theory and intergroup relations theory. It achieved this by empirically testing the interplay between the behavioural mechanism of coordination viz., organisational identification and intergroup relational identity, and cognitive means of coordination through intergroup strategic consensus. To the best knowledge of this researcher, there were no organisational level studies that have considered investigating the moderating effects of intergroup leadership on the relationship between consensus or organisational identification and firm outcomes. Finally, this study also contributed to further validation of the intergroup relational identity construct and scale which is yet to be broadly validated in practice, with only one known usage in Kershaw et al., (2021a) which however used university undergraduate students.

1.9 Definitions of keywords

Below definitions of keywords have been used throughout the study:

Organisational identification is a type of social identification wherein individual members of an organisation physically and emotionally identify themselves with the organisation, i.e., there is a merging of self and organisation (Ashforth et al., 2008; Conroy et al., 2017).

Strategic consensus is the degree of mutual comprehension of the strategic priorities by managers at the different organisational layers (Steven W Floyd & Wooldridge, 1992; González-Benito et al., 2012; Kellermanns et al., 2005; Tarakci et al., 2014). **Intergroup strategic consensus** is the extent to which interdependent teams, across all organisational levels, hold a shared interpretation of the firm's strategic priorities (Porck et al., 2020)

Intergroup leadership is leadership aimed at bringing together two or more officially recognised organisational groups aimed at achieving collective objectives, which achievement is dependent on the participation of these groups (Hogg et al., 2012)

Intergroup relational identity is self-identity within a group explained by the group's association with outgroups for the purpose of achieving common goals (Hogg et al., 2012)

CHAPTER 2 – THEORY AND LITERATURE REVIEW

2.1 Introduction

To support the study aims of understanding the relationship between intergroup strategic consensus and performance as well as the moderating effects of intergroup leadership thereon, this chapter covers the literature in support of these constructs. Each section of the literature ends with a hypothesis. The foundational assumption of this study was that organisational identification supports intergroup strategic consensus (Porck et al., 2020). This chapter will start off with a review of organisational identification theory, link that to intergroup strategic consensus, and finally look at intergroup leadership promoting intergroup relational identity.

2.2 Organisational identification

Social identity theory posits that people have a tendency to seek association with and a sense of belonging to a group or groups (ingroup) which give them identity distinctiveness, security and enhanced self-esteem (Ambrose et al., 2018; Ashforth & Mael, 1989; Conroy et al., 2017). The implication of this is that individuals define themselves in relation to a particular group as a result of the shared attributes that give them distinctiveness and determine their group boundaries (Liang et al., 2021). Organisational and group identification are the most common forms of identification and categorisation in organisations (Ambrose et al., 2018; Porck et al., 2020). This is because the majority of today's organisations are set up in functional groups (Liang et al., 2021).

Organisational identification is a type of social identification wherein individual members of an organisation physically and emotionally identify themselves with the organisation (Ashforth et al., 2008; Conroy et al., 2017). Physical connection would typically be demonstrated by individuals explaining their factual association with an organisation using terms like I work for XYZ (Meleady & Crisp, 2017). Emotional connectedness relates to those unobservable factors typically related to self-esteem, sense of security or uncertainty reduction and an inclination to experience organisational outcomes as own outcomes (Mael & Ashforth, 1992; Meleady & Crisp, 2017). Social identification is primarily aimed at fulfilling individual's emotional/self-esteem needs (Ashforth et al., 2008). The result is that individuals are then willing to go the extra mile to advance the organisation's interest as a way of protecting the fulfilment of their needs (Ashforth et al., 2008; Greco et al., 2021; Mael & Ashforth, 1992). The individual defines him/herself in terms of characteristics they perceive are representative of their organisation.

Organisational identification “fundamentally transforms the relationship between employees and their work organizations, because highly identified employees integrate their organizational memberships with their sense of who they are.” (Blader et al., 2017, p.19).

Organisational identification has been linked with workplace behaviour, for example, employee engagement, job satisfaction, improved performance, loyalty, organisational citizenship behaviour and other feelings (Blader et al., 2017; Eun Suk et al., 2015; Meleady & Crisp, 2017; Riketta, 2005). Workplace behaviour impacts performance and therefore organisational identification would arguably influence performance outcomes. The higher the perceived integration of individual’s self-definition and the organisation, the higher the tendency of individuals to act in ways that are beneficial to both themselves and the organisation (Collins et al., 2019; Conroy et al., 2017; Meleady & Crisp, 2017). It has been argued that individuals that identify highly with their organisations are primarily motivated to act in positive ways, are committed to organisational goals as a way of safeguarding their belongingness and self-esteem (Blader et al., 2017; Greco et al., 2021; Leicht-Deobald et al., 2021). Other scholars have suggested that where strong organisational identification prevails there is less staff turnover or high retention rates, elevated levels of job fulfilment, high motivation and performance, increased willingness of employees to take on extra roles and improved loyalty (Ashforth et al., 2008; Blader et al., 2017; Collins et al., 2019; Conroy et al., 2017; Eun Suk et al., 2015; Greco et al., 2021). Individual employees that have a deep connection to their organisations tend to live out their identity through high performance and collaborative attitude and behaviour for the benefit of the organisation (Leicht-Deobald et al., 2021). This is partly because of the normative pressures at play pushing organisational members to perform at levels that guarantee them continued membership (Leicht-Deobald et al., 2021). All these attributes of high organisation identification suggests that it enables an environment conducive to collaboration and therefore effective strategy implementation. Effective strategy implementation refers to the extent to which the implemented strategies are congruous to the organisations’ stated strategic intentions (Tawse & Tabesh, 2021).

In terms of intergroup dynamics, strong identification with the organisation is said to enhance intergroup collaboration as it steers groups towards a superordinate identity that promotes achievement of collective goals (Blader et al., 2017; Gaertner et al., 1999; Leicht-Deobald et al., 2021; Porck et al., 2020; Wenzel et al., 2007). This is because organisational identification represents the merging of organisation attributes with those of the individual (Blader et al., 2017). Members of the organisation tend to cooperate with other groups for organisational success as a means of fulfilling self-image desires

and sustaining feelings of belongingness (Meleady & Crisp, 2017). In addition identification with the organisation facilitates focus on execution against the stated priority goals (Porck et al., 2020). This invariably require some level of common understanding of priorities and cooperation between the different groups This, in essence, is the aim of strategic consensus, that is, to bind groups towards common goals through ensuring that each group/player holds a common interpretation of the strategic priorities and is implementing these in a coordinated manner (Porck et al., 2020).

Organisational identification is a superordinate or collective identity, that is, an all-encompassing identity that is superior to other social identities e.g., of subgroups, that exist within an organisation (Gaertner et al., 1999; Kershaw et al., 2021a; Rast et al., 2018; Wenzel et al., 2007). These sub identities, called group identities provide a distinct sense of belongingness to their members. Group identification arise from a process of comparison with other groups and the holding of positive attitudes towards own group (Ambrose et al., 2018; Conroy et al., 2017). As a result of comparisons with other groups, group identification is associated with destructive competition for resources and power, enhanced mistrust, ingroup focus to the detriment of higher order objectives (Desmidt & George, 2016; Gibson et al., 2019; Rast et al., 2018; Van Bunderen et al., 2018). Porck et al., (2020) found that group identification was detrimental to intergroup strategic consensus and its effects could not be mitigated by strong organisational identification.

An example of a superordinate identity is the reference to South Africa as the Rainbow Nation, a phrase popularised by Archbishop Desmond Tutu. Its key message is that citizens of South Africa are conjoined by their racial, ethnic, and cultural diversity. The aim of the idea was to promote tolerance amongst the groups which facilitates productive collaborations. This was in contrast to social identity based on race promoted during the apartheid era South Africa which polarised race relations. However, promoting a superordinate identity is not without risks or weaknesses amongst which are blind loyalty to the organisation, for example, discouragement of beneficial dissent and enablement of other destructive practices e.g., unethical conduct (Conroy et al., 2017). In intergroup situations the major risk is that it may invoke group identity threat (Hogg et al., 2017). Identity threat occurs when there is a perception of erosion of group distinctiveness and results in groups adopting less cooperative behaviours to protect their valuable distinctiveness from the other groups (Hogg et al., 2017; Wenzel et al., 2007). Using the Rainbow Nation illustration aforementioned, subgroup tensions are quite common and are typically based on race or country of origin as each group perceives danger to its

identity. It is for this reason that the salience of group identities must of necessity be built into any efforts to drive across groups collaborations.

Porck et al., (2020) found that strong organisational identification does not diminish the negative behavioural impacts of group identification on collaboration. However, it has been found that organisational identification enhances between team collaboration in knowledge based team settings (Gumusluoglu et al., 2017) In effect, both forms of identification have a place in intergroup behaviour, however, this study will only focus on organisational identification.

The above raise a question of interest regarding the relationship between organisational identification, intergroup strategic consensus, and firm performance. Porck et al., (2020) found that strong organisational identification has a positive impact on intergroup strategic consensus which in turn creates favourable conditions for effective coordination in the execution of strategy. Porck et al., (2020) called for researchers to investigate if this relationship translates to improved firm performance. The benefits of high organisational identification alluded to above also suggest that organisational identification as an independent construct enhances organisational performance. To answer these questions, this study proceeds on the basis of the following hypotheses

H1: Strong organisational identification is positively related to intergroup strategic consensus

H2: Strong organisational identification is positively associated with organisational performance

The next section looks at the existing literature on intergroup strategic consensus

2.3 Intergroup strategic consensus

Top management team ("TMT") leaders are responsible for strategy formulation, but execution is at all levels (Greer et al., 2017; Lee & Puranam, 2016). The TMT is responsible for cascading the strategy to the rest of the organisation (Antonakis & Hooijberg, 2007; Ateş et al., 2020) and creating conditions that support the collaborative execution of strategic priorities (Carter et al., 2020). Strategic priorities denote the weighted strategic choices or themes that organisations agree to execute against and they serve as the strategic compass for all players to follow (Kellermanns et al., 2011; D Sull et al., 2017). It is argued that to foster collaboration between interdependent but disparate teams, there must be some commonality of perception of the organisation's strategic priorities, that is, strategic consensus (Kellermanns et al., 2011).

Strategic consensus is defined as the degree of mutual comprehension of the strategic priorities by managers at the different organisational layers (Steven W Floyd & Wooldridge, 1992; González-Benito et al., 2012; Kellermanns et al., 2005; Tarakci et al., 2014). This definition of strategic consensus acknowledges that the understanding of strategic priorities is critical at all managerial levels as managers are charged with strategy execution. Strategic consensus has also been defined as “the level of agreement among senior managers concerning the emphasis placed on a specific type of strategy” (Homburg et al., 1999, p340). According to this definition only senior managers, as the custodians of strategy formulation need to agree on the strategic choices which includes both what (the goal) and how (the means) of the strategy. The implication of this is that at the operational level, focus is on execution and other coordinating mechanisms are available to align the teams. There is no debate that senior managers or top management teams, as a collective or as represented by the Chief Executive Officer, carry the final decision making authority in organisations (Samba et al., 2018). However, this study argues that narrowing the locus of strategic consensus to senior managers ignores the role of middle managers. Middle managers provide the critical link between the formulated strategy and its execution (Ateş et al., 2020; Friesl et al., 2021). Also middle managers perform critical across group activities which all contribute to creating favourable conditions for collaboration (Carter et al., 2020; Porck & Van Knippenberg, 2022), More importantly managers at the lower levels bridge the distance between top management teams and lower levels of the organisation (Desmidt & George, 2016; Kim et al., 2021). This is particularly important as organisational structures are becoming more complex e.g., increased clustering of operations in different geographies, matrixed structures and introduction of hybrid and virtual work, which means leadership cannot be assumed to be physically close to operations.

Strategic consensus has also been defined as the acceptance of the strategic choice by all the organisational actors possessing decision making rights, typically senior leaders and select non-top management team players (Bragaw & Misangyi, 2019). Whilst this definition acknowledges that strategic consensus must happen at all relevant organisational levels (by people with decision making power), the authors specifically argue that as the actors need to only accept the strategic choice, it follows that shared understanding is not the intent of consensus (Bragaw & Misangyi, 2019). This paper argues that to be able to agree to something requires some level of commonality of understanding of the subject matter (Walter et al., 2013), otherwise the essence of the agreement risks being lost in translation. Further and as argued by Ates et al., (2020) strategic consensus fosters commitment to the strategy as it enhances the attractiveness

and achievability of the strategic priorities. This commitment happens only when everyone reaches mutual understanding of the priorities.

Therefore, this study adopts the definition of strategic consensus as the shared comprehension of the strategic priorities by all managers at different organisational levels (Steven W Floyd & Wooldridge, 1992; González-Benito et al., 2012; Kellermanns et al., 2005; Tarakci et al., 2014). In the absence of such understanding, individual teams are more likely to pursue activities based on their own perceptions of the priorities. These may be at variance to the firm wide strategic priorities and risk jeopardising any efforts for effective strategic priorities execution (Friesl et al., 2021; Kellermanns et al., 2011).

Strategy process literature has long established the importance of strategic consensus to effective strategy implementation as it supports a shared meaning of the organisation's priorities creating buy-in from all the strategy execution players (Ateş et al., 2020; Kellermanns et al., 2011; Porck & Van Knippenberg, 2022). Strategic consensus is credited with enhancing coordination and cooperation, both required to drive positive firm outcomes (Steven W; Floyd & Wooldridge, 1992; Kellermanns et al., 2011; Porck et al., 2020). This is because the process of reaching consensus requires that the actors engage with and fully understand the rationale for the strategic choices (Kellermanns et al., 2011). Consequently, strategic consensus enable each team to pursue execution in a manner that is both aligned to the spirit of the priority and what other players are doing (Porck et al., 2020; Walter et al., 2013). Strategic consensus is expected to help reduce the prevalence of subunit bias, informal influences on priorities, disruptive competition for resources and lack of engagement during strategy execution (Ateş et al., 2020; Kellermanns et al., 2011; Porck et al., 2020). Therefore, strategic consensus seeks to mitigate against social identity issues (subunit bias, disruptive competition etc). Porck et al., (2020) argue that the dominant social identification posture in an organisation is a key determinant of the direction and strength of strategic consensus. In their study, they found that strong identification with the organisation as opposed to group had a positive impact thereon.

In an adaptation of the strategic consensus definition outlined above, Porck et al., (2020) define intergroup strategic consensus as the extent to which interdependent teams across all organisational levels hold a shared interpretation of the firm's strategic priorities. This definition supports the notion that no team is independent of other teams with whom they must interact, exchange resources and knowledge to deliver on their mandates (Carter et al., 2020; Marrone, 2010; Xie et al., 2022). It is therefore, suggested that teams must agree on the strategy and its meaning (Porck et al., 2020). This study

suggests that the reference to teams and not specifically managers as per other definitions, does not suggest a diminished role of managers. Managers remain central to strategy execution which is informed by their understanding of the strategic priorities. Managers belong in and represent teams. They are responsible for communicating and explaining the strategy to their teams and have the power to influence its interpretation (Ateş et al., 2020). Managers/leaders are responsible for coordinating work and to secure collaboration across the different organisational groups in order to deliver on the strategic priorities (Rast et al., 2018). Porck & Van Knippenberg (2022) argue that strategic consensus is a critical cognitive means of achieving effective collaboration only in intergroup situations where there is no commonality of division membership. They further argue that in non-intergroup situations, the formal organisation structure suffices to facilitate sharing of knowledge and achieve mutual understanding of their division objectives. It has been suggested that the existence of a shared appreciation of the overarching organisational priorities facilitates productive communication and collaboration and mitigates intergroup biases characteristic of organisational sub groups (Kellermanns et al., 2011; Porck & Van Knippenberg, 2022).

Previous researches of strategic consensus have largely been limited to top management teams as the focal point and/or within-team effects (González-Benito et al., 2012; Tarakci et al., 2014) and less so on between-group consensus (Desmidt & George, 2016; Porck et al., 2020). The dearth of studies on intergroup consensus overlooks the fact that modern organisations are made up of different but ever increasingly interdependent groups (Greer et al., 2017; Porck & Van Knippenberg, 2022). Also coordinating these different functions to deliver value remains a significant challenge for business (Gibson et al., 2019; Jin et al., 2019; Kwan, 2019; Sull et al., 2015). The coordination challenge is even more pronounced in intergroup settings where there is no commonality of group membership (Hogg et al., 2012; Porck & Van Knippenberg, 2022), for example, where every function has a different and external reporting line. Scholars have suggested that intergroup strategic consensus ought to have the same positive effects on intergroup settings as experienced in intra-team settings (Porck & Van Knippenberg, 2022). Strategic consensus clarifies the role of each player in the organisational value co-creation process in addition to mitigating against in-group biases and behaviours (Porck & Van Knippenberg, 2022). Porck et al., (2020) point out that there have been no studies that sought to empirically test the assumption of positive relationship between intergroup strategic consensus and organisational performance. This then raises the question, is intergroup strategic consensus positive for firm performance.

In order to answer the above question, it has been noted that previous studies on the strategic consensus – firm performance relationship have yielded mixed results ranging from positive to no relationship (González-Benito et al., 2012; Kellermanns et al., 2005). This has partly been attributed to the linearity assumption which either overlooks or minimises the effects of intervening or interacting elements (Bragaw & Misangyi, 2019; González-Benito et al., 2012; Kellermanns et al., 2005). These elements take the form of either a mediator or a moderator. A mediator variable explains the relationship between an independent variable and an outcome variable, whereas a moderator affects the direction and intensity of the relationship (Aguinis et al., 2017; Baron & Kenny, 1986). This study will argue that whilst having a shared understanding of the priorities amongst the often-competing groups is a solid foundation for collaboration effective intergroup coordination and collaboration is too complex to be left to consensus alone. Moreover, it has been pointed out that intergroups impose dynamics that are not seen with interteams (Carter et al., 2020; Porck et al., 2020; Tarakci et al., 2014; Xie et al., 2022). These dynamics invariably emanate from and are driven by the social identities and categorisation that teams take on (Ashforth et al., 2008). The traditional functional structures in organisations (Jin et al., 2019) tend to promote the salience of group identification and hence potentially work against seamless collaboration. As argued by Porck & Van Knippenberg (2022) the interaction between formal organisational structures, leader actions and shared perceptions work to enhance intergroup coordination effort towards organisation goal accomplishment. After all, leadership is responsible for creating and driving the enabling environments that foster intergroup collaboration (Carter et al., 2020; Hogg et al., 2012). Therefore, this study argues that even after achieving intergroup strategic consensus, leadership and its actions is required to operationalise the consensus through effective execution.

