



**BINDURA UNIVERSITY OF SCIENCE EDUCATION**

**FACULTY OF COMMERCE**

**GRADUATE SCHOOL OF BUSINESS**

*Where Great Minds Meet*

**RESEARCH DISSERTATION**

**TO EXPLORE THE IMPACT OF GROUP-LEVEL PSYCHOLOGICAL  
SAFETY ON GROUP PERSONALITY IN NON-WESTERN COUNTRIES: A  
CASE STUDY OF AUTO INDUSTRIAL (PTY) LTD, JOHANNESBURG,  
SOUTH AFRICA.**

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## **DECLARATION**

I, **Hilton Hatikundwi Samuriwo**, do hereby declare that this dissertation is a result of my own investigation and research, except to the extent indicated in the acknowledgments, bibliography, references, and comments included in the body of the report, and that it has not been submitted in part or in full for any other degree to any other university.



**STUDENT SIGNATURE**

15.12.2023

**DATE**

## **DEDICATION**

This dissertation is dedicated to my wife and companion, Svorai Otilia Muderedzwa Samuriwo, for your steadfast backing for all my academic endeavors. In the words of King David, “He who finds a wife finds a good thing. And obtains favor from the Lord” (Proverbs 18:22). To my daughters, Jordan Makanaka and Joanna Mudiwa, may this Masters thesis serve as a perpetual source for inspiration, propelling you towards greater achievements in your academic endeavors.

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## **ABSTRACT**

The construct of psychological safety has existed for decades and has been fairly studied in juxtaposition with personalities of individuals. This researcher believes that psychological safety and personality in the workplace are better treated at group level climates. Using the case study of Auto Industrial (Pty) Ltd.'s machining function, the researcher seeks to explore the impact of group-level psychological safety on group personality in non-Western countries. The methodology used in this study is a self-administered questionnaire. A total of 43 questionnaires were administered as interview questions and the targets were drawn using the purposive sampling technique. The study tested its proposition using Statistical Package for Social Sciences (SPSS) alongside the reflexive thematic analysis. Findings revealed that group psychological safety and group personality in non-Western, no-WEIRD countries have nuances that are owed to the dynamic social demographics of the African space. The recommendations, limitations of the study and the research on the phenomena of group psychological safety and group personality in non-Western countries and future research are also discussed.

**Keywords: psychological safety, group psychological safety, group personality, culture, race and ethnicity.**

<b>Contents</b>	<b>Page</b>
Approval Form .....	i
Release Form .....	ii
Declaration .....	iii
Dedication .....	iv
Acknowledgements .....	v
Abstract .....	vi
Chapter 1: Introduction and Background .....	1
1.0 Introduction .....	1
1.1 Background .....	1
1.2 Research Problem / Statement .....	3
1.3 Research Objectives .....	3
1.4 Research Questions .....	3
1.5 Proposition .....	3
1.6 Assumptions .....	4
1.7 Purpose.....	4
1.8 Justification .....	5
1.8.1 Psychological Safety .....	5
1.8.2 Group Psychological Safety .....	5
1.8.3 Group Personality .....	6
1.8.4 Culture, Race and Ethnicity .....	6
1.8.5 Personality Psychological Currently Lack Research in Culture, Race and Ethnicity .....	7
1.8.6 Scenarios .....	8
1.9 Significance / Importance .....	11
1.10 Delimitations / Scope of Research .....	12
1.11 Chapter Summary .....	12
Chapter 2: Literature Review .....	13
2.1 Introduction .....	13
2.2 Explanation of the search strategy for the literature .....	13
2.3 Definition of the phenomenon .....	14
2.3.1 Psychological Safety .....	14

2.3.2 Psychological Climate .....	14
2.3.3 Group/Team Psychological Safety .....	15
2.4 Underpinning theory(ies) .....	18
2.4.1 The Role of Psychological Safety in Human Development .....	18
2.4.2 Situations that Increase the Need for Psychological Safety .....	19
2.4.3 Situating Psychological Safety Individual ↔Context Processes .....	19
2.4.3.1 Inter-individual Differences in Perceptions of Psychological Safety .....	19
2.4.4 Structural Validity and Measurement of the Short Version of the Big Inventory BFI-10 in Selected Countries .....	20
2.4.4.1 Main Objectives and Sub-Objectives .....	20
2.5 Discussion of existing models/frameworks and key concepts and areas. ....	21
2.5.1 Conceptualizations of Personality Already Include Culture, Race and Ethnicity .....	21
2.6 Discussions of Key Variables/Dimensions .....	22
2.6.1 Interpersonal Factors .....	22
2.6.2 Team Psychological Safety .....	22
2.7 Literature Synthesis and Conceptual Framework/model .....	23
2.7.1.1. The Co-evolution of Network Ties and Perceptions of Psychological Safety .....	23
2.7.1.2 Key Contributions of the Co-evolution of Network Ties and perceptions of psychological safety framework .....	25
2.7.2 Discussion of contradictions in the research area .....	26
2.7.3 Research proposition .....	26
2.7.4 Crystallization of research questions .....	26
2.8 Chapter Conclusion .....	27
Chapter 3: Research Methodology .....	28
3.1 Introduction to the Chapter .....	28
3.2 Recap of Research Aim, Main Study Objective, Major Question, Proposition .....	28
3.3 Research Philosophy .....	29
3.4 Research Approach .....	29
3.4.1 Deductive .....	29

3.4.2 Inductive .....	31
3.5 Research Design .....	33
3.5.1 Descriptive .....	34
3.5.2 Exploratory .....	34
3.5.3 Explanatory .....	35
3.6 Research Strategies - Case Study .....	35
3.6.1 Purpose and Structure .....	35
3.6.2 Justification of the case study as a research strategy .....	36
3.6.3 Quality Necessity to the Case Study .....	37
3.6.4 Advantages and Disadvantages of the Case Study .....	38
3.6.5 Time Horizons .....	39
3.6.6 Cross Sectional Study .....	39
3.7 Methodology and Data Collection Methods .....	40
3.7.1 Primary Data Collection.....	40
3.7.1.1 Questionnaire (interview guide) development .....	40
3.7.1.2 The Interview .....	40
3.7.2 Pilot testing .....	41
3.8 Population and Sampling Techniques .....	41
3.8.1 Population .....	41
3.8.2 Samples Sizes .....	42
3.8.3 Sampling Methods .....	43
3.8.3.1 Purposive Sampling .....	43
3.9 Questionnaire Administration / Conducting Interviews .....	43
3.10 Methods of Data Analysis .....	44
3.10.1 Statistical Package for Social Sciences (SPSS).....	44
3.11 Validity and Reliability .....	44
3.11.1 Construct Validity .....	44
3.11.2 Internal Validity .....	44
3.11.3 External Validity/Generalizability .....	45
3.11.4 Threats to Validity .....	45
3.11.5 Reliability .....	45
3.11.6 Threats to Reliability .....	45

3.12 Ethical Consideration .....	46
3.13 Chapter Summary .....	46
Chapter 4: Results, Presentation and Discussion .....	47
4.1 Introduction .....	47
4.2 Demographic Profile of Respondents.....	47
4.3 Research Instrument Reliability Test Results .....	49
4.4 Research Findings .....	50
4.4.1 To examine group psychological safety in non-western countries .....	50
4.4.2 To investigate group personality traits in non-western countries .....	53
Chapter 5: Conclusions and Recommendations .....	59
5.1 Introduction .....	59
5.2 Research Conclusion .....	59
5.3 Recommendations .....	61
5.4 Avenues for future research.....	61
Abbreviations .....	66
Appendices .....	67

## List of Tables

Table 2.1 Some Definitions of Psychological Safety .....	15
Table 4.1 Respondents' Demographic Information .....	48
Table 4.2 Research Instrument Reliability Results .....	49
Table 4.3 Respondents' Psychological Safety .....	51
Table 4.4 Extent to which an individual is worried to talk about weekend activities at work .....	52
Table 4.5 Group Personality Traits Statements .....	54
Table 4.6 Respondents' perceptions of line managers and being corrected .....	56
Table 4.7 Likelihood to reach out to other teams and/or departments .....	57

## List of Figures

Figure 2.1 Examples of Differentiation Co-evolution Patterns of Team Members' Perceptions and Network Ties .....	24
Figure 3.1 Deductive Research Strategy .....	31
Figure 3.2 Inductive Research Strategy .....	32
Figure 3.3 Inductive Research Strategy.....	33
Figure 4.1 Respondents' extent of anxiety to share and/or make suggestions to workmates .....	50
Figure 4.2 How often does a team member go ahead with an unclear task .....	52
Figure 4.3 How best to describe personality traits .....	55







## **Chapter 1: Introduction and Background**

### **1.0 Introduction**

Psychological safety is more successfully researched as a team-level climate or construct (Newman, Donohue & Eva (2017)). The construct or concept of psychological safety has existed for decades and has been fairly studied in juxtaposition with the personalities of individuals. This researcher believes that psychological safety, as alluded to by Newman, et al., (2017), and personality are better treated as a team-level climates. This researcher believes that the treatment of group psychological safety and group personality in non-western spaces like South Africa may not be considered to be similar to western and English-speaking countries. In the same breath, this researcher believes that a group or team is larger than the sums of individual parts. As such, the research seeks to investigate the impact of group level psychological safety on group personality in Auto Industrial (Pty) Ltd, Johannesburg, South Africa.