As a result of the above observations, this study proceeds on the basis that intergroup strategic consensus has a positive impact on organisational performance. However, and considering the point raised about not overlooking interacting factors as well as required leader actions, it argues that the relationship is moderated by intergroup leadership.

The resultant hypotheses are,

H3: Intergroup strategic consensus is positively related to firm performance.

H4: Intergroup leadership moderates the intergroup strategic consensus - firm performance relationship.

Intergroup leadership as a moderator of intergroup strategic consensus and firm performance is discussed in the next section.

2.4 Intergroup leadership as a moderator

Modern organisations are made up of different but ever increasingly interdependent groups (Greer et al., 2017; Marrone, 2010; Murase et al., 2014). This means that the true success of organisations is measured by the effectiveness of collaborative efforts of the disparate groups to deliver on firm wide outcomes (Porck & Van Knippenberg, 2022; Xie et al., 2022). Organisations also tend to be structured around specific disciplines or functional lines (Jin et al., 2019) which create subgroups or teams embedded within the superordinate group or organisation (Kershaw et al., 2021a). These subgroups are not insular from each other. They need to coordinate activities, acquire resources, share and receive information in the pursuit of their objectives (Carter et al., 2020; Xie et al., 2022). Leadership is required to align all these different teams around the shared objectives whilst at the same time recognising the existence of groups as distinct social entities.

Groups are social entities characterised by distinct social identities and categorisations (Mael & Ashforth, 1992). They are founded on comparison with other groups considered outgroups (Ambrose et al., 2018; Conroy et al., 2017). They manifest their identity through competition, pursuit of subunit objectives ahead of organisational objectives, unwillingness to cooperate with others and conflict, all factors that are not conducive to collaboration/cooperation (Hogg et al., 2012; Murase et al., 2014; van der Stoep et al., 2020).

As alluded to in earlier sections, collaboration between interdependent groups in organisations remains a challenge (Carter et al., 2020; Casciaro et al., 2019; Rast et al., 2020; Sull et al., 2015). To underline this challenge, Casciaro et al., (2019) make the following observation “though most executives recognize the importance of breaking down silos to help people collaborate across boundaries, they struggle to make it happen. That’s understandable: It is devilishly difficult,” (p. 2).

The presence of groups in organisations calls for the presence of effective intergroup leadership to coordinate activities (Liang et al., 2021; Pittinsky & Simon, 2007; Rast et al., 2018) which is fundamental to organisational performance. It is the role of leaders to create conditions that are conducive for teams to work together (Carter et al., 2020; Salem et al., 2019). Leadership theory has long extolled the role of leadership in driving coordination among different groups, however, the focus of most of the work has largely been in the context of within groups characterised by shared group affiliation(s) (Carter et al., 2020; Hogg et al., 2012; Murase et al., 2014; Rast et al., 2018). As argued by Porck and van Knippenberg (2022), formal hierarchical structures of leadership suffice to drive coordination in intrateam settings, but this is not the case with interteams. There

is therefore still a dearth of studies on leadership aimed at leading in intergroup situations (Porck & Van Knippenberg, 2022; Rast et al., 2018).

Firm outcomes are a function of how well the disparate groups work together. The extent of their collaboration is influenced by the sensitivities of the different groups to their social identifications and categorisations. A question requiring enquiry is how organisations can effectively create social connectedness between the heterogeneous groups to achieve effective coordination and collaboration whilst at the same time being sensitive to the prevailing group identities.

Hogg et al., (2012) suggest that intergroup leadership, as distinct from leadership within group, is required to facilitate effective intergroup collaboration and coordination. They argue that intergroup leadership is required to shift group focus towards collective goal achievement whilst at the same time being alive to group idiosyncrasies. Intergroup leadership is simply defined as leadership aimed at advancing symbiotic intergroup relations (Pittinsky & Simon, 2007). Hogg et al., (2012) define intergroup leadership as leadership aimed at bringing together two or more officially recognised organisational groups to execute on collective objectives, where execution effectiveness is dependent on the participation of these groups. This definition implicitly recognises that leading across groups is a social identity phenomena and is a delicate balancing act between driving collaborative action and avoiding intergroup conflict (Hogg et al., 2012; Rast et al., 2018). Intergroup leadership must therefore confront the reality of existing social identities and categorisations if they are to manage intergroup conflict and avoid the devaluation and or subsumption of identities (Hogg et al., 2012; Kershaw et al., 2021b; Rast et al., 2018).

The majority of leaders in organisations have links to one group or other. They exert their influence on the group(s) to the extent that they are perceived as representing the ideals of the said group (Liang et al., 2021; Pittinsky & Simon, 2007). Through their formal hierarchical positions, their behaviour and pronouncements, they wield the power to mould their groups' identity in ways that can promote collaborative relations with other groups (van der Stoep et al., 2020). It has been highlighted that leaders who identify strongly with or are perceived to be representative of their home groups (Steffens et al., 2021) tend to be successful at promoting interteam collaboration and group goal attainment (Liang et al., 2021). Such leaders are referred to as group prototypical (Steffens et al., 2021; Van Knippenberg, 2011). However, the success of such leaders invariably creates intra/inter group compromises typically in favour of own group to the

detriment of outgroups which diminish efforts to collaborate (Carter et al., 2020; Liang et al., 2021; Van Bunderen et al., 2018).

It is for this reason, amongst others, that effective intergroup leadership is expected to “enable seamless coordination across distinct teams by identifying and capitalizing upon mechanisms that encourage teams to overcome naturally occurring divides” (Murase et al., 2014, p.973). It is the effectiveness of the selected leadership practices that determine the extent and quality of the collaboration (Hogg et al., 2012; Salem et al., 2019). It is therefore, the role of leaders to find the right balance between allowing for group dividing line impermeability to preserve group identity and permeability to drive collaboration (Carter et al., 2020; Hogg et al., 2017; Richter et al., 2006).

Guided by the common-in-group identity model, a **collective identity** has been advanced as one way of reducing intergroup bias (Gaertner et al., 1999). The collective identity is a form of social identification and categorisation which seeks to change subgroup members psychological characterisation of their belonging away from distinct teams to an all-inclusive and higher order organisational level identification (Gaertner et al., 1999; Hogg et al., 2012; Kershaw et al., 2021b; Rast et al., 2018; Wenzel et al., 2007). Gaertner et al.,(1999) and other earlier studies found that a collective identity was positively related to the reduction of intergroup bias (Hogg et al., 2012).

Whilst the promotion of a collective identity does not imply the absence of other salient identities, the subgroups that make up the collective are sensitive to any attempts to subsume or diminish their identity in favour of a collective identity (Kershaw et al., 2021a). This makes the promotion of a collective identity challenging. The collective identity assumes group members homogeneity (Kershaw et al., 2021b) or at least that groups can find some similarities with other groups represented in the superordinate group (Pittinsky & Simon, 2007). Furthermore, in terms of the social identity theory, members of groups derive their sense of distinctiveness and identity through a process of comparison to other groups (Ashforth et al., 2008; Rast et al., 2018). Therefore, its assumption of homogeneity amongst groups violates the tenets of identification and pushes strong identification groups to double down on protective behaviours by adopting less cooperative attitudes towards others (Dovidio et al., 2007; Hogg et al., 2017; Rast et al., 2018; Wenzel et al., 2007). In these circumstances, which are characterised by conflict, whether of a mild form or highly toxic, promoting a collective identity is futile (Kershaw et al., 2021a). Identity threat is said to occur when group boundaries are penetrable by others (Shi et al., 2017). This would be the case if highly identifying groups perceive loss or dilution of their identity distinctiveness when other groups which are

viewed as inferior suddenly graduate to this equalising collective identity (Shi et al., 2017) In this case the strong group identifiers take on defensive positions to the detriment of collaboration.

Also, leaders are generally perceived to be archetypical representations of their home group identities (Steffens et al., 2021). Their attempts to promote a superordinate identity risks alienating their ingroups who may perceive them as no longer representing the group (Rast et al., 2018). At the same time such leaders face resistance from outgroups who see them as not their representative but a representative of the other group (Hogg et al., 2012). Leaders are therefore caught in a conundrum, unable to please either group, making any efforts to drive cooperation particularly challenging.

The collective identity posture is found not to be an effective way of driving seamless intergroup collaboration where a strong sense of connectedness, implying impenetrable group lines, and therefore heightened identity threat exist (Rast et al., 2018; Shi et al., 2017). It is hard, but not impossible, to get employees to embrace superordinate identities as they tend to be the antithesis of who they are, as defined by their social categorisation.

In response to the shortcomings of collective identity, **a dual identification** has been proposed as a better alternative (Dovidio et al., 2007; Richter et al., 2006).

The dual identity approach to intergroup leadership posits that intergroup relations will benefit from the co-existence of subgroup and superordinate group identities (Hogg et al., 2012; Rast et al., 2018). In this view, strong group identification, which strives to maintain distinctiveness and is sensitive to any identity threats (Rast et al., 2018), is assumed to be moderated by a strong superordinate (organisational) identification to achieve positive intergroup relations (Shi et al., 2017). However, Porck et al. (2020) found that organisational identification was insufficient to counter the negative effects of group identification. Groups perceive their identities as superior to their comparator groups (Conroy et al., 2017; Wenzel et al., 2007). It has been established that some individual groups within a superordinate identity may attempt to appropriate the superordinate identity as theirs through a process of ingroup projection (Wenzel et al., 2007). When this happens, the dominant group shapes the collective identity (van der Stoep et al., 2020) and adopts biases against those that it considers non archetypal of their identity which compromises any collaborative efforts. Dual identification also assumes some level of homogeneity amongst groups such that they each can easily traverse between the two identities (Rast et al., 2018), which is problematic as each membership invokes a sense of identity and the two identities are often misaligned.

Shi et al., (2017) found that advocating for dual identity will be positive for addressing issues of intergroup bias in situations where group members are not deeply embedded in their respective group identities. However, where there is strong group identification, then a drive for dual identity suffers the same pitfalls found with the promotion of an overarching identity (Kershaw et al., 2021b). In reality, there is always going to be dominant groups in organisations and therefore managing group conflict and bias remains an issue for leadership under this paradigm. Group conflict and ingroup bias are an unpleasant fact of organisations and therefore the question that remains to be answered is whether there is an alternative identity that creates intergroup connectedness without clashing with existing group identities. To address this question and address the gap of both collective and dual identity, Hogg et al. 2012, proposed a new solution in the form of **intergroup relational identity**.

Hogg et al (2012b) define intergroup relational identity as self-identity within a group explained by the group's association with outgroups. In intergroup relational identity, self-identity is founded on collaborative connection with other groups for the purposes of a collective goal whilst treating individual group identities as sacrosanct (Hogg et al., 2012; Rast et al., 2018). Therefore, intergroup relational identity lives alongside and within the other group identities. The focus of the leaders is on the value messaging around a mutually beneficial collaborative relationship in which every group has a meaningful and essential part to play (Kershaw et al., 2021a; van der Stoep et al., 2020). By fostering intergroup relational identity, leaders are able to focus the teams on the value of shared objectives whilst eschewing identity threat perceptions and mistrust in the leader which arises when leaders try to promote superordinate identities (Hogg et al., 2012). It has been argued that by preserving individual group idiosyncrasies and avoiding promotion of an overarching identity, the relational identity promotes better intergroup contact, access to and sharing of resources, and generally a positive outlook of the outgroups, all prerequisites for effective collaboration and cooperation (Salem et al., 2019; van der Stoep et al., 2020). Recently, Cross & Carboni (2021) suggested that leaders can overcome the intergroup collaboration challenge by promoting an inclusive and relationship based intergroup culture that focuses the different teams on the strategic priorities and not the execution tactics thereof.

Intergroup relational identity therefore seeks to advance intergroup collaboration without resorting to manipulating the existing social arrangements of groups within organisations. It emphasises the salience of each group's contribution to the collaborative arrangement and the intergroup dependencies for effective collaboration for the achievement of shared objectives (Kershaw et al., 2021a). Intergroup relational

identity can be said to be the embodiment of the spirit of *Ubuntu*. Ubuntu is a Southern Africa Nguni language word that speaks to the connectedness of humanity in all its assorted colours and that success of one is dependent on the success of the other – which is the essence of collaboration.

Intergroup leaders can promote this identity by demonstrating, through talk and actions, that they are the embodiment of intergroup collaboration and emphasising the value that such cooperative behaviour brings to the groups (Hogg et al., 2012). However, teams only achieve superior outcomes when their leaders are able to traverse team boundaries that give them access to information and other resources, whilst at the same time ensuring that adequate guardrails are in place to preserve team identity (Carter et al., 2020). In other words, intergroup leadership ought to look for an identity that seeks to avoid intergroup conflict or biases.

The key questions that arise are (1) does intergroup relational identity drive effective collaboration such that the coordination benefits of strategic consensus are enhanced to drive better organisational outcomes. (2) does intergroup leadership through intergroup relational identity and effectiveness moderate the impact of organisational identification on firm performance.

The idea of relationship-based identities is being explored in other areas affecting organisations, for example, Greer et al (2017) talk of organisations needing to build relational capital with other organisations that they are dependent on as part of their strategy implementation process. They define relational capital as a relationship between two or more organisations founded upon mutual benefits. This is similar to the notion of intergroup relational identity which is based on mutually beneficiary collaborations. Similarly, it has been posited that interfirm relational identity, which is a firm's identity defined with reference to its association with another /other firm(s) enhances interfirm leadership making it easier to collaborate (Hao et al., 2017).

This study will argue that defining identity in terms of a relationship as a way of managing social identities in organisations and boost collaboration is integral to the leadership of interdependent but distinct groups. Further the study will argue that if intergroup strategic consensus results in improved coordination between groups, then intergroup leadership, through intergroup relational identity intensifies that impact by changing group's identity perceptions from ingroup to relational resulting in sustainable or effective intergroup collaboration. Therefore, the study proceeds on the following hypothesis

H4. Intergroup leadership moderates the relationship between strategic consensus, organisational identification and firm performance

H4.1. Intergroup leadership through relational identity and intergroup effectiveness moderates intergroup strategic consensus-performance relationship

H4.2. Intergroup leadership through relational identity and intergroup effectiveness moderates the organisational identification - performance relationship

2.5 Organisational performance

Ultimately the success or sustainability of an organisation lies in its ability to convert its strategies into actual outcomes through a process of strategy implementation. Unsurprisingly, organisational performance has attracted a great deal of interest in the field of management (Richard et al., 2009; Shea et al., 2012). Despite this interest, in organisational performance, there remains no consensus on a precise definition thereof (Gupta & Wales, 2017; Richard et al., 2009). Organisational performance is challenging to define due to the multiplicity of its dimensions and stakeholder objectives (González-Benito et al., 2012; Richard et al., 2009; K. Singh & Misra, 2021), for example, profitability is a measure of success for a shareholder, but that same profit may invoke negative disposition from workers if they perceive that they are not getting an equitable share of it. As a result of this complex nature, most studies avoid defining the term (González-Benito et al., 2012; Richard et al., 2009), but instead reference the measurements as seen in (e.g., Jin et al., 2019; Leicht-Deobald et al., 2021; Mistry et al., 2022).

More broadly, organisational performance has been defined as a collection of financial and non-financial measures used to evaluate outcomes against pre-determined targets of performance (González-Benito et al., 2012; Richard et al., 2009; S. Singh et al., 2016). Reliance on financial and non-financial measures is itself not without complications as there is a multitude of these measures, with 207 identified in 213 papers covering a three year period (Richard et al., 2009). This makes it impossible to reach consensus on which specific measures are to be used as standard which would facilitate the development of theory (S. Singh et al., 2016). Part of the reason for this many indicators is the fact that performance measurement is contextual, i.e., must talk to the specific organisation circumstances e.g., its strategic priorities (Homburg et al., 1999; Richard et al., 2009).

Researchers apply either or both objective e.g., profits, shareholder returns, sales growth, market share and perceptual measures, e.g., customer satisfaction, of organisational performance (Richard et al., 2009; Shea et al., 2012). . Objective measurements rely on actual organisational data, and therefore can be verified from secondary data, for example, profitability can be read off a company's financial

statements when accessible (S. Singh et al., 2016). The relatively lower prevalence of objective measurements in literature has been attributed to lack of access to the relevant data, with the exception of listed companies whose records are public (Richard et al., 2009; S. Singh et al., 2016). Also, objective data is firm specific and is therefore subject to the procedures and practices selected in its preparation, recording and reporting making comparisons to other organisations unreliable (Richard et al., 2009; Santos & Brito, 2012). As an example, one organisation can choose to apply aggressive accounting practices relating to debt owed reserves whilst another may choose to be conservative. It has also been found that objective measures, whilst perceived to be more credible, are also susceptible to manipulation (Richard et al., 2009). The well reported Steinhoff case in South Africa is just one example of how what ought to be objective measures of performance can actually have zero credibility. As a result of these challenges to objective measures, subjective or perceptual measurements have become more prevalent (Shea et al., 2012).

Perceptual measures involve soliciting information from key informants regarding their perception of their organisations performance as measured against its competitors or some other benchmark (Richard et al., 2009; Shea et al., 2012). However, perceptual measures have been challenged on the basis that they are dependent on typically biased human perception and are also difficult to validate (Richard et al., 2009). In terms of social identity theory and through a process of categorisation people have a tendency to view themselves and the groups they identify with more favourably (Ashforth et al., 2008). In high organisational identification settings, the positive stance on the organisation may result in more positive responses. Also, respondents may suffer from social desirability bias, where their ratings are based not on their objective views but rather what they believe is expected of them (Podsakoff et al., 2003). Notwithstanding these shortcomings, perceptual scale measurements have been found to have enough rigor with results that are well correlated to objective measurement outcomes (Homburg et al., 1999; S. Singh et al., 2016).