### **1.1 Background**

In organizational behavior, mentions of psychological safety trace back to early studies of organizational change, when Edgar Schein and Warren Bennis (1965), noted that psychological safety was essential for making people feel secure and capable of changing (as cited in Schein and Bennis, (1965) in Edmondson and Bransby (2022)). Schein (1993) later discussed the importance of psychological safety for helping people without excessive self-protection mechanisms (Edmondson and Bransby (2022)). William Kahn (1990) introduced psychological safety into the twenty-first century with a qualitative study of a summer camp and an architecture firm, connecting psychological safety to engagement (Edmondson and Bransby 2022). Kahn (1990) as cited in Edmondson & Bransby (2022) also argued that psychological safety assisted people “employ or express themselves physically, cognitively, and emotionally during role performances,” rather than disengage, or “withdraw and defend their personal selves”. Team members in work groups will always expect to be given the benefit of the doubt by their teammates and their superiors – this is a very important characteristic of group psychological safety as far as trust and respect and respect go.

Individuals or team members in the same temporal and geographical setting may have different perceptions and/or appreciations of psychological safety because of their different access to relationships and resources. Ideally, there would be alignment between a person's perceived need for psychological safety and the availability of relationships and resources in their contexts, as far as ecological assets are concerned (Wanless, 2016). As an example, young children now and then show unusual behaviors as a way to express their feelings of insecurity. Pairing these children with caregivers or teachers who give intentional and deliberate effort to nurture a warm, cordial and responsive relationship might increase the child's sense of psychological safety (Driscoll & Pianta, 2010 in Wanless, 2016). Children are able to focus on freely engaging with peers and the activities they have to participate in as a result of the "mutually beneficial" interactions that obtain between the child and his or her context (Lerner, et al, 2012 in Wanless, 2016). According to Wanless (2016), this "may decrease the symptomatic challenging behaviors." According to Wanless (2016), "this interplay between individual characteristics and aspects of the context demonstrates that it may be important to view psychological safety holistically: as the productive accumulation of many factors, generating a perception of safety that is qualitatively distinct from the sum of its parts." It is for this reason that this research seeks to explore the interplay between group psychological safety and group personality: more specifically how the former impacts on the latter.

Modern organizations are encountering far more uncertainty, sophistry and complexity than ever before. As the dynamics of the novel coronavirus pandemic continued to change and offer challenges far bigger than those, approximately initially, organizations around the world found themselves in a state of great continuous seemingly unstoppable change, with tremendously reduced clarity about future market opportunities, operational requirements and strategies, and human resources / human capital models. This tumult has given rise to new risks and new demands for innovation and experimentation in organizations. As a result, the need to inspire and enable people to contribute their knowledge in a timely, candid way has moved to the top of the organizational agenda for research and practice. (Edmondson and Bransby 2022). Today's ever-changing and relentlessly competitive environments have made continuous improvements to organizations and organizational resources like human resources, through learning, change, and innovation extremely and undeniably important to

organizational success. These processes develop across a myriad of levels of the organization as individuals and teams engage in behaviors such as speaking up, collaborating, and experimenting (Grant & Ashford, 2008; Nembhard & Edmondson, 2011 in Frazier, et al., 2017). The roles of group psychological safety and group personality cannot be understated in these interactions.

## **1.2 Research Problem / Statement**

To explore the impact of group-level psychological safety on group personality in non-Western countries: A Case Study of Auto Industrial (Pty) Ltd, Johannesburg South Africa.

## **1.3 Research Objectives**

- To investigate the group psychological safety of non-Western and non-English cultures.
- To examine the group level personality in non-Western countries.
- To proffer recommendations on group psychological safety and personality in non-Western countries.

## **1.4 Research Questions**

- What is the interplay between group level psychological safety and group personality in non-Western cultures, with diverse socio-dynamics?
- How do people with varying levels of individual psychological safety and individual personalities function in work teams that identify as being psychologically safe as a team?
- What group personality emerges from a work that shares group psychological safety in non-western communities?

## **1.5 Proposition**

The synergy between individual characteristics and features of the context in the accumulation of many factors that feed into group psychological safety and group personality are qualitatively easily distinguishable and unmistakable from the sum of its parts. Further in

non-western countries elements of culture, sociodemographic, race and ethnics also play a part in shaping and defining group psychological safety and group personality in ways different or not yet studied or proven in western societies.

## **1.6 Assumptions**

- Group-level psychological safety determines the personality of a work team or work group.
- Group level psychological safety can be influenced by group personality and be positively impacted when the personalities of team members align or vice versa.
- Cultural factors are the most common environmental factors that have a huge influence on group personality. There are innumerable nuances to the amount of value different cultures place different values on different traits. It should also be categorically stated at this point that, what may be considered a positive trait in one culture, say, in the West, may be a negative trait in another, say, South African, in general and South Africa, in particular, resulting in different personality across cultures.

## **1.7 Purpose**

Research has produced empirical evidence that shows that group norms may assist in moderating the relationship of group personality composition and group performance. According to Sidorenico & Borokhovski (2023:6), “cohesion as the psychological unity of the group, perceived from within or from outside, according to one or more attributes of relations: (a) the relationship of actors to the group tasks and the process of joint activities and (b) the relationship between actors.” According to Sidorenico & Borokhovshi (2023:6), “the differing views on aspects of group cohesion as a multidimensional construct” should be acknowledged. Further this research will show that the studies that have been conducted mainly focus on group psychological safety are only focused in western and mainly English-speaking countries. The main purpose of this study is to explore how group psychology safety and group personality co-evolve in an environment that is non-western, in this case South Africa

## **1.8 Justification**

### **1.8.1 Psychological Safety**

The concept of psychological safety has recently taken hold among a variety of practitioners as well (Edmondson, 2019). Thoughtful professionals in a variety of industries are seeking to meaningfully assist organizations make changes to create psychological safety as a long term plan of action designed to advance and nurture learning, innovation, and employee engagement (Edmondson, 2019). It should also be categorically highlighted that the popularity of psychological safety received a remarkable support in the managerial networking space after Charles Duhigg published an article in the New York Times Magazine in February (2016), that reported on a five-year study at Google that investigated what made teams outstanding and phenomenal. According to Edmondson (2019), the study examined several possibilities included whether it mattered if teammates have homogeneous educational backgrounds; whether gender balance was an important factor, and whether socializing outside of work had any bearing to how group psychological safety was achieved and how group personality was configured (Edmondson, 2019). According to The New York Time Magazine (2016), at the end of Project Aristotle as the project was codenamed, Julia Rozovsky and her team concluded that psychological safety was by far the most important of the five dynamics they found. Lastly, according to The New York Times (2016), behaviors such as setting clear goals and reinforcing mutual accountability were also considered pivotal, with the realization that unless team members felt psychologically safe, the other behaviors would not be enough to achieve group psychological safety.

### **1.8.2 Group Psychological Safety**

Team psychological safety or group psychological safety has a mediating role (Edmondson, 1999). Team psychological safety refers to a shared view of team members that it is safe to perform risk-taking practices within their teams (Edmondson and Bransby, 2022). These behaviors include making their voices heard and being able to share opinions and ideas that are not necessarily similar to others' nor popular. This assertion further reinforces the fact that several factors can influence team members' psychological safety (Edmondson and Lei, 2014 as cited in Edmondson and Bransby, 2022). However, leaders are familiar with holding a dominant position in their teams; therefore, they can develop team members' perceptions of psychological safety, in turn developing team creativity (Guo and Wang, 2017 in Edmondson

and Bransby, 2022). The teams' fear of failure significantly decreases when members of a team have a significantly high level of collectivism when they realize that they are operating in psychologically safe environments (Edmondson and Bransby, 2023).

### **1.8.3 Group Personality**

Previous research is diversified about the way that social, economic, and demographic characteristics such as gender and race may play a role in perceptions of psychological safety. (Wanless, 2016). Males are considered as oftentimes perceiving less risk than females (Wang, Kruger, & Walker, 2009 in Wanless, 2016), while blacks, Africans in general, South Africans included are oftentimes less tolerant of risks than whites (Sahm, 2012 in Wanless, 2016). These diversified positions may point to the fact that over and above race and gender, there may be several other factors that are related to perceptions of psychological safety (Wanless, 2016). In addition, developmental stages of group personality cannot always be classified by gender or other commonly employed gender and social categories (Wanless, 2016).

The foregoing arguments are some of the reasons why this research would like to investigate the impact of group psychological safety on group personality - a subject that has not received much attention yet, especially in non-western countries.

Edmondson (2019) poses questions that create an understanding that individual psychological safety of employees in the same organizations do not automatically eventuate in a psychologically safe orientation and a uniform group personality.

### **1.8.4 Culture, Race and Ethnicity**

While the idea that psychology has anchored the experiences of WEIRD (Western, Educated, Industrialized, Rich and Democratic) people (Espinosa & Vernry, 2020 as cited in Arshad & Chung, 2022; Heinrich et al., 2010, as cited in Arshad & Chung, 2022; Senicier & Thalmayer, 2012 as cited in Arshad & Chung, 2022) is not new, it, however, it currently remains an issue worthy of attention. In addition, research studies in psychological research have, in the past, factored out people from multiracial and minority people groups. (Hall et

al., 2016 as cited in Arshad & Chung, 2022; Syed et al., 2018 as cited in Arshad & Chung, 2022).

Culture can be defined as a dynamic set of norms and values that are learned and shared and transmitted through shared activities, definitely change over time, and are shaped to establish and fashion; determine; and decipher, the world around a group(s) of people (Marcus, 2008 as cited in Arshad & Chung, 2022; Matsumoto et al., 1996 as cited in Arshad & Chung, 2022; Rohner 1984 as cited in Arshad & Chung, 2022).

### **1.8.5 Personality Psychology Currently Lacks Research on Culture, Race and Ethnicity**

Due to the fact that the study of personality psychology was initially focused on assessing the mental capacity and brainpower of white men in the military, personality psychology research has, over time, been acutely focused on a limited and exclusive population (Gibby & Zickar, 2008 as cited in Arshad & Chung, 2022; Winter & Barenbaum, 1999 as cited in Arshad & Chung, 2022).

While culture, race and ethnicity are still under-researched, personality psychology has widened in its breadth (Arshad & Chung, 2022). According to Arshad & Chung (2022:4), “a search of the 50 most cited articles that use personality as a keyword, and the results showed that studies used samples predominantly composed of American undergraduate students, and were authored almost entirely by individuals in the western world. These results suggest that researchers in personality psychology should orient themselves toward more meaningfully addressing culture in their work by conducting and prioritizing work that uses non-Western samples.” Additionally, Syed (2021 as cited in Arshad & Chung, 2022), brings to the fore the glaring absence of race, ethnicity and culture in personality research while specifically identifying power, privilege and context, in trying to understand personality. This further highlights that a consideration of structural contexts and social structures and concepts that are seemingly uncommon in personality psychology, like, race, ethnicity and culture, are very important in order for personality to be understood as more than just traits (Arshad & Chung, 2022).

For the most part, research samples in psychology continue to be Western, English speaking countries (Arshad & Chung, 2022). Furthermore, there is a limited number of publications using multi-cultural and ethnic minority perspectives in the American Psychological Association (APA) journals (Arshad & Chung, 2022). On the other hand, most of the articles published in impactful psychology journals do not accentuate race as a matter that deserves attention, while the ones that are highlighted are mostly edited and published by white people who make use of few non-whites in their target populations and participant samples (Arshad & Chung, 2022). The foregoing further suggests that attention to race, ethnicity, and culture are unfortunately not perceived nor appreciated as valuable in established and recognized impactful publications and works to regrettably, further render unimportant the work of researchers who accentuate the need to also pay attention to multiculturalism of people groups and also the importance of minority groups (Arshad & Chung, 2022).

### **1.8.6 Scenarios**

#### **Scenario 1**

##### **A team member is uncomfortable when a co-worker is freely expressing themselves at work**

Ironically, there are probably people at a workplace who actually wish they had a lesser feeling of being psychologically safe at work so that they would actually stop expressing themselves freely at work (Edmondson, 2019). While it is quite enticing to want to mitigate this kind of challenge with a little measure of fear among workmates or teammates, it is never a constructive solution in the long term (Edmondson, 2019). It is the responsibility of colleagues to give a less than efficient and effective co-worker some feedback (Edmondson, 2019). Although it is not always the most enjoyable of tasks to give feedback to a lower achieving colleague, line managers and coaches must understand that in the greater scheme of things, it is actually better for the one receiving the feedback to get it than to remain ignorant. Over and above that, it is quite reasonable to let one's teammate than value what they think they are adding to the team is actually less than what they think they envision (Edmondson, 2019).

## **Scenario 2**

**A team member is concerned that the less interpersonal fear they show, the less popular they are becoming at work.**

This research opines that most people who may be confronted with this awkward scenario, but not uncommon scenario, are goal oriented team members who are deliberate, intentional, thoughtful, and positive to make their workplace an enviable place to work at. Should that be the case, surely, others who are in like manner, willing to learn are in similar fashion likely to appreciate hearing the feedback that their colleagues have for them. Nevertheless, there is a need for co-workers to always deliberate over the fact that feedback should be reciprocal and should always be taken as an opportunity to learn and to also find out where there may be gaps in what one offers to the team psychological safety.

There is also the sad reality that a person may be in a job or organization that does not have a good alignment with their personal values and goals, so much so that, whenever they make contributions for the organization, their colleagues are uninterested and checked out (Edmondson, 2019). This can even lead to high attrition whereby invested but probably misaligned staff leave the organization when they feel that no matter how much they are committed to making a positive impact in the organization, they feel unappreciated (Edmondson, 2019).

## **Scenario 3**

**Learning to be a successful leader of psychological safety**

The majority of people are able to learn and better understand that both the negative and positive impact mental attitude and individual practices has on their colleagues (Edmondson, 2019). While it may be challenging to coach certain people, the generality of colleagues choose to have a constructive rather destructive impact on others, and the bulk of the people are able to have a deep understanding of this dynamic with professional development; that is, training and coach (Edmondson, 2019). In the extreme, excessive self-interest, emotional instability, low emotional intelligence (EI) and other impediments will render it acutely arduous, to near impossible to build psychological safety in a work group or work team. It

should be noted, however, that an invested coach or co-worker who is open minded might actually win this battle, or lose with diminutive margins (Edmondson, 2019).

#### **Scenario 4**

##### **The possibility of creating psychological safety in multicultural populations, non-western and African cultures.**

The vast majority of people believe that it is quite unrealistic to expect employees to take interpersonal risks in the workplace. Hofstede et al., (2010), asserts that in countries social hierarchy is entrenched and the population accepts that power is unequally balanced between the elite members and the lower class members.

Attempting candidness and the reporting of errors in hierarchical societies like China, Japan, Zimbabwe and South Africa, to mention just but a few, would be problematic. The fact that it is near impossible to speak out or highlight errors in hierarchical populations does not mean that psychological safety is therefore not necessary nor possible in such an environment. For as long the work an organization does is dynamic, complex and sophisticated, as is the case in many 21<sup>st</sup> century organizations, working together and depending on one another is very important and the key to achieve this success is nurturing a certain degree of psychological safety. Should employees be reluctant to seek help, they will most likely perform below par. Should organizations, regardless of their size, be reluctant to challenge the status quo, there is a huge risk of succumbing to failure that is avoidable. Although speaking up, reporting error, challenging the status quo, et cetera in hierarchical societies may be tantamount to swimming against the tide, it is possible. When planned and implemented well, these efforts to achieve psychological safety can be a strong source of competitive advantage in an environment where on average psychological safety is low.

Frazier et al, (2007) admit that at the group level of analysis, there are limited in their “ability to assess the full nomological network because considerably fewer studies on psychological safety have been conducted at this level (page 141)

Frazier et al, (2017:146) posit that they provided “initial evidence that culture matters to psychological safety, research that explores psychological safety across a variety of cultures and cultural dimensions is warranted, especially given that most of the research on psychological safety has been conducted in English-speaking, Western countries.” Frazier, et al., (2017:146) further advances that “research can go beyond national culture to shed light on the role of the context in psychological safety’s nomological network. For instance, norms and workplace practices differ by industry.” Furthermore, “formal institutions or “rules of the game” warrant attention. For instance, countries with fragile or corrupt states and ineffective judicial systems often create a climate of cynicism in addition to providing poor protection to the workforce” (ibid; page 146). There is a need for psychological safety, and in this instance, group psychological safety needs to be examined especially in relation to group personality. Psychological safety is, according to Edmondson and Lei (2014:37), a “phenomenon that lives at the group level”. Frazier, et al., (2017:149-150), “highlight areas where research has the potential to fill in existing gaps in the literature. For example, studies have examined how group-level psychological safety is affected by group personality.” There is, however, still a lack of research conducted on psychological safety vis-a-vis group personality at the group level.

### **1.9 Significance / Importance of the Study**

What will help leaders in designing work environments that maximize the beneficial outcomes for their organizations is their ability to understand the benefits that psychological safety brings to organizations, the situations in which psychological safety is most influential, and the many factors that may result in psychological safety (Newman, Donohue & Eva, 2017). According to Edmondson and Lei (2014 as cited in Newman, Donohue & Eva, (2017), psychological safety is becoming increasingly important to organizational success in today’s business environment, given the requirements for employees to share information and exchange ideas with other team and organizational members in the attainment of shared goals. An increasingly growing proportion of work in organizations is undoubtedly becoming specialized, sophisticated and complex in nature, and therefore requires much greater collaboration among individuals than in the past.

### **1.10 Delimitations / Scope of Research**

The research will only focus on the focus business units of Auto Industrial Group (Pty) Ltd, a South African business organization, headquartered in Kempton Park. This study focused on one function of Auto Industrial (Pty) Ltd, namely Auto Industrial - Machining (AIM) which is particularly focused on machining. Overall, Auto Industrial (Pty) Ltd is an integral provider of machining and assembly, ductile, and grey iron castings, and hot steel forgings of various automobile components ([www.autoindustrial.co.za](http://www.autoindustrial.co.za), 2023).

### **1.11 Chapter Summary**

This chapter presented a compelling case for the problem under exploration, the purpose of the study and the research questions to be investigated. The theoretical framework was also introduced.

## **Chapter 2: Literature Review**

### **2.1 Introduction**

Psychological safety finds its roots in the seminal work conducted by Schein and Bennis (1965) on organizational change. Newman, Donohue & Eva (2017) advance that Schein and Bennis (1965) outline the extent to which individuals feel assured and certain about their ability to manage change. Since the mid-1960s, a number of other researchers have investigated the meaning of psychological safety in the world of work. Twenty five years after Schein and Bennis' (1965) seminal work, Kahn (1990) as cited in Newman, Donohue & Eva (2017) research led to re-energizes focus on psychological safety.

Psychological safety is the extent to which people feel comfortable in taking constructive interpersonal risks (Wanless, 2016). According to Wanless (2016:1), "feeling psychologically safe may decrease barriers to engagement and allow individuals to freely exercise agency to activate and interact with the world around them." By considering group psychological safety new insights may be gained about ways to establish environments that are more likely to increase the prospects of people that are willing to engage, learn and grow and feel psychologically safe to do so. Group members who feel psychologically safe will take interpersonal risks to promote engagement, connection and learning with the belief that no one will try to belittle or undermine them for their efforts (Wanless, 2016).