2.6 Conclusion

In the previous sections above, it was suggested that strong organisational identification explains intergroup strategic consensus. Further, it has been argued that organisational identification impacts organisational outcomes. This is because organisational identification has been linked to workplace behaviour (Blader et al., 2017; Eun Suk et al., 2015; Meleady & Crisp, 2017; Riketta, 2005). Consequently, it was argued that members who highly identify themselves with the organisation exhibit positive work behaviours

which manifest through high performance and collaborative attitudes and behaviours for the benefit of the organisation (Leicht-Deobald et al., 2021). Also, individuals that identify highly with their organisations are primarily motivated to act in positive ways and are committed to organisational goals as a way of safeguarding their belongingness and self-esteem (Blader et al., 2017; Leicht-Deobald et al., 2021). Lastly, strong identification with the organisation is said to enhance intergroup collaboration as it steers groups towards a superordinate identity that promotes achievement of collective goals (Blader et al., 2017; Gaertner et al., 1999; Leicht-Deobald et al., 2021; Porck et al., 2020; Wenzel et al., 2007).

It has also been suggested that intergroup strategic consensus, a cognitive coordination mechanism (Porck & Van Knippenberg, 2022) enhances intergroup collaboration towards the achievement of agreed upon priorities. The argument is therefore that intergroup strategic consensus drives firm performance. Other scholars have suggested that the strategic consensus - performance relationship is not linear as was assumed in some of the previous studies potentially contributing to the mixed results. As a result, they have argued for consideration of other factors that may affect the level and quality of outcomes from the relationship. This study will argue that intergroup leadership is the missing link in the relationship.

Leaders are responsible for creating environments conducive to cross team collaboration to drive achievement of organisational strategic priorities. Consequently, it has been argued that intergroup leadership is able to achieve effective interteam collaboration if it can find and promote an identity that does not threaten group identities but focuses the groups on shared objectives. Intergroup relational identity, which is defined as group self-definition in terms of the collaborative relationships with other groups is the proposed solution.

To summarise, organisational identification motivates individuals to commit to and cooperate with others to achieve organisational goals. Intergroup strategic consensus drives interteam collaborations by focusing teams on the agreed upon priorities. Intergroup leadership enhances intergroup collaboration by promoting intergroup relational identity that focuses teams on the shared objectives, whilst at the same time avoiding intergroup conflict. Organisational performance is therefore dependent on the quality and strength of intergroup collaboration which is influenced by the strength and quality of organisational identification, intergroup strategic consensus, and intergroup leadership. Table 1 below gives a summary of the three factors and how they impact collaboration between teams for effective strategy execution.

Table 1: Summary of key themes that drive intergroup coordination/collaboration

	Organisational identification	Intergroup consensus	strategic leadership
Definition	Individual sense of oneness with the organisation	Commonly held perception of organisation's strategic priorities	Driving collaboration through advancement of relationship-based identity that focuses the groups on mutually beneficial firm objectives
How coordination is enhanced	Individual need for positive self-image, drives them to behave in ways that are beneficial to the success of the organisation and fulfil their needs	Shared understanding of priorities Minimising pursuit of subunit goals Communication, cooperation, and coordination enablement	Focus on the mutually beneficial goal and the contribution of each function to its achievement
References	(Ashforth et al., 2008; Collins et al., 2019; Conroy et al., 2017; Meleady & Crisp, 2017))	(Steven W; Floyd & Wooldridge, 1992; Porck et al., 2020; Tarakci et al., 2014)	(Hogg, Rast, et al., 2012; Pittinsky & Simon, 2007; Rast et al., 2018)

Adapted from (Porck & Van Knippenberg, 2022)

CHAPTER 3 – RESEARCH HYPOTHESIS

3.1 Introduction

This chapter introduces the hypotheses to test the constructs and their relationships covered in the previous chapter. The aim of this study was to establish how the interplay of organisational identification, intergroup strategic consensus and effective intergroup leadership affect firm performance.

3.2 Literature and Hypothesis

Modern organisations are made up of different but ever increasingly interdependent groups (Greer et al., 2017). The implication of this is that the success of organisations is measured not only in terms of individual groups achieve their group objectives, but by the effectiveness of collaborative efforts of the disparate groups to deliver on firm wide outcomes. (Porck & Van Knippenberg, 2022). This implication suggests the interplay of social identity, strategic consensus, and leadership.

Social identity theory explains the human propensity to associate with groups/groupings that give them meaning (Ashforth & Mael, 1989). Organisational identification is a type of social identity and categorisation that exists in organisations as a superordinate identity (Gaertner et al., 1999; Rast et al., 2018; Wenzel et al., 2007). Highly identifying employees are motivated to behave in ways that preserve and enhance their belongingness and the success of the organisation (Blader et al., 2017). Porck et al., (2020) concluded that strong organisational identification enhances intergroup strategic consensus which in turn leads to improved coordination of activity.

Intergroup strategic consensus, a cognitive coordination mechanism (Porck & Van Knippenberg, 2022) is defined as the extent to which all interdependent teams hold a shared interpretation of the firm's strategic priorities (Porck et al., 2020). Porck et al., (2020) found that strong organisational identification facilitated intergroup strategic consensus and improved coordination amongst different groups. However, achieving effective collaboration between interdependent groups remains a big challenge for business (Casciaro et al., 2019; Jin et al., 2019; Schaubroeck et al., 2016; Sull et al., 2015) notwithstanding consensus on priorities. This is because groups are borne out of the need for belonging and that need is fulfilled through a process of comparison with other groups that are considered outgroups (Ambrose et al., 2018; Conroy et al., 2017). Groups are associated with unproductive competition for resources and power, ingroup bias, silo mentality and other behaviours not conducive to working together effectively

(Desmidt & George, 2016; Gibson et al., 2019; Rast et al., 2018; Van Bunderen et al., 2018). Consequently, this study posits that organisational identity and intergroup strategic consensus are insufficient coordination mechanisms for sustained intergroup collaboration. The missing link is intergroup leadership.

Hogg et al (2012) have argued that effective intergroup leadership is required to facilitate effective intergroup collaboration. They further argued that intergroup leadership achieves effective intergroup collaboration by promoting intergroup relational identity. Intergroup relational identity is self-identity within a group that is defined by the group's collaborative associations with outgroups aimed at achieving collective goals (Hogg et al., 2012). Intergroup relational identity celebrates the idiosyncrasies of the groups as the reason for the need to collaborate for collective goals (Hogg et al., 2012). Intergroup relational identity therefore, creates an environment conducive for improved intergroup contact, access to and sharing of resources and a generally non-conflictual relationship between groups (Kershaw et al., 2021a; van der Stoep et al., 2020). This view is supported by Greer et al., (2017) who posited that the sharing of information facilitates joint problem solving, which further improved coordination.

The above and earlier literature covered in Chapter 2 gave rise to the following hypotheses:

H1: Strong organisational identification is positively related to intergroup strategic consensus

H2: Strong organisational identification is positively associated with organisational performance

H3: Intergroup strategic consensus is positively related to firm performance

H4. Intergroup leadership moderates intergroup strategic consensus-performance relationship and organisational identity – firm performance relationship

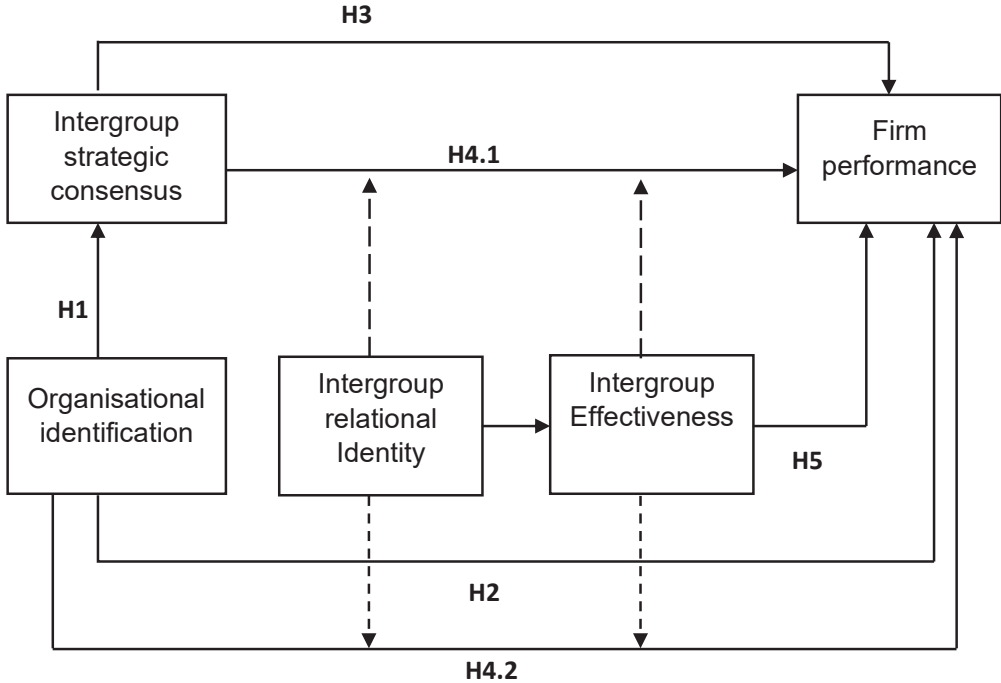
H4.1 Intergroup leadership through relational identity and intergroup effectiveness moderates the strategic consensus - performance relationship

H4.2. Intergroup leadership through relational identity and intergroup effectiveness moderates the organisational identification - performance relationship

H5: Intergroup effectiveness is positively related to firm performance

The resultant framework is shown in Figure 1

Figure 1: Research Framework



Author's compilation

CHAPTER 4 – RESEARCH METHODOLOGY AND DESIGN

4.1 Introduction

In this chapter, the research methodology and design to test the hypotheses that informed this study and detailed in Chapter 3 will be discussed.

4.2 Research paradigm

The explanatory nature of the study played into the positivist paradigm which uses deductive reasoning to formulate hypothesis from existing theory to explain, through any verifiable means, the relationships between independent and dependent variables (Bell et al., 2019; Park et al., 2020). A dependent variable refers to the phenomena that needs explanation, and an independent variable is the factor that is assumed to account for the differences in the amount of the dependent variable (Bell et al., 2019; Gallo, 2015). In ontological terms, meaning our theories about the nature of reality, the positivist paradigm adopts an objectivism posture which contends that social reality exists unrestrained by the players therein (Bell et al., 2019). The positivist stance suggests that the social reality actually constrains the behaviour of the players who interact within it and hence can be objectively assessed (Bell et al., 2019). Positivism theory holds the view that knowledge can be objectively gathered and tested using structured scientific processes, e.g., using surveys that are subjected to quantitative analysis (Bell et al., 2017; Bhattacharjee, 2012; Rahi, 2017). The interest of researchers in adopting this approach is to test theory and gain knowledge that is generalisable, i.e., can be extrapolated to wider populations in similar situations (Bhattacharjee, 2012).

The adoption of the positivist paradigm is considered suitable for this study because it uses existing theories of social identity, strategic consensus, intergroup leadership and intergroup relational identity to formulate hypotheses about the relationships between the constructs (Bell et al., 2019). The study aimed at contributing to existing theory. To verify or falsify the hypotheses, a quantitative methodology (scientific method) is adopted involving the use of questionnaires to collect data. A quantitative methodology collects data that is then expressed or converted into numerals for statistical analysis so as to draw conclusions (Apuke, 2017). A majority of research in social sciences has adopted a quantitative approach (e.g., Ambrose et al., 2018; Ateş et al., 2020; González-Benito et al., 2012; Leicht-Deobald et al., 2021; Jeanine Pieternel Porck & Van Knippenberg, 2022; Rast et al., 2018; van der Stoep et al., 2020) meaning it is a well-established approach (Bhattacharjee, 2012).

As an alternative, an interpretivist position could have been adopted. The interpretivist approach asserts that reality is a formation of actions of the social players and therefore theory building is an inductive process (Bhattacharjee, 2012). It was not considered suitable as its primary focus is in comprehending human conduct and building theory therefrom (Bell et al., 2019) whereas this study aimed at adding to existing theory.

4.3 Population

In research, population refers to the total of identifiable units that meet the criteria of the study as directed by the research question, from which a sample for investigation is drawn. (Bell et al., 2019; Rahi, 2017). It is important that the selection of the study population is targeted at answering the research question and also to avoid any process challenges like time and cost (Bell et al., 2019). The criteria applied to identify the relevant population was that it should be made up of companies that are organised in clearly defined groups with no shared division membership (Porck & Van Knippenberg, 2022). This would increase chances that the targeted subjects are most likely to be facing intergroup coordination challenges. The companies needed to also have an existing deliberate strategy against which implementation is already taking place (Porck et al., 2020). Implementation refers to execution in accordance with the stated strategic priorities using all available organisational mechanisms to drive performance (Lee & Puranam, 2016). In light of this, the population of this study was defined as multinational companies operating in the healthcare and specifically in the pharmaceutical space in South Africa. Multinational companies have largely operated matrixed organisations that not only create non-shared divisions amongst groups across geographies, which makes for complex coordination efforts requiring multiple interventions. Further, the overarching strategies are always formulated at corporate head office and cascaded down to operating units. Consensus on the cascaded priorities becomes critical in order to have all stakeholders pull in the same direction. The strategic priorities of these companies are freely available on the relevant companies' websites, which provided convenience in terms of identifying potential companies to do the study on (e.g., <https://www.novartis.com/about/strategy>; <https://www.astrazeneca.com/our-company.html>; <https://www.sanofi.com/en/investors/company-overview/strategy>).

In support of the relevance of this study to multinationals, it is said that strategic consensus amongst the top management teams is essential for internationalisation strategies (Haapanen et al., 2020), which is what geographic consolidation of operations brings for local operations. This criterion is consistent with that adopted by Porck et al.,

(2020) viz. organisation in the strategy implementation process with highly interdependent and geographically dispersed work teams.

4.4 Unit and level of analysis

The unit of analysis defines the subject that is the focus of study as dictated by the research question, e.g., individuals, teams or organisations from whom data is collected (Bell et al., 2019). The aim of this study was to explain how using a combination of behavioural (social identification, relational identity) and cognitive (strategic consensus) coordination tools, interdependent groups can achieve effective collaboration that drives firm performance. To understand the relationships between these constructs, the unit of analysis was the individuals who make up the different groups and are rolled up to team and organisational level for analysis (Ateş et al., 2020; Porck et al., 2020). The level of analysis is the organisation as organisational performance is the ultimate outcome that was to be explained. This approach is consistent with that adopted by Porck et al. (2020), who measured and analysed the results at the work group and organisation level.

4.5 Sample and Sampling method

A sample is a part of the population that is then subjected to testing in order to draw inferences about the entire population (Bell et al., 2019). The sample is selected from the population using either probability or non-probability techniques. Probability sampling techniques are recommended as they ensure that every unit in the population has an equal chance of selection (Bell et al., 2019). Using probability sampling mitigates against bias in the selection of subjects and enhances external validity (Bell et al., 2019; Rahi, 2017). On the other hand non probability techniques involve non randomised sample selection based on some criteria including convenience (Bhattacharjee, 2012). The criteria for the study population included that the organisation must be structured in distinct groups which would present potential intergroup coordination challenges and that it had a deliberate strategy that was in flight. Due to this criterion, probability sampling techniques would not have been practical as that would have not guaranteed selection of an organisation that met the study criteria. Therefore, non-probability sampling was the appropriate technique to use. Specifically, the researcher used his knowledge and contacts in organisations in this sector to identify an organisation that met the criteria and was willing to participate, that is a convenient sample (Etikan, 2016). Convenience sampling has the advantage of being easy to identify, the potential sample is readily available and in general it is less expensive to use (Etikan, 2016). Its major disadvantage is that results from such samples cannot be generalised to broader populations as they

lack external validity (Bell et al., 2019; Etikan, 2016). Whilst it is not recommended, it is widely used in organisation research (Bell et al., 2019), and examples can be found in Porck et al., (2020), Ateş et al., (2020), Porck & Van Knippenberg (2022), Rast et al., (2018).

The organisation for this study is a multinational pharmaceutical company, to be referred to hereinafter as "the organisation" that is organised in a cluster of countries covering all of Sub Sahara Africa with majority of leadership including the CEO located in South Africa. Except for the commercial part of the business which reports to the CEO, all other supporting functions report to different lines based on the function. Not only were there different division membership ((Porck & Van Knippenberg, 2022) but multi country cultural differences which are all ingredients for coordination challenges. Strategic consensus and effective intergroup leadership were assumed to be critical for this organisation.

In order to identify the correct sample, the organisation was asked to provide a list of all employees containing only employee numbers, location, job grade, job function, year of joining the organisation, which formed the sample frame. A sample frame is a database of subjects from which sample selections can be made (Martínez-Mesa et al., 2016; Rahi, 2017), e.g., list of employees in the case of studies involving organisational relationships. To ensure that only relevant subject units were included in the sample, the sample frame was reviewed to exclude employees with less than one year or those that held above country roles as their responses were only likely to skew the results. Similar to Porck et al., (2020) the entire organisation, after adjusting for aforementioned comprised the sample and that resulted in the study questionnaire being sent out to 226 potential participants comprising of top management team, other managers, and their teams.