Unfortunately, many individuals are in workplaces that they do not consider psychologically safe. Working in conditions like this hinder the individuals' inclination to participate in experiences that have the potential to facilitate their professional growth and development.

### **2.2 Explanation of the search strategies used for the literature**

In tandem with best practice, this researcher visited and searched for articles in numerous academic databases. This includes, but is not limited to Google Scholar, Emerald, JStor, Science Direct, ProQuest, Academic Edu, and virtual university libraries across the world. This researcher used keywords and phrases like psychological safety, group psychological safety, group personality, team personality, race, culture, and ethnicity. Furthermore, this researcher accessed the reference lists of some of the visited and read articles for additional research on group / team psychological safety and group personality globally.

## **2.3 Definition of the phenomena**

### **2.3.1 Psychological Safety**

Maslow (1945), asserts that psychological safety is achieved when a person meets current and future needs with a sense of feeling confident, safe and free objectivity and open mindedness without fear and apprehension. Employees feel psychologically safe when they feel that their wellbeing is catered for or taken seriously in their work environment. In addition, Chen, Gao, Zhang & Ran (2015), advanced that psychological safety is when employees who wish to take interpersonal risks in the workplace are unafraid to do so without worrying that their self-image, career development or their status in the organization will be negatively affected. Chen, Gao, Zhang & Ran, (2015:434) further posit psychological safety as in when “employees do not worry about self-image, position and negative impact of work, truly express themselves and show the different egos of different contexts.”

According to Chen, Gao, Zhang & Ran (2015:435) further advance that “psychological safety is often used as an index of employee psychological contract, organizational trust, when individuals feel the interpersonal environment is trustworthy, psychological safety is relatively strong.” Chen, Gao, Zhang & Ran (2015:435), further submit that “in the general level, psychological safety perception is regarded as an intermediate link between the organization’s characteristics and individual outcomes (such as employee attitudes, motivation, performance)”

### **2.3.2 Psychological Climate**

Schneider (1975) as cited in Chen, Gao, Zhang & Ran, (2015:434), put forward that “climate is the individual abstract psychological perception for a particular event, condition and experience.” James & James, 1989 as cited in Chen, Gao, Zhang & Ran, (2015:434), thought that psychological climate refers to how employees recognize the influence work environment has on their own welfare in the psychological area. Minxi, 2002 as cited in Chen, Gao, Zhang & Ran, (2015:434) viewed the psychological climate as individual level variables, “the process reaction of individual characteristics, involved in cognition, concept formation and the work environment.” Employees might produce meaning out of relationships, forecast the likely results, and even embark on the next suitable behavior according to their understood psychological climate (Chen, Gao, Zhang & Ran, 2015).

### 2.3.3 Group / Team Psychological Safety

Chen, Gao, Zhang & Ran, (2015) introduced psychological safety from the individual level to the group level, while calling it “team psychological safety” (Edmondson, 1999) and defining as “when members engage in any risky action in a team, the implementation of these actions is safe, can be accepted by colleagues” (Chen, Gao, Zhang & Ran, 2015:434). Edmondson, (1999) as cited in Chen, Gao & Ran (2015:434) “points out that psychological safety of staff is high when: (1) organizational members can speak one’s mind freely; (2) the organization encouraged and allowed risk-taking; (3) organizational members trust and respect each other; (4) organizational members have the same beliefs and opinions for things.” According to Klimoski & Mohammed, 1994 as cited in Chen, Gao, Zhang & Ran, 2015; and Walsh, 1995 as cited in Chen, Gao & Ran, 2015.

Levels	Authors	Definition
individual	Maslow(1945)	a kind of feeling of confidence, safety and freedom detachment out fear and anxiety, in particular, it contains the feeling a person meet current and future needs
	Schein & Bennis (1965)	when organization changes, if members possess the ability of change, they will feel safe
	Jones & James (1979)	Employees might explain things, predict the possible results, and even take the next appropriate behavior according to their perceived psychological climate
	James & James (1989)	A kind of perceive when employees see working environment be help for their own well-being
	Kahn(1990)	employees do not worry about self-image, position and negative impact of work, truly express themselves and show the different egos of different contexts
team	Klimoski et al (1994)	based on trust, similar cognitive and similar beliefs
	Edmonson(1999)	when members engage in any risky action in a team, the implementation of these actions is safe, can be accepted by colleagues
	Yang Minxi(2002)	Team member: (1) organizational members can speak one’s mind freely; (2) the organization encouraged and allowed risk-taking; (3) organizational members trust and respect each other; (4) organization members have the same beliefs and opinions for things.
	Tynan(2005)	Psychological safety is divided into self psychological safety (self-perception of others is safe) and others psychological security (communicating with others feel that they are safe)

Table 2.1: **Some definitions of psychological safety**

Source: Chen, M., Gao, X., Zheng, H., Ran, B., (2015)

The extent to which colleagues feel comfortable to positive interpersonal risks, such as trying something new, reporting an error, bringing up new innovative ideas is known as psychological safety(Wanless, 2016). Wanless (2016:1) posits that “when individuals feel

psychologically safe, they can exercise their agency to engage in experiences and interactions throughout life.” By considering group psychological safety new insights may be gained about ways to create contexts about ways to create contexts that increase the likelihood of a tolerant and non-restricting environment for colleagues to speak out. Wanless (2016:1), further submits that “rather than being inhibited by anxiety and identity management, individuals can focus on activating and accomplishing goals, regardless of the discomfort that inevitably accompanies new experiences and ideas.”

Work groups develop as whole systems that are time and again coordinating with their contexts. Meanings that are established in those coordinated relationships are based on the interchange between the person experiencing them and the context in which they obtain (Overton, 2015 in Wanless, 2016). Resultantly, and obviously because they are different, a variety of people may grasp the same moment, in the same context, as having varying degrees of risk and thus have dissimilar needs for psychological safety (Wanless, 2016).

People must report for duty for their whole being, willing to add value to the work experience and willing to work jointly with one another to find solutions to problems and attain success in work environments that are perennially changing. In order to thrive in the long term, 21<sup>st</sup> century organizations continuously seek and find new and innovative ways to create value.

Broadly speaking, psychological safety is defined as an environment in which team members are comfortable with expressing themselves and being themselves shamelessly and fearlessly. (Edmondson, 2019). When people feel psychologically safe at work they are bold enough to speak up and will indeed speak up without fear and will actually not be embarrassed, given no attention or castigated (Edmondson, 2019). Should coaches and managers want to harness individual and group talent, they need to promote a psychologically safe climate where employees are at liberty to report mistakes, share information and contribute ideas (Edmondson, 2019). This research can only imagine what modern day could achieve if the standard practice became one where employees felt their opinions, contributions and suggestions mattered in the workplace. Edmondson (2019), aptly calls this such an organization a fearless one. Organizations are made up of individuals who work in teams.

The questions are whether a team or work group can have group psychological safety and how much impact that has on group personality.

According to Halfhill, Nielsen, Sundstrom & Weilbaeher (2005:42) opines that “group personality composition refers to the mix of the group members’ individual traits, as reflected in group-level indexes such as average, minimum, maximum, or variance on such traits as individual agreeableness or conscientiousness.” Furthermore, according to Halfhill, Nielsen, Sundstrom & Weilbaeher (2005:44), “group average agreeableness may be expected to correlate with group cohesion, viability (members’ motivation to remain with their team in the future), and performance of work that requires effective handling of interpersonal relationships with customers, suppliers, managers, and others - at least in teams homogeneous enough on agreeableness to avoid personality-related conflicts.”

Wanless (2016), asserts that complete research is diversified on the way that societal and demographic characteristics such as gender and race may play a role in perceptions of psychological safety and that it is of uttermost importance to note, however, that race and gender may be more relevant in moments that directly depreciate this part of their identity. Feeling a discordance between an aspect of one’s identity and the chances of being successful in life in general or in a career, in particular, can be particularly threatening. Further, Wanless, (2016:4) opine that there is dissonance in “being a Black male in institutions with norms that do not align with those identities.” In *ibid* 4, “research has shown that Black male adolescents may feel the need to “act white” or distance themselves from their own identities and peers to be academically successful at school.” A phenomenon nearly similar to the foregoing has been found in research conducted in a production organization (Wanless, 2016). According to Wanless (2016:4), “when the organizations had a more accepting stance on racial diversity, all employees, regardless of their race, felt greater psychological safety and were more engaged at work.”

Beyond sociodemographic characteristics, diverse individual factors may also play a role in perceptions of psychological safety (Wanless, 2016). Employees who have a history of secure attachment in their early childhood may, for example, may find it easier to trust and give fellow colleagues the presumption of innocence. However, an attachment of insecurity can lead to increased sensitivity to signals about whether or not one feels psychologically safe,

such as negative perception of others' feelings (Wanless, 2016). Other early experiences are also important. One study found that children who lived in neighborhoods with higher levels of crime perceived levels of danger in their adult neighborhoods (Wanless, 2016). Additionally, stable attributes like personality can also play a role in determining an individual's tolerance of risk. While these characteristics alone cannot solely shape perceptions of psychological safety. This loop involves an individual perceiving a situation in a certain manner, evaluating whether that level of risk is acceptable enough to engage safely, and subsequently being continuously influenced by the evolving significance of that particular moment (Wanless, 2016)

## **2.4 Underpinning theory(ies)**

### **2.4.1 The Role of Psychological Safety in Human Development**

Psychological safety fosters an environment where individuals can freely engage, connect, and acquire knowledge with the fear of being humiliated, mocked, or shamed (Edmondson and Lei, 2014 as cited in Wanless, 2016). Instead of being hindered by anxiety and the need to manage their identity, individuals can concentrate on initiating and achieving their goals, regardless of the discomfort that is bound to arise from the new experiences and ideas (English and Stengel, 2010 as cited in Wanless, 2016).

Psychological safety plays a crucial role in the study of human development as it empowers individuals to exercise their agency, or their capacity to make choices that shape their growth (Wanless, 2016). Consequently, they can actively participate and adapt as they deem appropriate (Wanless, 2016). The concept of agency is vital in understanding individuals as capable of guiding their development through a nonlinear path of experiences and adjustments (Wanless, 2016). Essentially, feeling psychologically safe can reduce barriers to engagement and enable individuals to freely exercise their agency to interact with and activate the world around them (Wanless, 2016). Regrettably, many individually find themselves in work where they do not perceive psychological safety (Deter & Edmondson, 2011). Living in such contexts can hinder individuals' willingness to engage in experiences that would foster their development (Wanless, 2016).

A sense of psychological safety can have a positive impact on individuals encouraging them to actively and make choices in co-constructing meaningful and productive experiences. This

feeling of freedom allows individuals to engage in authentic ways that align with their personal motivations, leading to ongoing benefits. Moreover, this type of engagement can empower individuals and affirm their identity. Previous research supports the idea that when individuals feel psychologically safe, they are more likely to employ self-regulated strategies such as offering ideas, admitting mistakes, seeking help, engaging in learning opportunities, providing feedback and speaking up.

#### **2.4.2 Situations That Increase the Need for Psychological Safety**

In certain situations, individuals may not feel threatened in terms of psychological safety. However, there are other situations where the perception of risk can be quite high. In these particular situations, individuals have a sense that they will not be given the benefit of the doubt which leads to hesitancy in engaging (Kahn, 1990, as cited in Wanless, 2016). There are several factors that can contribute to a higher sense of stakes in these moments. For instance, when situations are more public, more ambiguous, have more pronounced hierarchies, or involve more salient or identity-related issues, individuals may feel a greater level of risk (Niembhard & Edmondson, 2006 as cited in Wanless, 2016). One reason why taking public risks can feel high stakes is the perception that people who are observing may be evaluating the risk taker (Edmondson, 2002 as cited in Wanless, 2016). For example, individuals who feel they have low status within a group are less likely to feel psychologically safe to engage with the group (Wanless, 2016). However, this is likely to be the case when the group leader emphasizes the importance of everyone's contributions to the group (Huo, Binning & Molina, 2010, Nembhard & Edmondson, 2006b as cited in Wanless, 2016).

#### **2.4.3 Situating Psychological Safety Individual↔Context Processes**

##### **2.4.3.1 Inter-individual Differences in Perceptions of Psychological Safety**

People are complex systems that constantly interact with their surroundings, forming meanings through these interactions. These meanings are shaped by the interplay between the individual and the context they occur in. Consequently, different individuals may perceive the same situation in varying degrees of risk and therefore have different psychological needs. While individuals and contexts cannot be separated and examined independently, there are individual characteristics that influence perceptions of risk and the required level of psychological safety.

In the field of human development research including the work of Wanless (2006), there is a keen interest in understanding the differences and development among individuals. The goal is not only to comprehend the trajectory of human development over time but also to explore how this trajectory may vary across different people.

#### **2.4.4 Structural Validity and Measurement invariance of the short version of the Big Inventory (BFI-10) in selected countries**

##### **2.4.4.1 Main Objective and Sub-Objectives**

Steyn and Ndofirepi (2022) concluded a study with the primary objective of examining the psychometric properties of the BFI-10 instrument. This brief instrument is used to measure the B5P factors. The study utilized data from the World Values Survey (WVS) and focused on four culturally diverse countries: Germany, the Netherlands, Rwanda, and South Africa. In addition to this main objective, the study also aimed to determine the suitability of a five-structure model proposed in B5P for both WEIRD (western, educated, industrialized, rich, and democratic) and non-WEIRD countries. Furthermore, it sought to assess the measurement invariance of the short version of the Big Five Inventory in both types of countries. The study by Steyn and Ndofirepi (2022) contributes to the field by comparing and contrasting the psychometric properties of the BFI-10 instrument in different cultural contexts.

The focus of the literature review was on the B5P conceptualization, as well as the concept of measurement variance and the importance of testing for it. It was discovered that while the B5P conceptualization is widely accepted, it is without criticism, particularly regarding its applicability as a universal theory of personality (Steyn and Ndofirepi, 2022)

The findings from the explanatory factor analyses (EFA) indicate that the model is partially valid in WEIRD contexts but invalid in non-WEIRD contexts. The results demonstrate that, in terms of configural level of measurement invariance, WEIRD countries largely met the criteria, whereas the non-WEIRD data did not support the proposed theoretical structure at all (Steyn and Ndofirepi, 2022).

These findings highlight the challenge in comparing personality score levels in cross-cultural studies. This supports Hofstede and McCrae's (2004) assertion that the perception of

personality dimensions is influenced by cultural context. Therefore, researchers should not assume that personality instruments are equally valid in settings other than those in which they were originally developed (Steyn and Ndofirepi, 2022).

## **2.5 Discussion of existing models/frameworks and key concepts and areas**

### **2.5.1. Conceptualizations of Personality Already Include Culture, Race and Ethnicity**

Personality psychology is commonly associated with the Big Five personality dimensions, which are considered as indicators of one's personality (Arshad & Chung, 2022). However, apart from the recommendations made by Arshad & Chung, 2022 regarding the conceptualization of personality, there are other approaches to studying personality. One such approach is the three-level organizational system, which takes into account the influence of culture, race, and ethnicity on personality traits. This approach examines characteristic adaptations within specific contexts and how they are shaped by social experiences. It also emphasizes the importance of life narratives, as they allow individuals to express the meaning they derive from their cultural experiences (McAdams & Pals, 2006 as cited in Arshad & Chung, 2022).

Furthermore, providing information about the cultural context of the sample can help challenge the norms of mainstream personality psychology in relation to culture, race and ethnicity. It is important to consider the population from which the sample is drawn and understand their norms, beliefs, and cultural practices (Arshad & Chung, 2022). Additionally, readers or consumers of such research should be aware of the historical, social, and cultural factors that may influence their interpretation of the study results (for example, Muthukasha et al 2021 as cited in Arshad & Chung, 2022; Sullivan, 2020 as cited in Arshad & Chung, 2022).

In pursuit of enhancing personality research, it is crucial to recognize the existence of broader, systemic factors. Firstly, the incentives associated with academic publishing and job stability within the field can dissuade researchers from integrating race, ethnicity, and culture into their studies (Arshad & Chung, 2022). Consequently, research focusing on racial subjects is less likely to receive funding and publication opportunities, resulting in a scarcity of studies employing this perspective in esteemed journals (Dupree & Boykin, 2021 as cited in Arshad and Chung, 2022).

## **2.6 Discussion of Key Variables / dimensions**

### **2.6.1 Interpersonal Factors**

The perception of psychological safety within an organization is greatly influenced by the relationships between employees and other individuals. This is because positive interpersonal interactions can effectively reduce conflicts and eliminate uncertainty, thereby ensuring psychological safety (Kahn, 1990 as cited in Chen, Gao, Zheng & Ran, 2015). According to Kahn, (1990) and May et al. (2004) as cited in Chen, Gao, Zheng & Ran (2015), interpersonal trust and support play a crucial role in enhancing employees' psychological safety.

### **2.6.2 Team Psychological Safety**

Currently, the primary method of measuring psychological safety is through the use of a 7-item scale developed in 1999, as mentioned in the study conducted by Chen, Gao, Zheng & Ran in 2005. This scale was specifically designed to assess team psychological safety. The items included in the scale are as follows: (1) if you make a mistake on this team, it is often held against you; (2) Members of this team are able to bring up problems and tough issues; (3) People on this team sometimes reject others for being different; (4) It is safe to take a risk on this team; (5) It is difficult to ask other members of this team for help; (6) No one on this team would deliberately act in a way that undermines the efforts; (7) Working with members of this team, my unique skills and talents are valued and utilized.

The significance of trust within groups and organizations has been widely acknowledged by researchers. For instance, Golembiewski and McConkie (1975), as cited in Edmondson (1999), and Kramer (1999), as cited in Edmondson (1999), have emphasized the importance of trust. Trust is defined as the belief or expectation that the future actions of others will be beneficial (Mayer, Davis, & Schoorman, 1995; Robinson, 1996), as cited in Edmondson (1999). Team psychological safety encompasses more than just interpersonal trust; it refers to a team climate characterized by trust and mutual respect, where individuals feel comfortable being themselves (Edmondson, 1999). In order for team psychological safety to be considered a group-level construct, it may be a shared perception among team members rather than an individual characteristic. Previous studies have examined the similarity of beliefs within social systems such as organizations and work groups (Klimoski & Mohammed, 1994; Walsh, 1995), as cited in Edmondson (1999).