4.6 Measurement instrument

A self-administered online survey questionnaire using Qualtrics platform as provided by the University of Pretoria was used to collect data from the respondents. Use of self-administered questionnaires is widely used in quantitative research involving establishing relationships between constructs (Bell et al., 2019; Jordan & Troth, 2020; Rowley, 2014). The advantages of using questionnaire surveys include ease of management both from a cost, time and convenience perspective (Bell et al., 2019). This is made possible as pre-existing questionnaires can be used, free or low cost survey tools e.g., Qualtrics or Survey Monkey, with analytical power for later statistical analysis and more importantly respondents are not restricted in terms of time or location to

complete the survey (Bell et al., 2019; Bhattacharjee, 2012). There are however some disadvantages to the use of questionnaires, and these include low response rates, incomplete responses and other potential response biases.

The questionnaire (Appendix 1) was created in Qualtrics with an anonymous survey link generated, which was distributed via email to all respondents requesting their voluntary participation. The email included a copy of the consent statement (refer to Appendix 1) contained in the actual survey once link was activated. By proceeding to complete the survey, the respondent gave their consent. The consent statement provided name and contact details of the researcher and supervisor. It explained the purpose of the study, that participation was voluntary and anonymous in that no respondent's personal identifier information including names, email addresses and IP addresses was to be collected. To guarantee anonymity, the "anonymise response" option provided in Qualtrics was activated, refer to Appendix 2. Finally, it explained that data will be reported on an aggregated basis further ensuring anonymity of respondents.

The survey questionnaire used in this study was a set of twenty-one questions, split into five blocks each with between one and eight questions. All questions and related scales were adopted from previous studies on consensus, social identification, and intergroup leadership. Use of questions developed and used by other researchers in one form or another is recommended as it provides assurance on reliability and allows for comparability of results (Bell et al., 2019). The questionnaire also included demographic data questions related to location, job level to enable roll up of data to teams and to facilitate other data analysis later on.

The following sections were included in the questionnaire

Section 1 collects demographic information, namely, location country, job function (department) and job level

Section 2 includes questions aimed at understanding the prevalence of organisational identification, and these were adopted from (Mael & Ashforth, 1992; Porck et al., 2020) and comprised of six questions. Example of questions include "When someone criticises my organisation it feels like a personal insult" and "My organisations successes are my successes".

Section 3 comprises of one question to assess intergroup strategic consensus. In line with recommendations by previous scholars (Kellermanns et al., 2005; Porck et al., 2020), the actual stated organisation strategic priorities were assessed by asking respondents to rank the priorities. The organisations strategic priorities were used

instead of generic strategic priorities as these are linked to the organisations competitive positioning (Boyer & Pagell, 2000; Walter et al., 2013) and therefore provide better insight (Boyer & Pagell, 2000). Boyer & Pagell (2000) recommended use of ranking to measure competitive strategies as opposed to rating, as this compels respondents to make a firm choice on how they perceive the priorities. This is because a majority of organisations are not in a position to execute equally across multiple priorities (Boyer & Pagell, 2000) hence the need to prioritise. This recommendation informed the choice of ranking scale to measure the priorities. For confidentiality reasons, the five stated priorities are abbreviated as follows: science, digital, go-to-market, people, and conversation.

Section 4 has five questions to assess intergroup relational identity (Rast et al., 2020). Sample questions include “The relationship between my group and that other group is part of who we are” and “The relationship between my group and that other group is important to what kind of organisation we are”

Section 5 has eight questions to assess intergroup effectiveness (Rast et al., 2020; Richter et al., 2005). Questions include “To what extent do both teams work effectively together to solve problems” and “To what extent do both teams make effective use of each other’s resources”

Section 4 and 5 questions are the two dimensions selected to measure intergroup leadership effectiveness.

Section 6 only has one perceptual question to assess firm performance through comparison with competitors (González-Benito et al., 2012; Homburg et al., 1999; Shanker et al., 2017). Respondents were asked to rank their organisation’s performance in comparison to competitors, on five items made up of four operational outcomes namely, sales growth, market share, customer satisfaction and new product launches and profitability which is a financial measure (González-Benito et al., 2012)

4.7 Data collection

The questionnaire was administered to all 226 employees of the organisation using an anonymous link from Qualtrics included in the request email, which upon activation took the respondent onto the Qualtrics platform. The first page of the questionnaire was the consent statement as detailed in section 4.6 above. The questionnaire was made up of closed questions which are easier to respond to and to analyse as they can easily be converted into numbers (Bell et al., 2019). Likert scales, which provided for answer selection either through selecting buttons or drop down for rating questions were used.

Likert scales were selected as they are the most convenient way of measuring attitudes, opinions, perceptions and sentiments (Boone & Boone, 2012), which are all the elements included in this study questionnaire. A 5-point scale ranging from 1- strongly disagree to 5 – strongly agree is used for organisational identification. A 7-point scale is used for intergroup relational identity ranging from 1- strongly disagree to 7 strongly agree and finally a 5-point scale is used for intergroup effectiveness ranging from 1- never to 5- always. Use of the 7-point scale for intergroup relational identity follows recommendations that this scale offers adequate points to be able to detect moderating effects, which otherwise would be lost if low scale points are used (Aguinis, 1995; Aguinis et al., 2017).

To control for multiple responses, the “prevent multiple submissions” button was activated on the survey.

Low response rates have been highlighted as one of the major disadvantages of self-administered surveys which compromises reliability of the collected data (Chidlow et al., 2015). To reduce non response rates, the questionnaire comprised of a total of five sections made up of between one and eight with an average of four questions per section and was expected to take no more than 30mins to complete, which subjectively is considered short enough to keep potential respondents interested (Bell et al., 2019). Leaning on recommendations made by Childow et al., (2015) three reminder emails, two actual emails and one auto follow up prompt were sent subsequent to the initial request. In all such instances, the voluntary nature and anonymity of the survey was communicated to potential respondents. Whilst, it has been widely acknowledged that use of follow up reminders has a positive impact on response rates (Rowley, 2014), low response rates have been noted when follow up letters are used (Chidlow et al., 2015; Mellahi & Harris, 2016; Wu et al., 2022). This study realised an overall response rate of 50.4%

4.8 Confidentiality and anonymity of participants

Confidentiality refers to the concealment of any information collected as part of the study that could be traced to an individual, and is typically achieved by assigning aliases to names of all disclosed subject identities (Coffelt, 2017). In this study all data collected, which includes email addresses obtained from the organisation to enable the distribution of the survey, are encrypted with a password, and saved on the researchers OneDrive, which itself is password protected. All data collected will be kept for a period of ten years.

Anonymity on the other hand refers to instances where no personal identifiers are collected at all, making it impossible to trace the data to any particular respondent (Bell et al., 2019; Coffelt, 2017). In this survey, this was achieved by not requesting any personal information e.g., email addresses and by invoking the Qualtrics “anonymize response” option which disables the collection of IP addresses, location and contact information of respondent.

4.9 Data analysis approach

In this section, details of how data analysis was approached are provided including the type of tests conducted. Once survey responses were collected using Qualtrics, they were extracted onto Statistical Package for Social Sciences (SPSS) as the primary analysis tool. The Qualtrics file extract format was a .sav which is compatible with SPSS with pre-existing coding. For strategic consensus, an excel version of the file extract was used to populate a template for upload to the Strategic Consensus Mapping (SCM) a freely available online tool at <https://mtarakci.shinyapps.io/consensus/> (Tarakci et al., 2014)

The questionnaire made use of Likert scale with either a five-point or seven-point item, and all responses where ordinal data thus could be assigned numerical values for measurement.

4.9.1 Descriptive statistics

This study made use of descriptive statistics to explain the underlying attributes of the sample (Pallant, 2020). This took the form of summarising respondents’ demographic data in terms of country location, job level and function by looking at the frequencies for each.

4.9.2 Validity and Reliability

Reliability and validity of measurement procedures are used to evaluate the quality of research studies in the social sciences space (Bell et al., 2019; Bhattacharjee, 2012).

4.9.2.1 Validity

Validity refers to the degree to which the measurement tool actually measures the intended subject matter and not something else (Bell et al., 2019; Heale & Twycross, 2015). Bell et al., (2019) posit that validity is about the level of trust that can be placed on the findings and deductions from the research. Validity was specifically assessed for constructs with at least two factors, and in this instance, was applied to intergroup

leadership, which is comprised of intergroup relational identity and intergroup effectiveness. The assessment was aimed at confirming composite reliability, convergence validity and discriminant validity. Convergent validity seeks to assess the degree to which at least two constructs relate to the same overarching construct (Carlson & Herdman, 2012). It was measured by the average variance extracted (AVE) with a target of > 0.5 recommended (Ab Hamid et al., 2017; Hair Jr. et al., 2017). Average variance extracted were 0.611 and 0.535 (both >0.5) for intergroup effectiveness and relational identity respectively (Table 8) Discriminant validity confirms if a construct's composition (scale items) is different from that used by other related constructs in the same model (Bell et al., 2019; J. F. Hair et al., 2010). Discriminant validity was measured using both the Fornell-Larcker and the heterotrait-monotrait ratio (HTMT) methods. Fornell-Larcker method requires factor loadings greater than 0.7 whereas the HTMT threshold is below 0.90 to prove discriminant validity (Ab Hamid et al., 2017). Using the Fornell-Larcker method, the factor loadings were both above 0.7 at 0.782 and 0.732 for intergroup effectiveness and relational identity respectively. The HTMT result was 0.551 which is below the 0.9 threshold.

4.9.2.2 Reliability

Reliability refers to the degree of similarity in the results obtained from repeated use of a measurement tool in similar circumstances, that is, a test of tool dependability.(Bhattacharjee, 2012; Johnson, 2017). Reliability tests seek to understand the extent to which the measurement scale is not affected by unexpected elements that are unrelated to the phenomena being studied (Pallant, 2020). The Cronbach's alpha is a widely used test for internal reliability (Bonett & Wright, 2015; McNeish, 2018). It is a measure of how scale items within a construct are correlated when they are divided into two lots in whichever combination (Bell et al., 2019; Gliem & Gliem, 2003). The target value for Cronbach alpha is 0.7 (Bell et al., 2019; Johnson, 2017; Pallant, 2020). Composite reliability rho_c and rho_a are used in structural equation modelling and similar to the Cronbach alpha measure internal reliability with the main difference between the two being the assumption of the latter about the equal weighting of factors into the construct model (Joseph F Hair et al., 2021; Peterson & Kim, 2013). A third measure of internal reliability rho_A is suggested as a compromise between rho_c and Cronbach alpha (Joseph F Hair et al., 2021) with all three targeting values of between 0.7 and 0.9 to be considered reliable (Ab Hamid et al., 2017; Peterson & Kim, 2013). Cronbach alpha values between 6 and 7 have been described as questionable (George, D., & Mallery et al., 2003; Gliem & Gliem, 2003). Reliability tests were conducted for

organisational identification and intergroup leadership only as they were the ones that were made up of scale items that were expected to be correlated. The results for this study were measured against the 0.7 standard and are summarised in below table

	Cronbach alpha	Rho_a	Rho_c
Organisational identity	0.63		
Intergroup relational identity	0.84	0.845	0.887
Intergroup effectiveness	0.71	0.734	0.820
Firm performance	0.808		

4.9.2.3 Common Method Bias

This is a bias that is associated with cross sectional survey based researches that arise because all variables (independent, dependent and moderator) are measured using the same data collection tool, for example, using the Likert scale (Jordan & Troth, 2020; Kock et al., 2021). Common method biases give rise to a measurement error that has the potential to compromise the true nature of relationships being tested and resultant conclusions (Podsakoff et al., 2003). To deal with the risk of common method bias in this study, the Harman single factor test was applied to check that the total variance extracted was less than 50%. Actual variance extracted was 23.10% thus confirming no common method bias error.

4.10 Research limitations

This study was conducted in a single organisation and therefore the organisational context may impact the results, for example, it has been found that strategic consensus may not be desirable in dynamic environments and the opposite for stable environments, (Ateş et al., 2020; Kellermanns et al., 2005). Also, the study assumption was that strong organisational identity is beneficial to intergroup strategic consensus (Porck et al., 2020), however, it did not test for the presence of other identities, e.g., dual identification which may be a factor. Moreover, strong organisational identification has been found not to be an effective means of dealing with intergroup conflict (Rast et al., 2018; Shi et al., 2017). Porck et al., (2020) study was conducted in a stable environment, which may question

the applicability of their finding in different organisational settings. Therefore, generalisation of this study findings may be problematic unless applied to organisations operating in similar environments.

Limited sample size risked inadequate statistical power which is a similar challenge with previous studies involving moderation where majority did not have enough power to detect the moderating effects (Aguinis et al., 2017). A larger sample size would address the issue; however, this particular study was restricted by the size of the organisation. It has also been found that sample size must be linked to the study setting with a suggestion that a valid sample size of 100 items can be deemed large if study is on an organisation with a population of 200 (Memon et al., 2020).

In addition, use of online questionnaire is associated with low response rates, which may diminish the generalisability of the findings

The use of a convenience sample limits the level for generalisability, however, such samples are quite prevalent in business research (Bell et al., 2019). Also, generalisability is restricted to the specific population, in this case, multinational pharmaceutical companies with similar attributes as the organisation of study.

CHAPTER 5 – RESULTS

5.1 Introduction

The study aimed to establish how the interplay of organisational identification, intergroup strategic consensus, and effective intergroup leadership affect firm performance. The investigation was conducted using a cross-sectional quantitative design with deductive approach and testing the hypotheses presented earlier in chapter 3. A total of 114 usable responses were received from the 226 invitations sent out. The resultant response rate was 50.4% calculated based on the usable responses in proportion to the total requests sent out (Baruch, 1999; Baruch & Holtom, 2008). This was higher than the online response rate of 44% (Wu et al., 2022) and was within the recommended 50% for research conducted in organisations (Mellahi & Harris, 2016). This chapter starts with data screening and cleaning followed by the demographic profile of the respondents. Flowing from this is the descriptive statistics, tests for validity and reliability of each of the constructs. This is then followed by the test of the hypothesis starting with correlation matrix of the constructs' relationship and moderation effect. SPSS, Excel and Smartpls ver4 for partial least squares – structural equation modelling (PLS-SEM) are the tools that were used for the data analysis.

5.2 Data screening and cleaning

The data screening and cleaning was conducted by first determining the extreme outliers of the data using the box plot and the z-scores to identify them. In using the box plot, values that are at least three times above the interquartile range (box containing 50% of the sample items) are considered extreme outliers (Mowbray et al., 2019). Z-scores with values of ± 3.29 and above were also considered outliers (Tabachnick & Fidell, 2013). The highest z-score identified was -3.549 and this together with others meeting the criteria were excluded. The next step conducted was the missing value analysis (MVA). Missing data has been found to compromise the quality of the analysis and deductions therefrom (Bennett, 2001; Dong & Peng, 2013). The missing value detected was 7.2% (missing data records/total records) which is lower than the suggested threshold of 10% (Bennett, 2001; Dong & Peng, 2013). Missing values were not considered an issue for this study and are therefore included in the sample. This was followed by the analysis of the common method bias (CMB). This is a bias that is associated with cross sectional survey based researches that arise because all variables (independent, dependent and moderator) are measured using the same data collection tool, for example, using the Likert scale (Jordan & Troth, 2020; Kock et al., 2021). The common method bias was

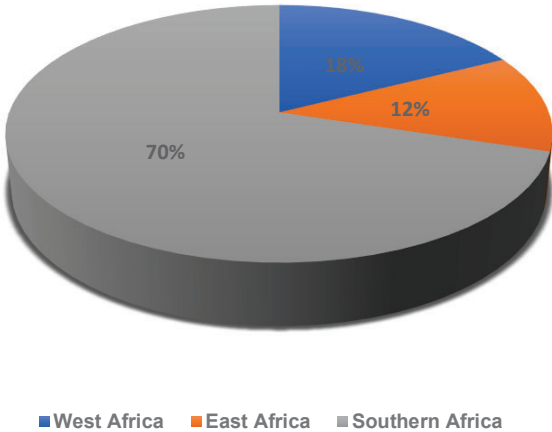
analysed using Harman single factor test with exploratory factor analysis using principal factoring axis and the results for total variance extracted was 23.10%. This is lower than the threshold of 50%, meaning that there were no issues with common method bias.

5.3 Demographics descriptive statistics and Response rate

5.3.1 Demographics descriptive statistics

There were 114 responses in this study which constituted the empirical data used to investigate the hypotheses as discussed in Chapter 3. Respondents from Southern Africa made up 70.2% of the total sample followed by West Africa with 17.5% and then East Africa with 12.3%. Southern Africa serves as the headquarters of the organisation, and it is where the majority (67%) of Executives (TMT) was based. The most represented function was sales and marketing comprising of 44.7% of the respondents, followed by others (including HR, Legal and Compliance) with 17.5% which are departments that have between one and four team members, for example, procurement and business technology amongst others, medical at 7.9%, finance at 7.0%, supply, regulatory at 6.1% each, with the rest under 6%.

Chart 1 - Respondents distribution by country

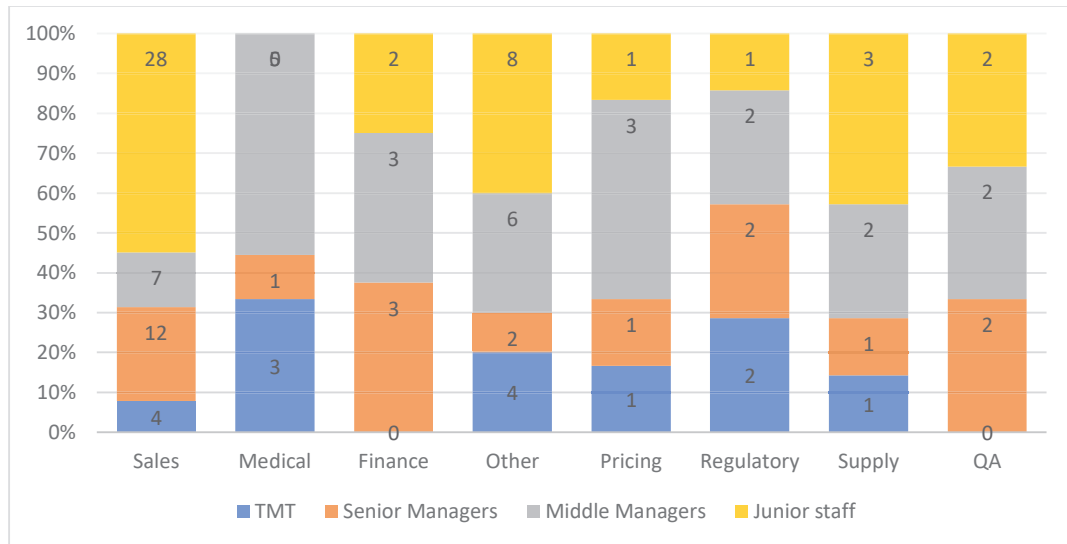


Full breakdown of the sample demographics is provided in Table 2.