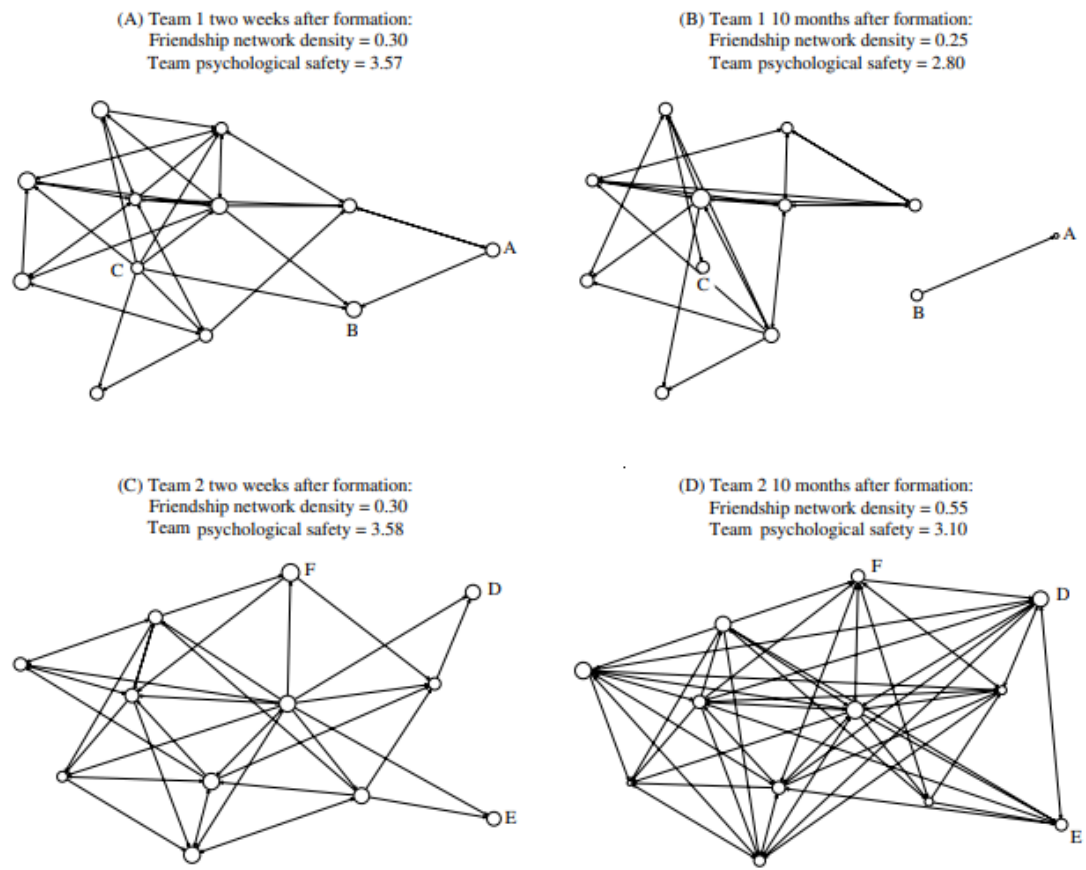
Research on distributive justice supports the importance of interpersonal inferences in groups. It reveals that individuals prioritize relational aspects over instrumental factors when evaluating allocation decisions made by authority figures. People pay close attention to the tone and quality of social processes and are more likely to comply with them when they feel appreciated (Tyler & Lind, 1992 as cited in Edmondson, 1999).

## **2.7 Literature Synthesis and Conceptual Framework/Model**

### **2.7.1.1 The Coevolution of Network Ties and Perceptions of Psychological Safety**

During the first ten years of the 2000s, numerous team researchers have embraced a psychological approach, highlighting the significance of emergent team states in elucidating team processes and outcomes. These emergent team states among team members. Notable studies by Matthieu et al. (2008) and Marks et al. (2001), as cited in Schulte, Cohen & Klein (2010), have contributed to this team orientation. The research conducted in this field suggests that team members' perception of their team's cohesiveness, climate, psychological safety, and the distribution of expertise have a predictive influence on crucial team processes and outcomes. On the other hand, some researchers have taken a sociological perspective, documenting the impact of team social networks on team outcomes. These social networks refer to the intricate web of interpersonal connections among team members. Brass (1984) as cited in Schulte, Cohen & Klein (2010), has extensively explored this aspect. Research in this domain indicates that dense friendship and network within a team can enhance team effectiveness and validity. Furthermore, team members' perceptions of their team play a dual role in both reflecting and shaping the extent to which they seek advice, help, and support from one another, or avoid interactions due to the fear of conflict or difficulty. Noteworthy studies by Dean and Brass (1985), as cited in Schulte, Cohen & Klein (2010), have contributed to this understanding.

It is intuitively evident that the perception of team members regarding their own social network ties and those of their teammates are likely to coevolve. However, the mechanism behind this coevolution remains puzzling (Schulte, Cohen & Klein, 2010). To illustrate this, this researcher would like to consider two teams presented in Figure 2A of Schulte & Klein's 2010 study.



Notes. The graph displays two teams two weeks after their formation (A and C) and immediately prior to disbanding, 10 months after their formation (B and D). The nodes represent all team members. The size of the nodes represents their individual perceptions of team psychological safety, with larger circles indicating a more positive perception of team psychological safety. Ties are directed friendship ties. Psychological safety is measured on a scale of 1 to 5, with 1 being very low and 5 being very high.

**Figure 2.1: Examples of Differentiation Coevolution Patterns of Team Members' Perceptions and Network Ties**

Source: Schulte, Cohen & Klein, (2010)

Shortly after their establishment, both of these teams had comparable levels of friendship network density and team psychological safety, which is the primary focus of Schulte, Cohen & Klein's research in 2010. However, after several months, the two teams displayed significantly contrasting levels of psychological safety and friendship network density. In order to effectively impact a team's progression towards higher psychological safety and network density, researchers must acquire a deeper understanding of how team members' connections and perspectives evolve together over time (Schulte, Cohen & Klein, 2010).

Schulte, Cohen & Klein (2010), have developed and tested a framework aimed at understanding how team members' perceptions of their team and their social network ties evolve together. The framework proposed by Schulte, Cohen & Klein (2012) consists of six

socio-psychological mechanisms, three of which explain how individuals' perceptions of the team influence their network ties, and three that explain how individuals' network ties influence their perceptions of the team. To test these mechanisms, Schulte, Cohen & Klein (2010), collected data on team members' advice, friendship, and difficult ties, as well as their perceptions of their team's psychological safety, at three different points over a 10-month period involving 69 work teams. The focus of their study was on psychological safety, which refers to the shared belief among team members that the team is a safe environment for taking interpersonal risks. The concept is not only seen as an important factor for team learning and effectiveness, but also as an interesting phenomenon in its own right.

Schulte, Cohen & Klein, 2010's conceptual framework and research findings provide four significant contributions to the literature by combining sociological and psychological perspectives on team development.

#### **2.7.1.2 Key Contributions of the Coevolution of Network Ties and Perceptions of Psychological Safety Framework**

The previous conceptual models and studies, such as Pastor et al. (2002), which suggested one-way effects of team networks on emergent team states, were challenged by the framework and findings of Schulte, Cohen & Klein (2010). These models and studies overlooked the individual-level mechanisms that connect social network ties and perceptions of the team, this potentially misrepresenting the coevolution of team networks and emergent team states (Schulte, Cohen & Klein, 2010).

In addition, the framework and findings of Schulte, Cohen & Klein (2010) provided new insights into the concept of "emergence" within the team literature. This term is commonly used to indicate that team-level properties originate from the behaviors, perceptions, attitudes, and effect of individual team members. However, it is often not clearly defined or studied in detail (Schulte, Cohen & Klein, 2010).

The research conducted by Schulte, Cohen & Klein (2010) provided new insights into the factors that contribute to both team psychological safety and interpersonal ties within teams. Previous studies (for example, Edmondson, 1999; Detert and Burns, 2007 as cited in Schulte, Cohen & Klein, 2012) have focused on team-level antecedents of psychological safety, such

as the behavior of the team leader. However, the findings of this framework suggest that individual team members' network ties can also play a role in shaping the level and distribution of psychological safety within a team (Schulte, Cohen & Klein, 2012). Additionally, previous research has shown that team members' enduring demographic and personality traits can influence their network ties (for example, Klein et al. (2004); Mehra et al. 2001 as cited in Schulte, Cohen & Klein, 2012). In contrast, this framework and the findings highlight the potential impact of team members' perceptions of the team on the network ties they establish and maintain (Schulte, Cohen & Klein, 2012).

Furthermore, this research and framework offer practical suggestions for team managers, leaders, and members to intervene and influence the level of psychological safety of social networks that develop within a team (Schulte, Cohen & Klein, 2012).

### **2.7.2 Discussion of contradictions in the research area**

Psychological safety environments reduce teams' apprehension. Past studies have produced conflicting results regarding the potential influence of socio-demographic factors like culture, race, and ethnicity on the perception of psychological safety. Furthermore, it remains uncertain whether the implementation of group psychological safety and group personality, as observed in Western countries, should be replicated in non-WEIRD countries.

### **2.7.3 Research proposition**

The interaction between personal traits and contextual traits and contextual factors contributes to the amalgamation of various elements that contribute to group psychological safety and group personality, which are qualitatively unique compared to their individual components. Moreover, in non-western nations, cultural aspects, socio-demographics, race, and ethnicity also influence the formation of group psychological safety and group personality in manners that have not been extensively explored or validated in western societies.

### **2.7.4 Crystallization of research questions**

- What is the interplay between group level psychological safety and group personality in non-Western cultures, with diverse races and diverse ethnicities?

- How do people with varying levels of individual psychological safety and individual personalities function in work teams that identify as being psychologically safe as a team?
- What group personality emerges from a work that shares group psychological safety in non-western communities?

## **2.8 Chapter Conclusion**

This chapter examined the chosen and relevant literature pertaining to the group psychological safety and group personality. The researcher offered an extensive examination of the literature pertaining to the issue being investigated and the background information presented in the initial chapter.