Table 2 - Demographic profile of the respondents

Demographic variable		Frequency	Percent frequency
Country / Cluster	Southern Africa	80	70.2
	East Africa	14	12.3
	West Africa	20	17.5
	Total	114	100.0
Job level	Executive (TMT)	15	13.2
	Senior Manager	24	21.1
	Manager	30	26.3
	Other	45	39.5
	Total	114	100.0
Function	Sales and marketing	51	44.7
	Supply	7	6.1
	Regulatory	7	6.1
	Pricing and market access	6	5.3
	Medical	9	7.9
	Quality & Drug Safety	6	5.3
	Finance	8	7.0
	Others	20	17.5
	Total	114	100.0

Chart 2 - Respondents by function and job level showing % contribution from each category

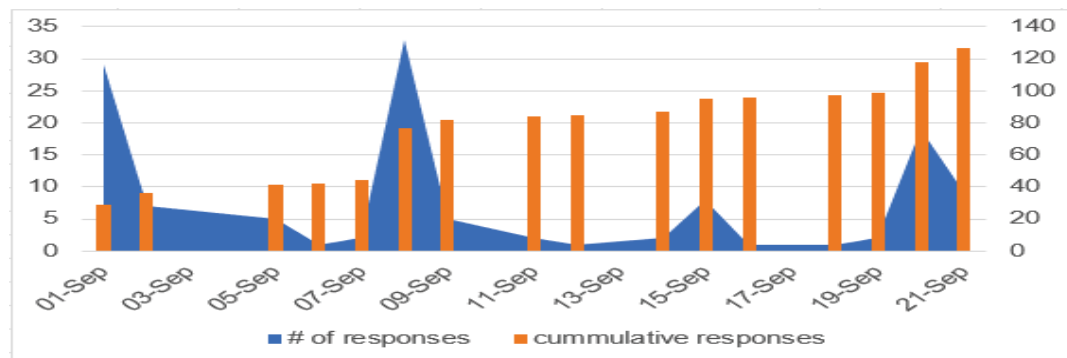


Junior level respondents made up 39% of the responses and within the sales and marketing function they made up 55% as shown in Chart 2.

5.3.2 Response Rate

The survey questionnaire was distributed to 226 respondents on the 1st of September 2022 with reminders on the 8th of September, an auto reminder on the 15th and a final reminder on the 20th. As shown in the chart 3 below, responses were high on each communication occasion. Interestingly, when an auto reminder was set, the response rate remained very low. Also, the first two reminders yielded high responses than the last one which perhaps indicates the hesitancy of respondents the longer the time between initial request and action.

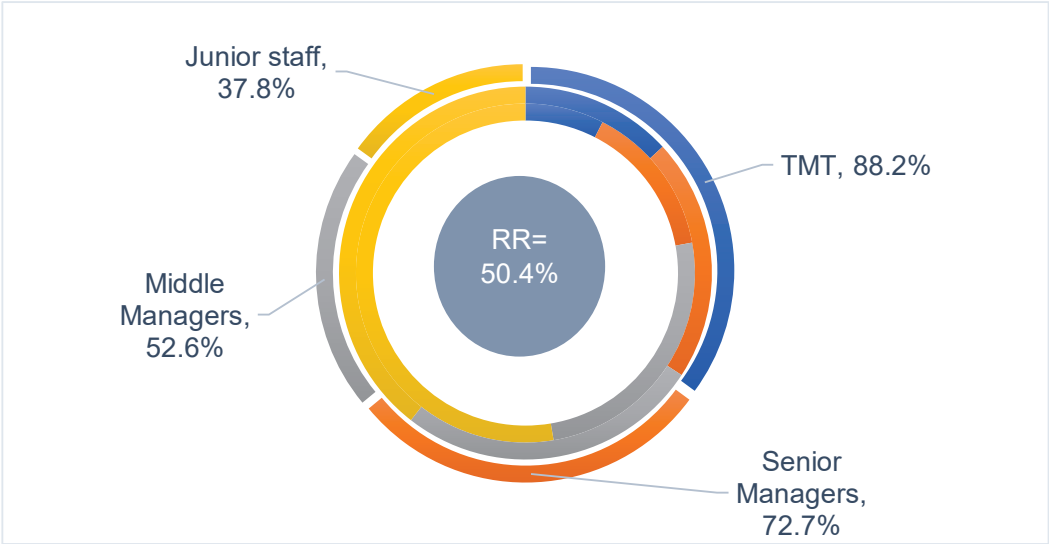
Chart 3 - Responses daily trend



In total 114 valid responses were received after accounting for responses started but not completed and this resulted in an effective response rate of 50.4% (see chart 4) which is just on the 50% ballpark figure recommended for research in organisations (Baruch & Holtom, 2008; Mellahi & Harris, 2016). This suggests that the survey results are within both the validity and generalisability criteria.

In relation to the response rate, it was also noticed that this varied according to the seniority of the respondent with higher rates experienced the higher the seniority level as shown in Table 2. Unsurprisingly, junior staff had the lowest response rate, which is in line with the observation of Mellahi & Harris, (2016) whose work showed that union members (equivalent of junior staff) have the lowest response rate compared to the other levels.

Chart 4 - Response rates by job level and total



5.4 Organisational identification analysis

The organisational identity was assessed with six variables based on the 5-point Likert scale. Table 3 presents the descriptive statistics of the data which was used to understand the central tendency using the mean (M) and median (Mdn). The data spread is measured by the standard deviation (SD). The highest mean was found with Q8 which stated, 'When I talk about my organisation, I usually say "we" instead of they' (M = 4.65, SD = 0.601) with a median =5.00 showing high levels of agreement with this statement. The second highest was Q10 which read 'When someone praises my organisation, it feels like a personal compliment' (M = 4.55, SD = 0.645). The lowest variable that the

respondents least agreed with was Q6 ‘When someone criticises my organisation it feels like a personal insult’ with mean (M = 3.92, SD = 1.122). The skewness and kurtosis of the variables show that they were normally distributed with value for skewness within ± 2 while the kurtosis is within ± 7 (George & Mallery, 2010; J. F. Hair et al., 2010).

Table 3 - Descriptive and multivariate statistics for organisational identity

	Mean (M)	Median (Mdn)	Std. Dev (SD)	Skewness	Kurtosis	(α)	Org Id	Q7	Q8	Q9
Q6	3.92	4	1.122	-0.875	-0.195		-			
Q7	4.44	5	0.694	-0.853	-0.485		.638**	-		
Q8	4.65	5	0.601	-1.779	3.332	0.630	.686**	.300**	-	
Q9	4.41	5	0.767	-1.335	1.620		.743**	.245**	.289**	-
Q10	4.55	5	0.645	-1.560	3.017		.688**	.196*	.302**	.453**
Q11	4.15	4	1.083	-1.325	1.079		-	-	-	-

Bold variable excluded in the final construct – organisational identity

The reliability analysis was conducted with Cronbach alpha with coefficient of 0.7 and higher indicating acceptable levels of reliability (Ab Hamid et al., 2017; Peterson & Kim, 2013). Based on the suggestion that Cronbach alpha values between 6 and 7 are borderline (George, D., & Mallery et al., 2003; Gliem & Gliem, 2003), results above 0.6 have been accepted. The final reliability of 0.63 was obtained from Q7, Q8, Q9, Q10 with Q6 and Q11 excluded in the final construct after initial alpha before deleting these records was below 0.6. A convergent validity which determines whether the inter-item correlation between the components of a scale is present was conducted using correlation matrix. The correlation coefficients between the items and the construct ranged from 0.638 – 0.743 which are much stronger than the benchmark of 0.50 (Heale & Twycross, 2015), and therefore confirming convergence validity.

5.5 Intergroup strategic consensus analysis

The intergroup consensus was analysed using five variables, focusing on strategic priorities in order of importance, where 1 = very important, 2 = fairly important, 3 = important, 4 = slightly important, 5 = not at all important. The highest mean was obtained for Q13_1 ‘science’ with a mean (M) = 1.78 (SD = 1.103) and median (Mdn) = 1 indicating that it was ranked as fairly important to very important. It is followed by Q13_4 ‘people’ with M = 2.61 (SD = 1.341) with Mdn = 2.00. The least important is Q13_5 ‘conversation’ with M = 3.68 (SD = 1.286) and Mdn = 4.00 which represent slightly important. The

skewness and kurtosis are all within the acceptable ranges indicating that there were no noticeable outliers. Table 4 summarises the statistics.

Table 4 - Descriptive statistics on Intergroup strategic consensus

	Mean	Median	Std. Deviation	Skewness	Kurtosis
Q13_1	1.78	1.00	1.103	1.293	0.675
Q13_2	3.57	4.00	1.160	-0.416	-0.620
Q13_3	3.37	3.00	1.221	-0.148	-0.997
Q13_4	2.61	2.00	1.341	0.398	-1.060
Q13_5	3.68	4.00	1.286	-0.538	-1

5.5.1 Intergroup strategic consensus mapping

Intergroup strategic consensus was measured using the Strategic Consensus Mapping tool developed by Tarakci et al., (2014) for computing within and between group level of consensus which is freely available at <https://mtarakci.shinyapps.io/consensus/> (Porck et al., 2020; Porck & Van Knippenberg, 2022). Within group consensus is represented by alpha (α), which is a measure of how each representative member within a particular group perceives the order of the priorities. It takes on values between 1 and zero where 1 is perfect consensus and zero indicates no consensus. The between group consensus is measured by the correlation coefficient expressed as $r(A,B)$, where r lies between 1 and -1, with 1 representing perfect consensus and -1 representing opposing views of the strategic priorities (Tarakci et al., 2014).

The results shown in Table 5 indicate that there was an overall moderate within group consensus including for the TMT with an $\alpha = 0.6$. There was a moderate to strong between group consensus with four group dyads (Sales>>Pricing/Access, Sales>>Medical, Finance>>Supply, and Quality Assurance>>Regulatory) achieving correlation coefficient (r) >0.8 indicating near perfect consensus. There was a strongly positive correlation between groups and the TMT at $r = 0.86$ calculated as an average of the groups correlation with the TMT (Tarakci et al., 2014).

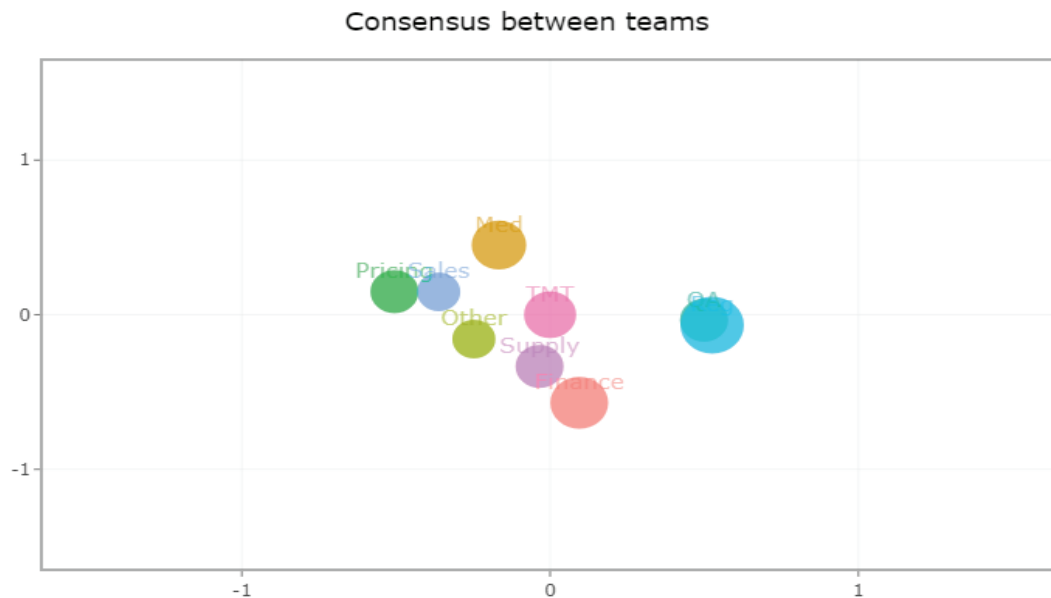
Table 5 - Correlations within (α) and between the groups ($r(A, B)$) included in the study for the whole organisation.

	Alpha	1	2	3	4	5	6	7	8	9
1 TMT	0.60	1.00								
2 Sales	0.47	0.81	1.00							
3 Supply	0.57	0.92	0.76	1.00						
4 Reg	0.89	0.82	0.41	0.76	1.00					
5 Pricing/Access	0.60	0.83	0.81	0.74	0.40	1.00				
6 Med	0.70	0.88	0.89	0.68	0.60	0.77	1.00			
7 QA	0.57	0.84	0.46	0.78	1.00	0.43	0.65	1.00		
8 Finance	0.77	0.80	0.53	0.95	0.77	0.61	0.44	0.77	1.00	
9 Other	0.48	0.86	0.53	0.76	0.69	0.86	0.65	0.69	0.75	1.00

(Tarakci et al., 2014)

A visual inspection of the intergroup strategic consensus graph shown in Chart 5 suggested that the TMT is not the focal point of consensus as the functions with the biggest within group consensus (α) > .70 are all farthest away from it (Tarakci et al., 2014). Also, those with lower within group consensus are also far from the centre.

Chart 5 - Consensus between teams



(Tarakci et al., 2014)

Since this organisation operated across all of Sub Sahara Africa with majority of TMT located in South Africa, it was of interest to assess if the degree of intergroup strategic consensus was affected by location. The degree of consensus in South Africa was measured as shown in Table 6 below which reveal some significant differences between it and the total organisational level e.g., within TMT consensus moves from 0.60 to 0.78.

Also, the sales function improved within group consensus from below 0.5 to just above 0.5.

Table 6 - Correlations within (alpha) and between the groups (r (A, B)) included in the study for the South Africa organisation component to assess if the strength of consensus differed between locations.

	Alpha	1	2	3	4	5	6	7	8	9
1 TMT	0.78	1.00								
2 Sales	0.51	0.96	1.00							
3 Supply	0.73	0.88	0.79	1.00						
4 Reg	0.88	0.67	0.45	0.78	1.00					
5 Pricing	0.63	0.60	0.72	0.16	0.06	1.00				
6 Med	0.74	0.85	0.85	0.64	0.46	0.70	1.00			
7 QA	0.72	0.63	0.41	0.81	0.98	0.18	0.43	1.00		
8 Finance	0.72	0.69	0.58	0.83	0.76	0.01	0.24	0.75	1.00	
9 Other	0.42	0.96	0.88	0.79	0.75	0.60	0.82	0.68	0.68	1.00

(Tarakci et al., 2014)

5.6 Intergroup leadership analysis

Intergroup leadership Intergroup leadership is a multidimensional construct that is formed by intergroup relational identity and intergroup effectiveness and was therefore analysed with two constructs covered by Q16 - Q22 and Q22 – Q29 respectively. Intergroup relational identity was assessed using a 7-point Likert scale, which gave greater flexibility, whilst intergroup effectiveness was measured using a 5-point scale. Table 7 provides the descriptive statistics.

Within intergroup relational identity the variable with the highest mean was Q20, “The relationship between my group and that other group is important to what kind of organisation we are’ with M = 6.31, SD = 0.860 and Mdn = 6.50. It was followed by Q17 ‘The collaborative relationship between my group and that other group is part of what makes us who we are’ and Q16 ‘The relationship between my group and that other group is part of who we are’ with M = 6.04, SD = 1.256 and M = 6.02, SD = 1.077 respectively.

Within intergroup leadership Q24 “To what extent is the relationship between your team and this other team productive” had the highest mean of 3.80, SD = 0.925 and Mdn = 4 whilst the lowest was Q27 “To what extent does your team receive resources and support from this other team to perform its duties and achieve its goals” with a mean of 3.26, SD =1.045 and Mdn = 4.

Except for Q17 which had skewness slightly off the ± 2 , all other variables had both skewness and kurtosis within the recommended ranges.