## **Chapter 3: Research Methodology**

### **3.1 Introduction**

The previous chapter provided a comprehensive literature review, while this chapter focuses on the research methodology employed in the study to address the research objectives. This chapter presents the research process, which outlines the steps followed in the study, including research philosophy, approach, strategy, data collection process, and data analysis technique.

In this study, a quantitative approach was utilized for the research process. The researcher adopted the research onion strategy proposed by Saunders et al. (2016). Therefore, it is essential for the researcher to select a design that can provide relevant information on the research proposition and achieve the underlying objectives effectively and accurately. Research design is commonly categorized into qualitative and quantitative methodology.

The research design serves as a blueprint for conducting a project (Hair, et al. 2007). Given this principle, it is crucial for the researcher to select a design that can provide relevant information on the research proposition and achieve the underlying objectives in an effective and accurate manner. Research design is typically categorized into qualitative and quantitative methodologies. Quantitative research involves methods like semiotic analysis of texts and participant observation (Spiggle, 1994).

On the other hand, the quantitative methodology aims to identify and prioritize the various factors that influence an action or decision (Gurley, Lin and Ballou, 2005). Effective quantitative research addresses objectives by employing empirical assessments that involve numerical measurement and analysis techniques (Zikmund & Babin, 2007), and utilizes statistical analysis (Maholtra, 2007).

### **3.2 Recap of Research Aim, Main Study Objective, Major Question, Proposition**

#### **Main Aim**

- A Case Study to Auto Industrial (Pty) Ltd in Johannesburg, South Africa aims to

investigate the influence of group-level psychological safety on group personality in non-western countries.

### **Main Study Objective**

- To investigate group psychological safety of non-western and non-English cultures.

### **Major Question**

- What is the interplay between group level psychological safety and group personality in non-Western cultures, with diverse socio-dynamics?

### **Proposition**

- The interaction between personal traits and contextual elements contributes to the imagination of various factors that contribute to group psychological safety and group personality, which is fundamentally different from the mere combination of its individual components. Moreover, in non-western nations, cultural aspects, sociodemographics, race, and ethnicity also influence and define group psychological safety and group personality in unique ways that have not been extensively explored or validated in western societies.

### **3.3. Research Philosophy**

Quantitative research refers to research that utilizes numerical data and numerical mathematically based methods, particularly statistics, to explain phenomena. It can also be seen as a form of empirical research that investigates social phenomena or human practices, testing theories that involve variables measured with numbers and analyzed using statistics to determine if the theory can explain or predict the phenomena of interest (Cresswell, 1994; Gay & Airasian, 2000 as cited in Yilmaz, 2013).

Qualitative research, on the other hand, is considered “difficult to define” due to its multifaceted nature and the various paradigms that underpin it (Hitchcock & Hughes, 1995:25 as cited in Yilmaz, 2013). However, some researchers have provided a working definition. According to Strauss & Corbin (1998) as cited in Yilmaz (2013:10-11), qualitative research refers to any type of research that produces findings not obtained through statistical procedures or other means of quantification. This type of research is based on the

epistemological assumption that social phenomena are complex and complex and interconnected, making it inappropriate to reduce them to isolated variables and use the term “variable” when defining qualitative research.

### **3.4 Research Approach**

#### **3.4.1 Deductive**

Deductive reasoning is a process in which the conclusion is logically derived from a set of premises that are based on theory. This means that the conclusion is logically derived from a set of premises that are based on theory. This means that the conclusion is considered true only when all the premises are true (Ketokivi & Mantere, 2010 as cited in Saunders, Lewis & Thornhill, 2019). When a researcher begins with a theory, often developed through their review of academic literature, and then designs a research strategy to test the theory, they are using a deductive approach.

The deductive approach, also known as the hypothetico-deductive or falsification approach, is the opposite of an inductive approach. It starts with a hypothesis or a set hypothesis that forms a theory, which could potentially provide an answer or explanation for a specific problem. The approach then uses observations to rigorously test the hypothesis (Malhotra, 2017).

In a deductive argument, the reasoning moves from premises, with at least one being a general or universal statement, to a conclusion that is a singular statement (Malhotra, 2017). Deductive propositions follow a hierarchy from theoretical to observational, from abstract to concrete (Malhotra, 2017). The deductive thinker believes that observational is guided and guided and presupposed by theory, and this approach is sometimes informally referred and presupposed by theory, and this approach is sometimes informally referred to as a “top-down” approach is sometimes informally follows from the premises or available facts (Malhotra, 2017)

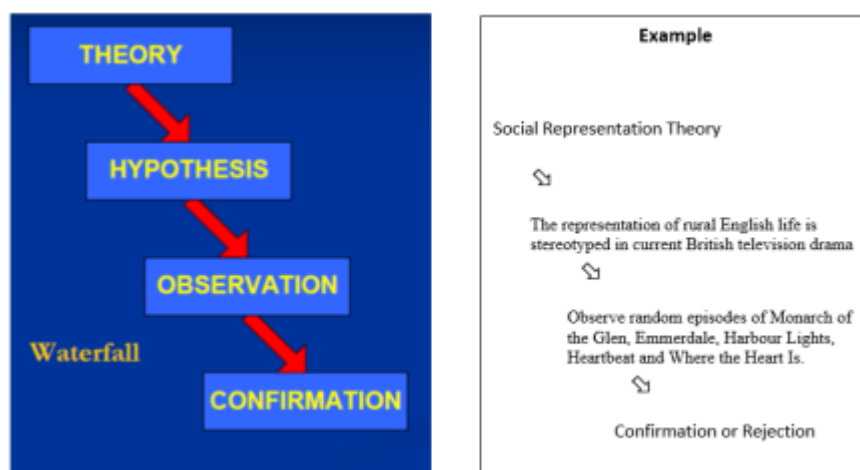


Figure 3.1: **Deductive Research Strategy**

Source: Malhotra, 2017

### 3.4.2 Inductive

This study employed the inductive research strategy. The objective of this strategy is to establish limited generalizations regarding the distribution and patterns of associations among observed or measured characteristics of individuals or social phenomena. The inductive approach to inquiry constructs generalizations based on observations of specific events. It begins with specific statements and progresses towards generalizations or universal propositions (Malhotra, 2017). To implement the inductive research approach, empirical data related to the problem must be collected and analyzed and new hypotheses are derived based on the findings (Eisenhardt, 1989, in Henderson, 2015). The aim of this approach is to gain a better understanding of the problem and its influencing factors, ultimately contributing to the development of the new theories.

This approach assumes that explanations about the functioning of the world should be grounded in facts obtained through objective and unbiased observation, rather than subjective notions. It posits that nature will reveal itself to an impartial and receptive mind (Malhotra, 2017).

The inductive strategy asserts that all scientific knowledge is built upon observations, which serve as a reliable foundation for deriving knowledge. It argues that reality is directly perceived through this perception and may be enhanced by instruments. The conclusion of an

inductive argument goes beyond the premises and expands knowledge by surpassing actual experiences (Malhotra, 2017).

The greater the number of observations that illustrate a correlation between phenomena, the greater the likelihood that the overall statement is accurate. The validation of inferred generalizations through observations, specifically those that seem to endorse it, is crucial. Inductive reasoning operates in the opposite direction, moving from specific observations to more extensive generalizations and theories (Malhotra, 2017).

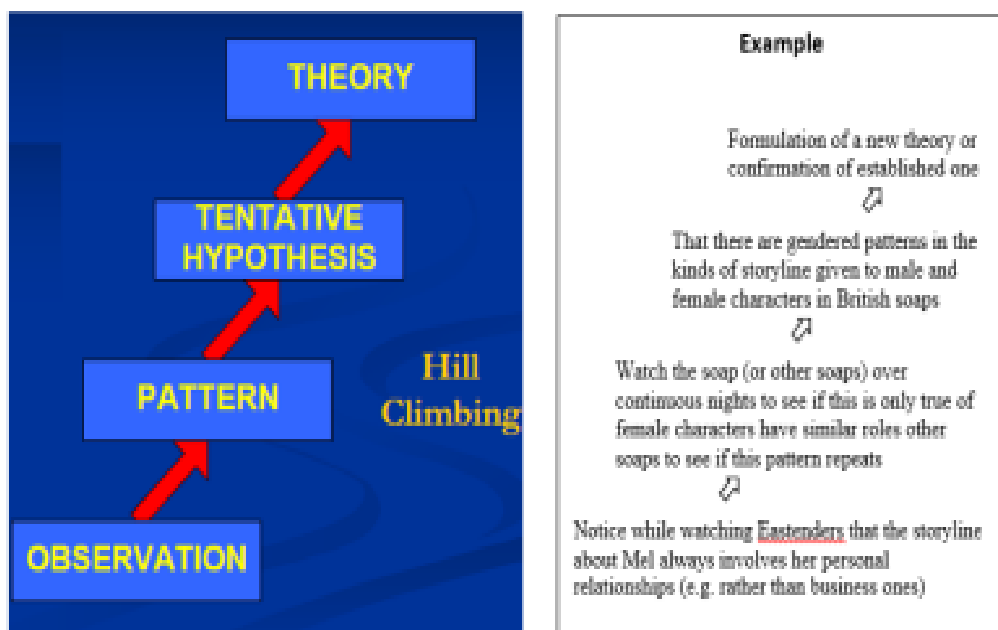


Figure 3.2: Inductive Research Strategy

Source: Malhotra, 2017

Inductive	
<b>Aim:</b>	To establish descriptions of characteristics and patterns
<b>Ontology:</b>	Cautious, depth or subtle realist
<b>Epistemology:</b>	Conventionalism
<b>Start:</b>	Collect data on characteristics and/or patterns Produce descriptions
<b>Finish:</b>	Relate these to the research questions

Figure 3.3: **Inductive Research Strategy**

Source: Malhotra, 2017

### 3.5 Research Design

#### 3.5.1 Descriptive

Descriptive study designs serve the purpose of providing a simple description of the characteristics of the sample under investigation. These types of studies aim to describe the distribution of one or more variables without considering any causal or other hypothesis (Aggarwal & Ranganathan, 2019). Additionally, a descriptive design may attempt to generalize the findings from a representative sample to a larger target population, as seen in a cross sectional survey (Omair, 2015). The key features shared by all descriptive study designs is the absence of a comparison group, with a single sample studied.