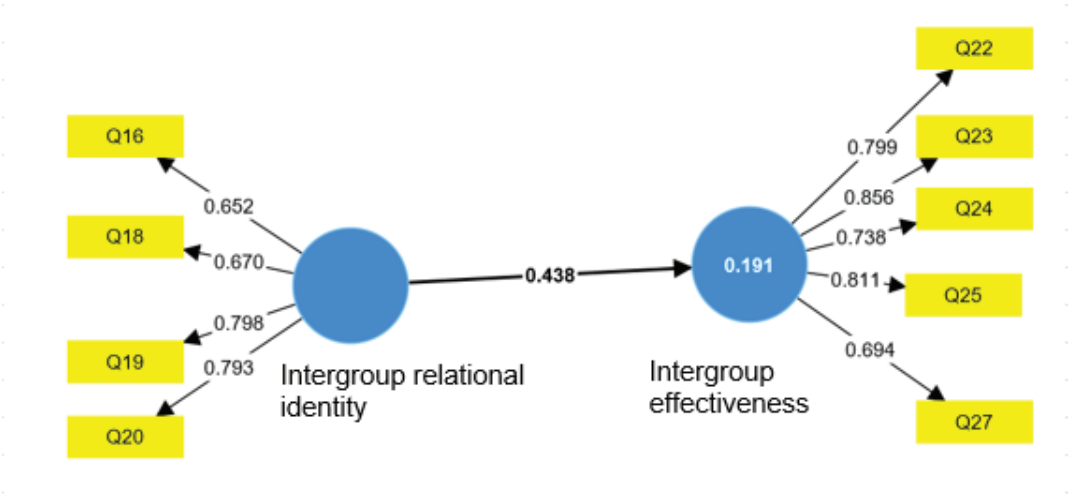
Table 7 - Descriptive statistics of intergroup leadership

	Mean	Median	Std. Deviation	Skewness	Kurtosis
Q16	6.02	6.00	1.077	-1.781	4.831
Q17	6.04	6.00	1.256	-2.202	6.023
Q18	5.48	6.00	1.356	-1.464	2.556
Q19	5.65	6.00	1.191	-1.476	3.159
Q20	6.31	6.50	0.860	-1.520	2.894
Q22	3.77	4.00	0.943	-0.743	-0.272
Q23	3.69	4.00	0.934	-0.661	-0.430
Q24	3.80	4.00	0.925	-0.881	0.014
Q25	3.59	4.00	0.967	-0.615	-0.462
Q26	3.74	4.00	0.961	-1.002	0.453
Q27	3.26	4.00	1.045	-0.390	-1.152
Q28	3.40	4.00	1.164	-0.251	-1.321
Q29	3.26	4.00	1.026	-0.119	-1.233

A partial least square - structural equation model (PLS-SEM) measurement was developed to determine if the two constructs have composite reliability, convergence validity and discriminant validity. The loading factors were all higher than 0.60, with the overall within a latent construct 0.7 or higher. Refer to Figure 2 for overall intergroup leadership model.

Model fit was assessed using the standardised root mean squared residual (SRMR) and this gave a model fit index of 0.094. This is above the recommended threshold for good fit of 0.08, best fit 0.05 (Hu & Bentler, 1999). However it has been acknowledged that an SRMR of below 0.10 can be considered an acceptable albeit not a good fit (Cangur & Ercan, 2015), hence model fit is confirmed.

Figure 2 - Measurement model of intergroup leadership



Source: Ringle, C. M., Wende, S., and Becker, J.-M. 2022. "SmartPLS 4." Oststeinbek: SmartPLS GmbH, <http://www.smartpls.com>.

As a multidimensional construct, intergroup leadership component constructs were tested for convergence (AVE), discriminant (HTMT) validity and Composite Reliability (Rho_a, Rho_c, Cronbach Alpha). Both constructs met convergence validity with average variance extracted (AVE) of 0.611 for intergroup effectiveness and 0.535 for intergroup relational identity, which are higher than the >0.5 benchmark (Ab Hamid et al., 2017; Hair Jr. et al., 2017) . Further they had acceptable composite reliability, rho A = 0.845 and 0.734 for Intergroup effectiveness and Intragroup relationship identity respectively. The rho_c and Cronbach alpha for both constructs were within the 0.7-0.9 range for reliability (Ab Hamid et al., 2017; Peterson & Kim, 2013). Table 8 summarises the results.

Table 8 - Composite reliability and convergence validity of intergroup leadership

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Intergroup effectiveness	0.84	0.845	0.887	0.611
Intragroup relationship identity	0.71	0.734	0.82	0.535

The discriminant validity was assessed using Fornell Larcker criterion and heterotrait-monotrait ratio of correlations (HTMT) which are measures of similarity between latent variables (Ab Hamid et al., 2017). At factor loadings above 0.7 for the Fornell-Larcker method and value below 0.9 for the HTMT, discriminant validity was confirmed, as shown in Table 9.

Table 9 - Discriminant validity assessment with Fornell Larcker criterion and heterotrait-monotrait ratio of correlations (HTMT)

Fornell Larcker criterion	Intergroup effectiveness	Intergroup relational identity
Intergroup effectiveness	0.782	
Intergroup relational identity	0.438	0.732
HTMT	Intergroup effectiveness	Intergroup relational identity
Intergroup effectiveness		
Intergroup relational identity	0.551	

5.7 Firm Performance

Overall, the team believed that the firm performed same to better than others (Mean = 2.14 to 2.56) (Median: 2.00 is better than others). The best performance is in profitability and the worst performance is market share as shown in Table 10.

Table 10 - Descriptive statistics of firm performance

	Mean	Median	Std. Deviation	Skewness	Kurtosis	Cronbach alpha (α)
Q31_1	2.41	2	1.040	0.464	-0.598	0.808
Q31_2	2.56	2	1.034	0.188	-1.191	
Q31_3	2.43	2	1.046	0.296	-0.490	
Q31_4	2.45	2	1.080	0.280	-0.694	
Q31_5	2.14	2	0.897	0.616	0.550	

The reliability was assessed with Cronbach alpha, and it was confirmed to be reliable with $\alpha = 0.808$. Skewness and Kurtosis were also within the recommended bands. All the variables (Sales growth, market share, customer satisfaction, new product launches, profitability) are all correlated with the construct of firm performance, with all Pearson's correlation values higher than 0.5 ($r = 0.683 - 0.814$) (Table 11).

Table 11 - Convergence validity of firm performance with variables

	Firm performance	Q31_1	Q31_2	Q31_3	Q31_4	Q31_5
Q31_1	.814**					
Q31_2	.823**	.709**				
Q31_3	.719**	.445**	.494**			
Q31_4	.683**	.400**	.421**	.312**		
Q31_5	.727**	.516**	.454**	.439**	.418**	-

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

5.8 Hypothesis testing

The correlation matrix was conducted to determine the correlations between the different constructs, organisational identity, intergroup effectiveness, intergroup relational identity, and firm performance which was the dependent variable. The strength of the correlations were assessed using the guidelines: strong - $>.50$, moderate $0.3 - .49$ and weak - <0.29 (Pallant, 2020). The results, summarised in Table 12, showed that intergroup effectiveness had a moderate association to firm performance ($r = .408, p < .01$). Organisational identity had a moderate correlation with both intergroup effectiveness ($r = .358, p < .01$) and intergroup relational identity ($r = .480, p < .01$). On the other hand, both intergroup relational identity and organisational identity were weakly correlated to firm performance ($r < 0.3$).

Table 12 - Correlation Matrix of the constructs

	Firm performance	Intergroup effectiveness	Intragroup relationship identity	Organisational identity
Firm performance	-			
Intergroup effectiveness	0.408**	-		
Intragroup relationship identity	0.166	.536**	-	
Organisational identity	0.184	.358**	.480**	-

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

5.8.1 Hypothesis one testing

The first hypothesis focuses on understanding the influence of organisational identity on the intergroup strategic consensus. This hypothesis can be recapped as follows:

H1: Organisational identification is positively related to intergroup strategic consensus

Chi square was used to analyse the association between organisational identity and the variables of the intergroup strategic consensus. When using the chi square test, the results are only significant if p-value is ≤ 0.05 implying that values > 0.05 indicate no association between the constructs (Pallant, 2020). The results summarised in Table 13 showed that there was no statistically significant relationship for all variables of intergroup strategic consensus with all p-values higher than 5%. Therefore, the hypothesis is rejected.

Table 13 Chi square and Cramer's V analysis for association between organisational identity and variables of Intergroup strategic consensus

	χ^2	<i>P</i>
Q13_1	32.05	.464
Q13_2	27.64	.687
Q13_3	43.14	.090
Q13_4	30.34	.551
Q31_5	26.51	.741

5.8.2 Hypothesis two testing

The second hypothesis test related to the relationship of organisational identification and firm performance. The hypothesis was summarised as follows:

H2: Organisational identification positively impacts firm performance

A correlation matrix was conducted to test the association of organisational identification and firm performance and found a weak positive relationship, $r = 0.184$ (Table 12). Similarly, the relationship has a p-value of 0.166 (Table 17) _which is greater than 5% and therefore not significant. Hypothesis two is therefore rejected

5.8.3 Hypothesis three testing

The third hypothesis test assessed if Intergroup strategic consensus positively impacted firm performance. The hypothesis was summarised as follows:

H3: Intergroup strategic consensus positively impacts firm performance

Chi square analysed the association between the variables of the intergroup strategic consensus and firm performance. The results show that there is statistically significant association between intergroup strategic consensus – ‘science’ and firm performance ($\chi^2 = 105.98, p = .<.001$). This association is strong with Cramer's V, $\phi = 0.507$. The other four variables of intergroup strategic consensus are not statistically significant. As such, the hypothesis three was partially accepted. Table 14 provides a summary of the results

Table 14 - Chi square and Cramer's V analysis for association between variables of Intergroup strategic consensus and firm performance

	χ^2	<i>P</i>	ϕ
Q13_1	105.98	<.001	0.507
Q13_2	72.73	.213	-
Q13_3	57.67	.698	-
Q13_4	67.89	.346	-
Q12_5	66.30	.398	-

5.8.4 Hypothesis four testing

The fourth hypothesis of the study assessed the moderation effect of the intergroup leadership on intergroup strategic consensus and organisational identification. This was done for the relationship between the organisational identity and the firm performance. A moderation test could not be executed for strategic consensus as the construct failed to create a reliable model. As an alternative, chi square tests were conducted. This hypothesis was recapped as follows:

H4.1: Intergroup leadership is positively related to intergroup strategic consensus

Table 15 - Chi square and Cramer's V analysis for association between variables of Intergroup strategic consensus and intergroup effectiveness

	χ^2	<i>P</i>	ϕ
Q13_1	93.07	.449	-
Q13_2	79.63	.818	-
Q13_3	82.79	.743	-
Q13_4	111.25	.084	-
Q12_5	89.78	.546	-

The results show that there are no statistically significant associations between any of the intergroup strategic consensus variables and intergroup effectiveness. All p-values are above 5%. Therefore, the hypothesis is not accepted.

Table 16 - Chi square and Cramer's V analysis for association between variables of Intergroup strategic consensus and intergroup relational identity

	χ^2	P	ϕ
Q13_1	64.91	.711	-
Q13_2	92.39	.053	-
Q13_3	76.63	.333	-
Q13_4	65.83	.682	-
Q12_5	77.92	.296	-

The results show that there are no statistically significant associations between any of the intergroup strategic consensus variables and intergroup relational identity. All p-values are above 5%. Therefore, the hypothesis is not accepted.

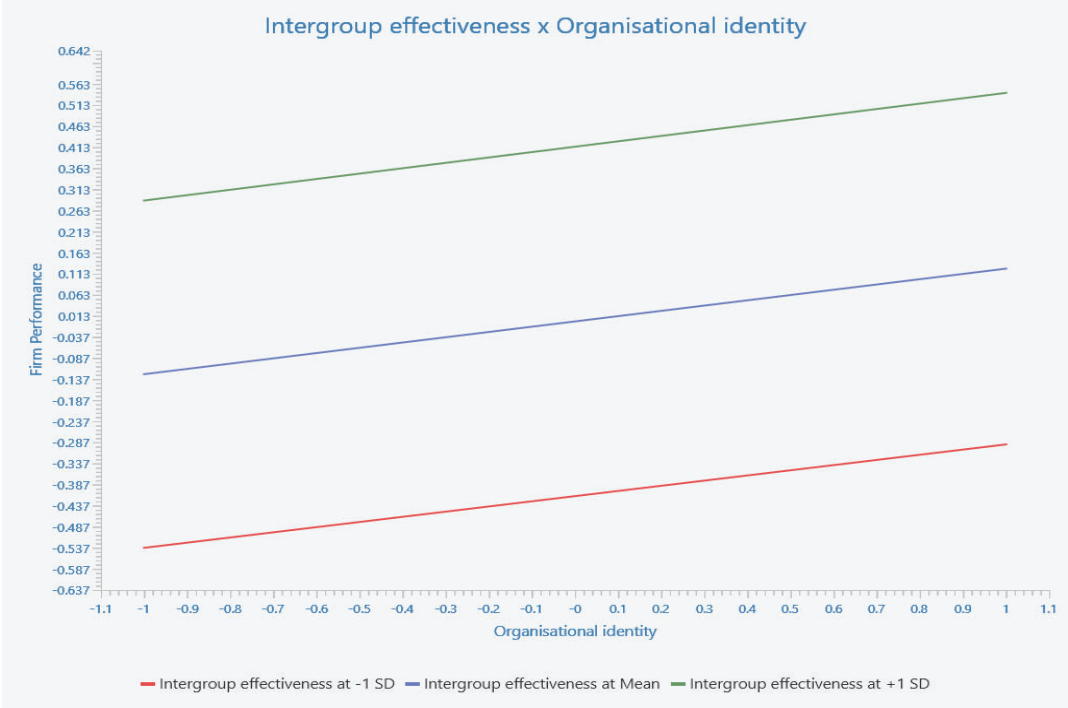
Overall, no significant relationship was noted for intergroup strategic consensus and intergroup leadership and hence hypothesis was rejected. It was therefore concluded that moderation effects are likely to have yielded similar results.

For the organisational identification and intergroup leadership, the hypothesis was summarised as:

H4.2: Intergroup leadership, through its promotion of intergroup relational identity moderates the relationship between organisational identity and firm performance

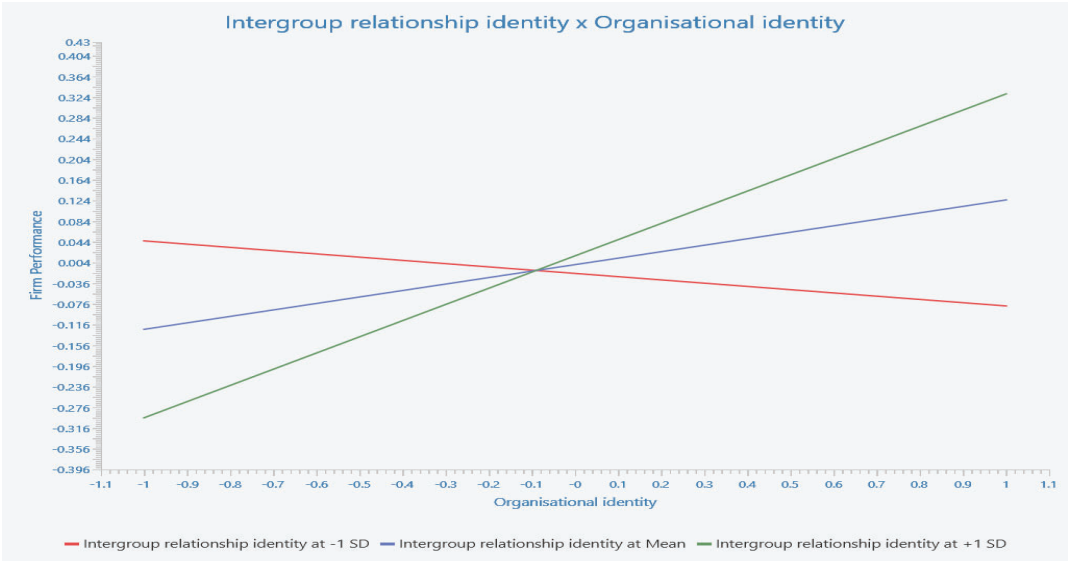
A visual assessment was conducted with PLS-SEM algorithm for the additive effect on intergroup effectiveness on organisational identity. The results shown in Figure 3 reflect that the trends for all variables did not change or deviate with the addition of intergroup effectiveness at -1SD and +1SD. This is indicative of lack of moderation effect from intergroup effectiveness on the relationship between organisational identity and firm performance.

Figure 3 - Visual plot of moderation effect of intergroup effectiveness in the relationship between organisational identity and the firm performance.



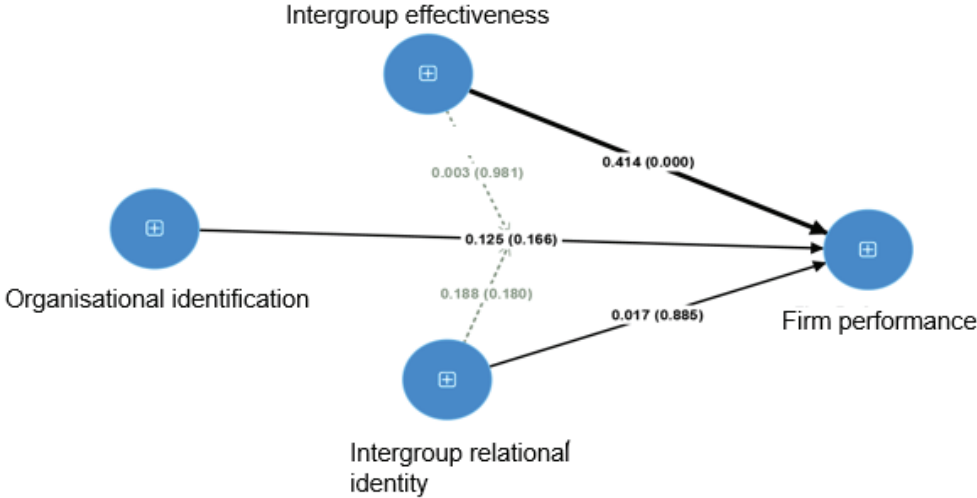
Another visual assessment was conducted for the intergroup relationship identity (Figure 4). The results show that at mean and at +1SD the firm performance increased with the increase in organisational identity, albeit not significantly.

Figure 4 - Visual plot of moderation effect of intergroup relationship identity in the relationship between organisational identity and the firm performance.



The overall model of the moderation effect of Intergroup leadership (intergroup effectiveness and intergroup relationship identity) on the relationship between Organisational identity and firm performance is presented in Figure 5.

Figure 5 - Moderation effect model Intergroup leadership



Source: Ringle, C. M., Wende, S., and Becker, J.-M. 2022. "SmartPLS 4." Oststeinbek: SmartPLS GmbH, <http://www.smartpls.com>.

The results show that there is no statistically significant relationship between all the paths except Intergroup effectiveness -> Firm Performance ($\beta = -0.414, p < .001$). This is a statistically significant positive relationship. Both the core paths, Intergroup effectiveness x Organisational identity -> Firm Performance and Intergroup relationship identity x Organisational identity -> Firm Performance ($\beta = -0.188, p = 0.18$) were higher than 5%

Table 17 provides a summary of the path coefficients for the intergroup leadership organizational identification and firm performance. Only one path i.e., intergroup effectiveness and firm performance have a significant and positive relationship $p < 0.001$.

Table 17 - Path coefficients of the moderations effect relationships

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Intergroup effectiveness -> Firm Performance	0.414	0.416	0.085	4.897	0.000
Intergroup relationship identity -> Firm Performance	0.017	0.058	0.118	0.144	0.885
Organisational identity -> Firm Performance	0.125	0.119	0.090	1.386	0.166
Intergroup effectiveness x Organisational identity -> Firm Performance	0.003	0.018	0.109	0.023	0.981
Intergroup relationship identity x Organisational identity -> Firm Performance	0.188	0.146	0.140	1.341	0.180

5.8.5 Hypothesis five testing

The fifth hypothesis test assessed if Intergroup effectiveness positively impacted firm performance. The hypothesis was summarised as follows:

H5: Intergroup effectiveness positively impacts firm performance

Using correlation matrix of the constructs, Table 12, and also confirmed in the moderation effect model for intergroup leadership, intergroup effectiveness was found to be moderately related to firm performance with $r = .408$, $\beta = 0.414$, $p < 0.001$. Therefore, the hypothesis was accepted.

CHAPTER 6 – DISCUSSION

6.1 Introduction

The aim of this study was to empirically test the influence of intergroup strategic consensus on organisational performance. Further, the study aimed to assess if intergroup leadership interaction enhanced the intergroup strategic consensus – organisational performance relationship.

This chapter is a discussion of the key insights obtained from the results presented in chapter 5 and evaluating these against the theory presented in chapter 2 for each construct and associated hypotheses. The summary of the findings is first presented and then a discussion under each hypothesis ensues

6.2 Hypotheses

The main findings of the study were that (i) intergroup strategic consensus was partially associated with firm performance, (ii) organisational identification had no influence on intergroup strategic consensus, (ii) intergroup leadership through intergroup relational identity did not impact the intergroup strategic consensus-firm performance relationship, however, intergroup effectiveness had a moderate influence on firm performance. Other significant findings were that intergroup effectiveness had a strong correlation with intergroup relational identity and a moderate association with organisational identification, whilst intergroup relational identity and organisational identification had a moderate to strong relationship.

6.2.1 Organisational identification >>> intergroup strategic consensus

H1: Organisational identification is positively related to intergroup strategic consensus.

The study findings were that organisational identification had no influence on intergroup strategic consensus as measured by the chi-square and Cramer's V, refer to Table 13. This is despite the fact that, as per Table 4, members of the organisation identified with the organisation with mean scores for the items that survived reliability (Q7-Q10) leaning towards strongly agree. Notably Q6 and Q11 which dealt with the respondent's reaction to criticism of their organisation did not find strong support and not surprisingly failed the internal consistency test as measured by Cronbach alpha. This is at variance with theory that has posited that where organisational identity is strong members are more loyal and committed to it (Collins et al., 2019; Eun Suk et al., 2015; Greco et al., 2021). Strong organisational affinity is also said to induce members to render resolute support to their

organisation as that fulfils their self-esteem (Conroy et al., 2017). Such support may even happen when it is clearly to the detriment of an organisation or other stakeholders e.g., supporting unethical behaviour in the organisation for fear of losing belongingness (Conroy et al., 2017). This could be attributed to the reality that people identify with multiple social groups, often simultaneously, each fulfilling a particular purpose(s) which may even be in conflict (Levy et al., 2017). Organisation members can thus identify with the organisation and at the same time with other groups nested within the organisation. In fact, Porck et al., (2020) found that where both strong organisational and group identification prevail, the negative impact of strong group identification, e.g., prioritisation of ingroup priorities at the expense of other groups, could not be mitigated by organisational identification. Since this study did not seek to establish the status of group identification, this leaves an open question on the robustness of findings on organisational identification in the absence of a simultaneous study of other prevailing identities.

Given that in the case of the study organisation, the strategic priorities which in this instance are the ends, are pushed down from corporate head office, could it be that intergroup strategic consensus is not critical as head office oversight and formal hierarchical arrangements suffice as structural coordination mechanism (Porck & Van Knippenberg, 2022). This observation is despite the fact that other researchers have suggested that strategic consensus (at TMT level) is critical for multinational companies internationalisation strategies (Haapanen et al., 2020). The growing practice of multinational companies to cluster countries under shared management brings a challenge to local management who may now need to battle cultural differences in their quest to foster organisational identification and strategic consensus.

6.2.2 Organisational identification >>> performance

H2: Strong organisational identification is positively associated with organisational performance

Using the correlation matrix shown in Table 12, a weak (statistically insignificant) positive correlation between organisational identification and firm performance was found $r=0.184$. In addition, a partial least squares-structural equation modelling exercise (Figure 5) to test for a moderating effect of intergroup leadership found that even leadership action had no impact on the relationship. Therefore, the hypothesis was rejected.

In section 2.2 it was argued that strong organisational identification leads to employees exerting themselves for the success of the organisation which success enhances their self-esteem and reduces uncertainty (Ashforth et al., 2008; Blader et al., 2017; Leicht-Deobald et al., 2021). Also employees are subjected to normative pressures to enhance their performance as a way of earning their continued membership, and therefore performance levels tend to be higher (Leicht-Deobald et al., 2021). Organisational identification implies oneness between individual sense of identity and that of the organisation and as a result employees' behaviours and actions are centred on enhancing the success of the organisation which fulfils their sense of accomplishment (Blader et al., 2017)

Whilst strong organisational identification has been advanced as a desirable form of identification as it focuses the organisational players on executing against the strategic priorities (Porck et al., 2020), its superordinate status has been challenged. The biggest challenge to organisational identification is that its promotion as a superordinate identity carries the risk of invoking group identity threat in the absence of recognition of the salience of the sub identities in existence (Dovidio et al., 2007; Hogg et al., 2012; Rast et al., 2018). Consequently, it has been found to be an ineffective means of driving intergroup collaboration particularly where strong group identification is in existence as the risk to the strong identity gets elevated invoking identity defensive actions (Rast et al., 2018; Shi et al., 2017).

As pointed out in 6.1.1, members of an organisation do tend to carry multiple identities, and one such identity is the group identification. Group identification has also been found to improve coordination but for the benefit of the group itself as a result trade-offs in favour of ingroups are prevalent (Carter et al., 2020; Xie et al., 2022). In fact, other studies have raised concerns that interteam coordination activities may actually be detrimental to team performance (Xie et al., 2022), hence no incentive to collaborate across team boundaries. In addition, leaders are responsible for leading or facilitating cross team coordination activities (Carter et al., 2020; Liang et al., 2021; Murase et al., 2014), and yet, leaders' influence on coordination/collaboration is heavily dependent on them being archetypal of the groups they seek to influence (Pittinsky & Simon, 2007; Steffens et al., 2021). Consequently such leaders have been found to be more effective at driving interteam collaboration and delivering team results as their teams accept their leadership (Liang et al., 2021).

The conclusion being drawn here is that whilst there is merit in having strong organisational identification, the lack of consideration of other potentially existing and

perhaps more important social identities in organisations challenges the search for a direct organisational identification – firm performance relationship. This challenge is further compounded by the absence of consideration of leadership actions. The lack of consideration of other intervening factors was brought up as one of the reasons why studies in organisational phenomena like strategic consensus and firm performance have yielded mixed results (Homburg et al., 1999). The fact that intergroup effectiveness, a leader driven action, was found to be moderately associated with firm performance (Table 12), whereas organisational identity which is meant to improve coordination was found to actually have a very weak relationship is perhaps not surprising. This again raises the question of the viability of testing for strong organisational identification without simultaneously getting an appraisal of other existing sub organisational identities. In relation to multinational companies, it may be of interest to researchers to establish which organisation the employees identify with – local affiliate or the parent organisation as the separate associations bring nuances to the discussion. It is possible that employees of multinational companies associate more with the parent than the often less visible local affiliate and therefore identification with the organisation is at a higher-level and impact cannot therefore be assessed locally.

6.2.3 Intergroup strategic consensus >>> performance

H3: Intergroup strategic consensus is positively related to firm performance

Using chi square (χ^2) and Cramer's V analysis as depicted in Table 14, only one out of the five intergroup strategic priorities had a statistically significant correlation to firm performance, Q13_1 yielded $\chi^2 = 105.98$ and $\phi = 0.507$. Therefore, hypothesis was partially accepted.

Past research has suggested that intergroup strategic consensus elevates intergroup coordination which therefore ought to be positive for implementation and the achievement of firm outcomes (Leicht-Deobald et al., 2021; Porck et al., 2020; Porck & Van Knippenberg, 2022). If improved coordination is the outcome of both organisational identification and intergroup strategic consensus, the null hypothesis for the former and partial acceptance of the latter seems to be at odds with the fact that intergroup effectiveness has a moderate relationship with firm performance as shown in Table 12.

Intergroup strategic consensus was measured for the entire organisation using the online Strategic Consensus Mapping (SCM) tool <https://mtarakci.shinyapps.io/consensus/>, and the results are shown in Table 5. The results showed very strong consensus between

the different groups and TMT ($r=0.86$). However there existed moderate to weak correlations between the teams, e.g., the sales function strategic alignment with Regulatory and Quality (QA) is below 0.5. This is an unexpected relationship given that in the pharmaceutical industry sales are heavily dependent on regulatory and quality for products to sell and therefore strong consensus would have been expected.

In line with the definition of intergroup strategic consensus, viz., the extent to which interdependent teams, across all organisational levels, hold a shared interpretation of the firm's strategic priorities (Porck et al., 2020), the questions on consensus were sent to all potential respondents. This is also in line with the studies by both Porck et al., (2020) and Porck and Van Knippenberg, (2022) in which all teams were surveyed. A closer inspection of the results highlights that teams (sales, QA, Supply chain) with a relatively larger proportion of junior level staff had much lower within team consensus. In fact, sales as the biggest grouping and with 55% of its members in junior roles had the lowest alpha at 0.47. It was also observed that the respondents in junior roles accounted for the highest number of unanswered questions on strategic consensus possibly for the reason that they may not have considered themselves knowledgeable enough to render opinions. Porck et al., (2022) posited that where there is shared division, the official hierarchical structure is sufficient for coordination of work. Drawing from this logic, an argument is that at junior levels, the functional leadership uses its authority to influence coordination and therefore consensus at junior levels is not required. Consequently, the conclusion to be drawn is that strategic consensus must be sought from stakeholders with decision making authority (Bragaw & Misangyi, 2019), that is, the managers and other key players who are not necessarily managers but are influential. The challenge with this suggestion is however that it would be hard to find organisations with a large number of managers to constitute a viable sample size, typically 100+.

Secondly, results of consensus focusing only on South Africa (Table 6) which hosts the majority of Executives including the CEO, showed a marked improvement in the level of consensus with TMT consensus moving from $r=0.60$ to $r=0.78$. This may suggest that the proximity of senior leaders had a greater influence on the messaging around the strategic priorities and consequently, the respondents were better informed.

6.2.4 Intergroup leadership – Moderator

H4.1: Intergroup leadership moderates the relationship between intergroup strategic consensus and firm performance

The moderating effect of intergroup leadership on the relationship between intergroup strategic consensus and firm performance could not be measured as the intergroup strategic consensus failed to load onto the model. As an alternative, the association between the consensus constituents and intergroup effectiveness and relational identity were measured.

The results showed that intergroup strategic consensus had no significant association with either intergroup effectiveness (Table 15) or intergroup relational identity (Table 16).

Literature has argued that strategic consensus leads to improved coordination amongst interdependent teams (Kellermanns et al., 2011; Porck et al., 2020; Porck & Van Knippenberg, 2022). Intergroup effectiveness relates to how well members of the different organisational groups work together, i.e., coordinate their activities (Hogg et al., 2012). Therefore, it is an unexpected result that no significant association between the two has been detected given that both are aimed at improved coordination. Other results of this study were that only one variable of the intergroup strategic consensus construct was significantly linked to performance whilst intergroup effectiveness was moderately – strongly linked thereto. This would suggest that intergroup effectiveness operates with or without formal strategic consensus.

On the other hand, it is perhaps not an unexpected result that there is no significant association between intergroup strategic consensus and intergroup relational identity. Strategic consensus refers to the shared understanding of organisational level strategic priorities (Steven W; Floyd & Wooldridge, 1992; Kellermanns et al., 2005; Porck et al., 2020), which happens prior to strategy execution. Whereas, intergroup relational identity is a cognitive coordinating mechanism (Porck & Van Knippenberg, 2022) for driving effective intergroup coordination in the execution of strategic priorities.

H4.2 Intergroup effectiveness moderates the relationship between organisational identity and firm performance

The moderating effect of intergroup leadership was measured using both intergroup effectiveness and intergroup relational identity on organisational identity and firm performance. The results from the partial least squares-structural equation modelling

(PLS-SEM) which were visually inspected as depicted in Figure 3 showed that intergroup effectiveness had no impact on the organisational identity-firm performance relationship. This is despite the fact that organisational identity and intergroup effectiveness were found to be moderately correlated $r=0.358$ (Table 12). Intergroup effectiveness was also found to be moderately correlated to firm performance $r=0.408$, however the relationship between organisational identity and firm performance was found to be weak $r=0.184$.

Strong organisational identity is associated with positive work behaviours (Blader et al., 2017). These behaviours include improved propensity for organisational members to coordinate with other in order to safeguard organisational success and sustain their self-esteem (Blader et al., 2017; Leicht-Deobald et al., 2021). Organizational identification as a superordinate form of identity (Kershaw et al., 2021a; Wenzel et al., 2007) facilitates synchronisation of activity and focus on shared objectives across teams (Porck et al., 2020). On the other hand intergroup relational identity has been advanced as a means of achieving effective intergroup effectiveness (Hogg et al., 2012; Rast et al., 2018), which is a requirement for organisational performance. Therefore, an argument was made that the interaction of intergroup relational identity strengthens the coordination benefits already fostered by organisational identification and therefore it was expected that there will be a difference in the perceived level of performance.

As a superordinate form of identity, organisational or collective identification has been criticised for being incompatible with the fundamental principles of social identity, i.e., existence of distinct groups in organisations that are founded on comparisons with other groups (Ambrose et al., 2018; Conroy et al., 2017). Whilst its fundamental premise is not to deny existence of groups, it has been criticised for assuming group homogeneity which triggers identity distinctiveness threat which drives groups to be less cooperative with others (Dovidio et al., 2007; Hogg et al., 2017). Consequently it was found to be a weaker response to the reduction of intergroup conflict and in fact increases group's propensity to adopt anti-cooperative behaviours (Rast et al., 2018; Shi et al., 2017).

The results of this study have suggested that organisational identification has neither a direct or moderated effect on performance. Whilst both intergroup relational identity and intergroup effectiveness are positively associated with organisational identification, their impact on firm performance could not be linked back to organisational identification. This study concludes that in today's organisations, a superordinate identity is ineffective for firm performance. The explanation for this could be that members of organisations increasingly have multiple identities (Levy et al., 2017). These different identities serve different member needs and invariably influence member behaviour and firm outcomes

differently. An example of such identity is group identification which has been found to actually enhance group performance (Carter et al., 2020; Xie et al., 2022). Therefore, in the presence of other salient identities in organisations, the argument is that organisational identity is perhaps a far-removed identity to influence performance outcomes. The results also suggested that intergroup effectiveness was not dependent on organisational identification for it to impact firm performance even though the two constructs are moderately correlated. The success of organisations is measured by how well groups achieve their group goals but more importantly by how well the disparate groups collaborate and achieve organisational outcomes (Porck & Van Knippenberg, 2022; Xie et al., 2022). Intergroup effectiveness was found to positively drive firm performance (Table 12) and therefore its failure to influence the relationship between organisational identification and firm performance showed that firm performance was not influenced by the degree of organisational identification.

H4.3 Intergroup relational identity moderates the relationship between organisational identity and firm performance

The PLS-SEM (figure 4) assessment of the impact of intergroup relational identity on organisational identity found a positive impact albeit not significant. This result is rather inconsistent with the finding that there was a moderate to strong correlation between ($r=.480$) organisational identity and intergroup relational identity as shown in Table 12.

This finding is logical based on the premise that intergroup relational identity eradicates or minimises intergroup bias which organisational identity has been found to risk invoking. Thus, intergroup relational identity acts to neutralise the negative effects of organisational identity by positioning itself as an identity that recognises and celebrates the salience of the different groups (Kershaw et al., 2021a; Rast et al., 2018). Further, strong organisational identity would require to be actively promoted if it is to have an impact on firm outcomes, and such promotion would inevitably downplay group identities and in the process erode group cooperation. This would also be incompatible with intergroup relational identity which seeks to not promote any form of identity other than that founded on collaborative relationships. However, the finding seems to be also incompatible with the principles of intergroup relational identity which are that intergroup effectiveness is dependent on the presence of the diverse groups. Such groups may include those members that highly identify with the organisation.

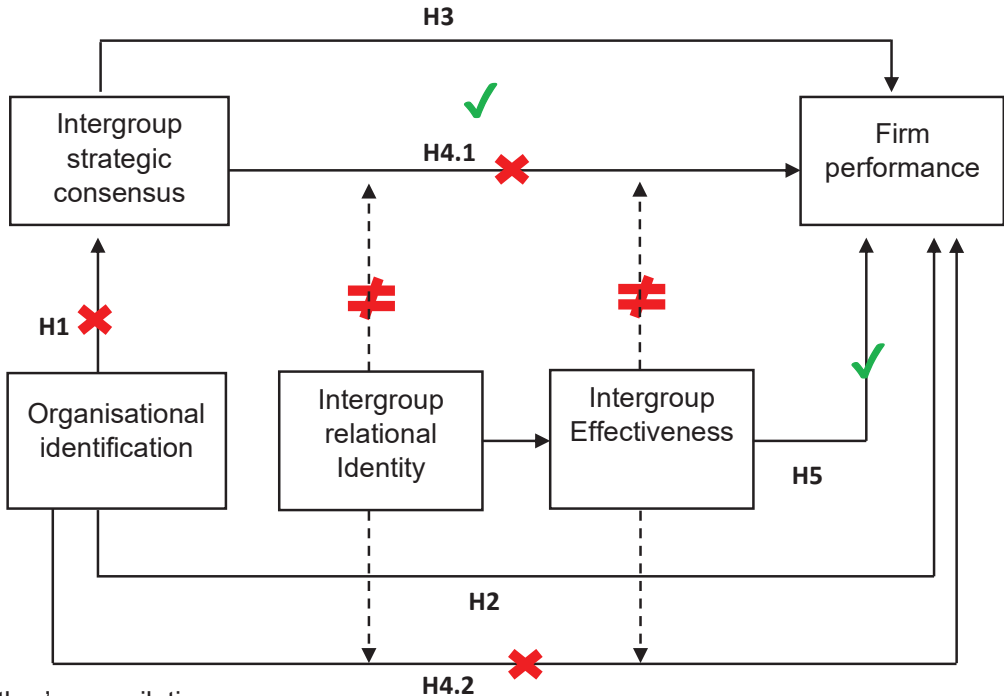
The question that arises and is a potential area for future research is whether organisational identity is still relevant in assessing the behavioural drivers of firm performance in the presence of other more proximal identities in organisations.

Lastly, Aguinis et al., (2017) argued that most studies involving moderation have lacked statistical power to detect such effects primarily because of limited sample sizes. This may be the case with the moderating effect of intergroup relational identity which had a statistically insignificant positive impact (Figure 6). This study sample size of 114 out of a sample frame of 226 can be argued to be large enough (Memon et al., 2019, 2020). The organisational setting also detected the sample size, which therefore pose a question on whether there is an organisation size threshold to be able to conduct moderation studies. It was possible that this study sample lacked statistical power required to bring out moderating effects.

6.3 Summary of discussion

The results of the hypothesis testing rejected H1, H2 and H4 whilst H3 was partially accepted and H5 was accepted. H4 comprises of H4.1 which was rejected as there was no moderation at all and H4.2 which was rejected on the basis of statistically insignificant moderation. The resultant framework from the hypothesis testing is shown in below diagram

Figure 6 - Summary of hypotheses testing



Author's compilation

Key: ✓ - relationship established, × - no relationship found, ≠ - moderating effects could not be performed

6.4 Conclusion

This chapter provided a discussion of the results of the hypotheses testing, reflecting on the results against the theory covered in chapter 2, culminating in the summary of the hypotheses testing. The next chapter will provide overall conclusions on the research based on discussions covered in this chapter.

CHAPTER 7 – CONCLUSION

7.1 Introduction

This study aimed to empirically evaluate the relationship of organisational identification, intergroup strategic consensus, intergroup leadership, and firm performance. This study set out to contribute to the understanding of organisational dynamics that impact the realisation of effective cross team collaborations. Achieving effective intergroup coordination remains a leadership challenge and hence this study sought to understand the existing behavioural and cognitive coordination tools. This chapter provides key conclusions arising from this study based on the hypotheses tested. It will also provide a summary of the resultant implications for both theory and business. Lastly it will cover the limitations of the study as well as provide recommendations for future research.

7.2 Study findings

In investigating the relationships, the study hypothesises that are stated in Chapter 3 were tested using a combination of excel, Statistical Package for Social Sciences (PSS) and Smartpls ver 4 for the partial least square-structural equation modelling.

The first hypothesis relating to organisational identification and intergroup strategic consensus found that there was no correlation between the two, and hence the hypothesis was rejected. This is contrary to the findings of Porck et al., (2020) who concluded that organisational identification was positively related to intergroup strategic consensus whilst organisational identification was inversely related. The results also pose a challenge to the view that strong organisational identification is linked to positive work behaviours, which include the increased propensity of the players to seek collaborative relations with other groups (Blader et al., 2017; Leicht-Deobald et al., 2021). The argument was that collaborative relations are nurtured in the presence of shared goals which happen through the strategic consensus process.

The second hypothesis which was related to organisational identification and firm performance failed to be accepted as a statistically insignificant but positive correlation was identified. This contrasts with the view that high organisational identification is linked to improved firm performance as members of the organisation are more inclined to favour firm success as that fulfils their self-esteem goals (Blader et al., 2017). The finding is also at variance with that of Leicht-Deobald et al., (2021), who found a significant and

positive relationship between collective organisational identification and performance. However, their measurement scale only had one variable which asked respondents (one HR representative per firm) to assess how their firm performed relative to its competitors (Leicht-Deobald et al., 2021). This study assessed performance using a five variable measurement scale which was therefore not too broad as the former.

The third hypothesis was related to intergroup strategic consensus and firm performance. One out of five variables had a strong positive relationship hence hypothesis was partially accepted. The other consensus variables had positive albeit insignificant correlations with firm performance. This result is consistent with literature that states that a shared interpretation of the organisations strategic priorities improves coordination as it focuses all players on the shared objectives (Porck et al., 2020). It is also consistent with the idea that strategic consensus fosters commitment to the priorities (Ateş et al., 2020) and therefore a link between the understanding of the objectives and performance can be established.

The next hypothesis was for the moderated relationship between intergroup strategic consensus and intergroup leadership. This hypothesis was rejected due to the failure of the consensus construct to produce a reliable model required to test for moderation. Further, tests for the relationship between intergroup strategic consensus and the two measures of intergroup leadership, i.e., intergroup relational identity and intergroup effectiveness also failed to sustain the hypothesis, both yielded insignificant relationships.

The fifth hypothesis was conducted to test the moderating effects of intergroup leadership on the organisational identification – firm performance relationship. Intergroup effectiveness did not moderate the relationship. Similarly intergroup relational identity did not moderate the relationship, however a positive albeit not significant relationship was observed. Overall, the hypothesis was rejected. The intergroup relational identity and organisational identification result is an interesting finding and offers a significant opportunity for future research. The key issue arising from it is whether intergroup relational identity which itself is a superordinate identity can mitigate the downside risks associated with the promotion of organisational identification. Afterall, every organisation seeks to promote its identity amongst its members and will be better off if this can happen alongside intergroup relational identity.

The final hypothesis tested was between intergroup effectiveness and firm performance. This hypothesis was confirmed. Intergroup effectiveness is positively related to firm

performance. Firm performance is a function of the effectiveness with which the different organisational players collaborate with each other to execute on the stated strategic priorities (Jin et al., 2019; Porck & Van Knippenberg, 2022; Xie et al., 2022). This finding was unsurprising as organisations that were effective in nurturing cross team collaborations were found to have competitive advantage as demonstrated by higher revenue growth rates, profitability and market shares (Cross & Carboni, 2021).

7.3 Theoretical implications and contribution

The study contributed to the continuing strategy research process with particular focus on strategic consensus in organisations that rely on interdependent groups for strategy implementation. Specifically, the study empirically tested the relationship between intergroup strategic consensus and firm performance, which to the knowledge of this author is one of the first such studies following calls from Porck et al (2020) for such studies. The results showed that indeed intergroup strategic consensus is linked to firm performance. This validates the assumption made so far that the benefits of strategic consensus in general must also apply to intergroup settings (Porck & Van Knippenberg, 2022). However intergroup strategic consensus mapping revealed higher levels of consensus of the different teams to the TMT but moderate within team consensus, and this disconnect was particularly noticeable in groups with relatively high number of junior level respondents. This raises a question around the locus of strategic consensus.

Secondly, the study empirically tested the impact of effective intergroup leadership, represented by intergroup relational identity and intergroup effectiveness, on firm performance. This was also amongst the first empirical tests on intergroup relational identity using the construct and scale recently developed by Rast et al., (2020). It was also amongst the first to be conducted in an organisational setting as opposed to university graduate students and in an emerging and not developed market location. This study has therefore added to the theory of intergroup leadership which Hogg et al., (2012) define as leadership aimed at bringing together at least two formal organisational groups for the purpose of achieving collective goals. The study also confirmed the theory that intergroup relational identity is a tool for influencing intergroup effectiveness which on its own has no impact on firm performance. However, and as expected intergroup effectiveness is critical for firm performance.

Whilst the study was unsuccessful in proving any of the moderated relationships, it found that there is some potential for intergroup relational identity to work in tandem with organisational identification. This raises hope on how social identity theory and intergroup leadership theory can be leveraged to boost between teams effectiveness.

7.4 Implications for business

Modern organisations are a collection of interdependent groups who are each expected to work together to create value (Carter et al., 2020; Gibson et al., 2019; Greer et al., 2017). Yet the challenge of achieving effective coordination across these groups remains an ongoing challenge for business (Casciaro et al., 2019; Schaubroeck et al., 2016; Donald Sull et al., 2015). This study sought to address these concerns by looking at the cognitive and behavioural coordination mechanisms available to leaders in organisations. This study highlighted the relevance of strategic consensus in creating commitment to the strategic priorities which drives coordination efforts to positively impact performance. This is particularly important as organisations are undergoing transformation post the Covid-19 pandemic e.g., virtual working, making a shared understanding of priorities even more important.

Also highlighted is the importance of intergroup effectiveness which is a function of the promotion of intergroup relational identity. This is supported by Mashek (2022) and Cross & Carboni (2021) who both argued for a relationship-based culture of working to boost collaboration. For leaders, the starting point is therefore using their influence to build relationship-based collaborations.

The other implication for business is that all of the available mechanisms coordinating mechanisms work in tandem (organisational identification – intergroup relational identity) and intergroup effectiveness are all positively correlated, and it is up to the leaders to strike the balance of application across all of them.

7.5 Study limitations

Similar to other studies of this nature, this study has limitations which might have influenced the results. Below are the potential limitations identified:

- Sample size – the small sample size of 114 was not big enough to allow for the test of moderating effects (Aguinis et al., 2017). Also, structural equation modelling, which limited the assessment tools available.
- Use of convenience sampling technique may limit the generalisability of the results (Bell et al., 2019). However, this is quite common in organisational studies, with a number conducted using graduate university students or same organisation where data has already been gathered before (e.g., Ateş et al., 2020; Kershaw et al., 2021a; Porck et al., 2020). Also, the use of existing scales suggests that there are other similar studies conducted already. For this reason, this limitation was not considered to be fatal

- The organisational identification construct internal reliability was below 0.7 even after removing two variables.
- The intergroup strategic consensus construct failed to be validated and as such no reliable model could be created. This limited the full measurement of the hypotheses; particularly structural equation modelling could not be used.
- Only organisational identification was assessed which knowing the existence of multiple identities in organisations may have curtailed full understanding of how and which for of social identification and categorisation interacts with other factors to influence organisational performance.

7.6 Suggestions for future research

The study findings raised a number of questions that could be interesting avenues for future research. The following are suggested areas of research.

The first area of potential interest is in relation to the locus of intergroup strategic consensus. Porck et al., defined the locus quite broadly to include every level in the organisation. However, the open question is how reliable are consensus studies which are informed by respondents who are in the majority at junior levels of organisations and arguably not well informed about strategy. At junior levels, would the argument that strategic consensus is not relevant in the case of shared division as the official hierarchical structures can ensure coordination (Porck & Van Knippenberg, 2022).

The second area of suggested interest is related to where to measure intergroup strategic consensus in multinational companies which are set up in clusters with central management. The interest is whether the countries making up the clusters should be treated like strategic business units, on the basis that consensus at TMT level does not translate to consensus at country level (Homburg et al., 1999).

In multinational settings where corporate tends to play a significant role, it could be of interest when measuring organisational identification to consider which organisation is being measured as there are actually two organisations (local and global) at play.

Finally, the study of moderating effects remains of interest and researchers are encouraged to specifically investigate the moderating effects of intergroup leadership which is an area that has not yet been explored.

7.7 Conclusion

This study set out to empirically test the relationships between organisational identification, intergroup strategic consensus, intergroup leadership and how these interacted individually or jointly to impact organisational performance.

The findings show that organisational identification had no influence on strategic consensus and similarly for firm performance. A key finding was that intergroup effectiveness was strongly related to intergroup relational identity and was positively related to firm performance. In a sense this supports the well-established position that firm success is dependent on effective coordination, which itself is a result of productive collaborative relationships. It is hoped that this confirmation spurs leaders in any organisation type to pursue relationship-based collaborations.

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Appendix 1: Survey questionnaire

Consent Statement

Q1 I am conducting research on how agreement on strategic priorities in an organisation impact organisational performance, and how this relationship is affected by the extent to which members of the organisation define themselves in relation to the organisation and to other groups within it. I hereby request your assistance and participation in completing this survey, thank you. The survey should take no more than 30 minutes to complete. Your participation is voluntary, and you may withdraw at any time without penalty. Your participation is anonymous and only aggregated data will be reported. By completing the survey, you indicate your voluntary participation in this research. If you have any concerns, please contact my supervisor or me.

Q2 Please select your country/cluster from below list

- Southern Africa (1)
- East Africa (2)
- West Africa (3)

Q3 Please select your function as at **31 May 2022** from the drop down list below

- Sales & Marketing (1)
- Supply Chain (2)
- Regulatory (3)
- Pricing & Market Access (4)
- Medical (5)
- Quality Assurance (6)
- Finance, Business Analytics & Insights (7)
- Drug Safety (8)
- Human Resources, Communication, Legal and Compliance (9)
- Other (10)

Q4 Please select your job level, as at **31 May 2022**, in the organisation from the below choices

- Executive - GJL100 and above (1)
- Senior Manager - GJL90 (2)
- Manager - GJL70 (3)
- Other - GJL60 and below (4)

Organisational identification

Q6 When someone criticises my organisation it feels like a personal insult

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q7 I am very interested to know what others think about my organisation

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q8 When I talk about my organisation, I usually say “we” instead of they

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q9 My organisation’s successes are my successes

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q10 When someone praises my organisation, it feels like a personal compliment

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Q11 If stories in the media criticised my organisation, I will feel embarrassed

- Strongly disagree (1)
- Somewhat disagree (2)

- Neither agree nor disagree (3)
- Somewhat agree (4)
- Strongly agree (5)

Intergroup strategic consensus

Q13 Please rank the following strategic priorities in order of importance, where 1 = very important, 2 = fairly important, 3 = important, 4 = slightly important, 5 = not at all important

- _____ Deliver first-in-class science (1)
- _____ Win the digital race (2)
- _____ Transform our go-to-market model (3)
- _____ Unleash the power of people (4)
- _____ Lead the conversation (5)

Intergroup relational identity

15 Please select all groups (referred to as "other group" in the next five questions), that your group works most with. Please do not select your own group

- Sales & Marketing (1)
- Supply Chain (2)
- Regulatory (3)
- Pricing & Market Access (4)
- Medical (5)
- Quality Assurance (6)
- Finance, Business Analytics & Insights (7)
- Drug Safety (8)
- Human Resources, Communication, Legal and Compliance (9)
- Other (10)

Q16 The relationship between my group and that other group is part of who we are

- Strongly disagree (1)
- Disagree (2)
- Somewhat disagree (3)
- Neither agree nor disagree (4)
- Somewhat agree (5)
- Agree (6)
- Strongly agree (7)

Q17 The collaborative relationship between my group and that other group is part of what makes us who we are

- Strongly disagree (1)
- Disagree (2)
- Somewhat disagree (3)
- Neither agree nor disagree (4)
- Somewhat agree (5)
- Agree (6)
- Strongly agree (7)

Q18 My group is in part defined by our relationship with that other group

- Strongly disagree (1)
- Disagree (2)
- Somewhat disagree (3)
- Neither agree nor disagree (4)

- Somewhat agree (5)
- Agree (6)
- Strongly agree (7)

Q19 The relationship between my group and that other group is part of who my group and that other group are

- Strongly disagree (1)
- Disagree (2)
- Somewhat disagree (3)
- Neither agree nor disagree (4)
- Somewhat agree (5)
- Agree (6)
- Strongly agree (7)

Q20 The relationship between my group and that other group is important to what kind of organisation we are

- Strongly disagree (1)
- Disagree (2)
- Somewhat disagree (3)
- Neither agree nor disagree (4)
- Somewhat agree (5)
- Agree (6)
- Strongly agree (7)

Intergroup effectiveness

Q22 To what extent does your team and the other teams work effectively together to respond to tasks or duties (e.g., coordinating cross-team activities, assignment of organisational duties, etc)?

- Never (1)
- Sometimes (2)
- About half the time (3)
- Most of the time (4)
- Always (5)

Q23 To what extent does your team and the other teams work effectively together to achieve their joint goal(s)?

- Never (1)
- Sometimes (2)
- About half the time (3)
- Most of the time (4)
- Always (5)

Q24 To what extent is the relationship between your team and this other team productive?

- Never (1)
- Sometimes (2)
- About half the time (3)
- Most of the time (4)
- Always (5)

Q25 To what extent do both teams work effectively together to solve problems

- Never (1)
- Sometimes (2)
- About half the time (3)
- Most of the time (4)
- Always (5)

Q26 To what extent does this other team receive resources and support from your team to perform its duties and achieve its goals?

- Never (1)
- Sometimes (2)
- About half the time (3)
- Most of the time (4)
- Always (5)

Q27 To what extent does your team receive resources and support from this other team to perform its duties and achieve its goals?

- Never (1)
- Sometimes (2)
- About half the time (3)
- Most of the time (4)
- Always (5)

Q28 To what extent do both teams effectively help each other out if resources and other support is needed?

- Never (1)
- Sometimes (2)

- About half the time (3)
- Most of the time (4)
- Always (5)

Q29 To what extent do both teams make effective use of each other's resources?

- Never (1)
- Sometimes (2)
- About half the time (3)
- Most of the time (4)
- Always (5)

Organisational performance

Q31 From the items listed below, please rate your organisation's performance compared to its competitors

	Much better than others (1)	Better than others (2)	Same as others (3)	Worse than others (4)	Much worse than others (5)
Sales growth (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Market share (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Customer satisfaction (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
New product launches (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Profitability (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>