Regardless of the subtype, descriptive studies offer several advantages. Firstly, they are often easy to conduct, particularly in the case of cross-sectional studies. Secondly, data collection is typically straightforward and can be accomplished in a single encounter. As a result, descriptive studies are often considered inexpensive, quick, and require minimal effort. Moreover, these studies usually do not encounter significant ethical scrutiny unless they involve the collection of confidential information.

However, the main disadvantage of cross-sectional studies is the validity of their results. The accuracy and representativeness of the study sample, as well as the use of precise and consistent measurement tools, greatly influence the validity of the findings.

### **3.5.2 Exploratory**

Interviewing individuals is a form of exploratory research that gathers data through verbal and sometimes narrative communication. This type of data can be categorized using various methods, such as hermeneutics or grounded theory. The conclusions drawn from these analytical tools are typically inductive. These characteristics classify interviews as qualitative research aligning with the categorization found in literature.

During exploratory research, it is important for the researcher to be open to changing their direction based on new data and insights. Exploratory research aims to explore research questions rather than provide final answers to existing problems to define the nature of the problem has not been clearly defined, helping to define the nature of the problem and gain a better understanding of it.

The advantages of exploratory research include lower costs, flexibility and adaptability, laying the groundwork for future studies, and potentially saving time by identifying worthwhile research avenues at an early stage.

There are several drawbacks associated with exploratory research. These include, but are not limited to, the inclusive nature research findings. Additionally, the generation of qualitative information and the interpretation of such information are susceptible to bias. Moreover, exploratory research typically relies on a limited number of samples, which may not accurately represent the target population. As a result, the findings of explanatory research cannot be generalized to a broader population. Furthermore, the findings of these studies are often not practical for decision-making purposes.

### **3.5.3 Explanatory**

Explanatory research is a method that aims to understand the reasons behind a phenomena when there is limited information available (George & Merkus, 2023). It plays a crucial role in increasing the researcher's comprehension of a specific topic, determining how or why a

particular phenomenon occurs, and making predictions about future events. This type of research is often conducted at the initial stages of a study, serving as a starting point for further investigation. Although there may be existing data on the researcher's topic, the specific causal relational relationship they are interested in might not have been extensively studied.

One of the disadvantages of using the explanatory research design is that it adds significance to previous research, filling gaps in existing analyses, and providing insights into the underlying reasons behind phenomena. Moreover, explanatory research is highly flexible and can be replicated, ensuring high internal validity when conducted correctly. Additionally, it is a cost- and time-effective approach, allowing researchers to utilize pre-existing resources to guide their study before committing to more extensive analyses.

However, it is important to note that explanatory research does not contribute to the solidification of theories, hypotheses, or propositions. It often lacks conclusive results and its findings may not be applicable to a broader body, lacking external validity. Furthermore, there is a risk of mistaking coincidences for causal relationships, making it challenging to determine the causal variable and its effect.

### **3.6 Research Strategy - Case Study**

#### **3.6.1 Purpose and Structure**

A research method refers to a systematic approach to conducting research, starting from the underlying philosophical assumptions and progressing to the research design and data collection process (Malhotra, 2017). Another way to define a case study is as a research strategy that involves investigating a specific contemporary phenomenon within its real-life context using multiple sources of evidence (Robson, 2022 as cited in Saunders, Lewis & Thornhill, 2009). Yin (2003) as cited in Saunders et al. (2009) also emphasizes the significance of context, stating that the boundaries between the phenomenon under study and the context in which it is studied may not be clearly defined within a case study. The choice of research method has an impact on how data is collected by this researcher who opted for the case study method. The term "case study" can have various meanings. It can refer to a unit of analysis, such as a case study of a specific organization, or it can describe a research method that utilizes the case study approach

(Malhotra, 2017). In this study, the case study is used to describe a unit of analysis. A case study is an empirical investigation that examines a contemporary phenomenon within its real-life context, particularly when the boundaries between the phenomenon and its context are not clearly defined (Yin, 2002 in Malhotra, 2017). This definition highlights the importance of the case study as a research design, emphasizing its qualitative orientation and the significance of the methodological and conceptual pluralism. Case study design is typically suitable when there are numerous variables within a small number of applied units of analysis and when the context plays a crucial role (Vaus, 2001 in Henderson, 2015).

The case study research method is well-suited for this research as it examines a current phenomenon within its real-life setting. While there are various approaches to collecting data and interpreting empirical evidence, it is not recommended to combine multiple research strategies in a study. Conducting case studies may pose a risk of lacking objectivity, quantification, and representative significance. However, the case study method remains highly popular, even for research questions outside of the social sciences (Eisenhardt, 1989 in Henderson, 2015).

### **3.6.2 Justification of the Case Study as a Research Strategy**

The case study is often subject to critical discussion as a research approach. Many authors argue that it is a weaker form of social science research compared to other approaches. Yin (2003) in Henderson (2015), states that case studies are often seen as qualitative in nature, which leads to criticism regarding their lack of objectivity, quantification, representative significance, and robustness. Other research approaches, such as experiments, purely quantitative surveys, analysis of archived data, or historical considerations, are considered to have more favorable qualities in these aspects (Henderson, 2015). Shavelson & Townes (2002), social research authors, even advocate for different approaches for each phase of an investigation. They argue that surveys and storytelling are more suitable for the descriptive phase, while causal relationships between observed phenomena can only be explored in the explanatory phase and within the context of an experiment (Henderson, 2015).

For this researcher, the case study strategy is an integral part of gaining a comprehensive understanding of the research context and the processes involved (Morris & Wood, 1991 as cited in Saunders, et al, 2009).

The choice of the appropriate research approach should be determined based on the objective of the review, which limits the available research options. The survey can be viewed as a substitute for a case study that is often criticized for its lack of objectivity, quantifiability, representative validity, or robustness as a research approach. In an attempt to address these limitations, the case study aims to eliminate the need for a large number of limitations, the case study requires significant time and personnel investment for the entire research project. Additionally, the abundance of data obtained can make it challenging to effectively utilize the typical instruments of a case study, potentially hindering the identification of significant observations (Henderson, 2015). In such situations, a standardized survey serves as a preferable alternative to a case study as it allows for the data collection from a large sample.

### **3.6.3 Quality Necessity to the case study research**

The qualitative research conducted in the context of case study offers distinct advantages over the purely quantitative data. It allows the researcher to gain a deeper understanding of the meaning behind observed actions and events. This insight is not possible with quantitative data alone. However, the very nature of qualitative data, with its inherent subjectivity, makes the case study vulnerable as a research strategy. The quality of a case study can be logically and structurally assessed based on four criteria outlined by Yin, (2003).

It is important to note that the lack of integration between quantitative and qualitative research approaches in the social sciences has resulted in researchers expressing strong opinions about the divisions and hesitance to combine these approaches. Quantitative approaches involve statistical analysis of data collected through standardized questionnaires and surveys, which have been transformed and simplified numerically. These approaches rely on a sampling frame that is representative of a larger population.

The case study strategy possesses significant capability in generating answers to the question “why?” as well as the “what?” and “how?” questions. However, the survey strategy tends to focus more on the “what?” and “how?” questions (Saunders, et al., 2009). Therefore, a combination of data collection techniques is likely to be employed. These techniques may include interviews, observation, documentary analysis, and questionnaires. Qualitative data obtained through the case study research offer researchers more opportunities to understand the meaning behind observed actions and events, giving them an advantage over the purely

quantitative data (Henderson, 2015). However, the inherent “softness” of qualitative data also makes the case study vulnerable as a research strategy. The quality of a case study can be logically and structurally deduced from four criteria outlined by Yin (2003:33).

The case study approach can be categorized into four groups based on two distinct dimensions: a single case versus multiple cases, and holistic case versus embedded case (Yin, 2003 as cited in Saunders, et al., 2009). This research is a single case study. A single case is often chosen when it represents a critical, extreme, or a unique case. In this instance, a single case was selected to provide the researcher with an opportunity to observe and analyze a phenomenon that is rarely studied (Saunders, 2009). Undoubtedly, a crucial element of utilizing a singular case defining then specific case. In the case of numerous part-time students (including the researcher in question), this refers to the organization they are employed by. However, it is important to highlight that this researcher does not work for the target organization, but had been granted permission to collaborate with it and possessed comprehensive access to the target population during data collection. Ultimately, it can be contended that employing a case study strategy can prove highly valuable in exploring established theories. Furthermore, a meticulously constructed case study strategy has empowered this researcher to challenge an existing theory and generate a plethora of new research inquiries (Saunders, et al., 2009).

#### **3.6.4 Advantages and disadvantages of case study research**

The selection of the research method is dependent on the research question at hand. The case study research method is particularly suitable for research questions that aim to explain phenomena by exploring the “how” and “why” aspects (Henderson, 2015). Moreover, the case study method becomes more relevant when in-depth explanations and descriptions are required (Henderson, 2015). This method finds application in various fields such as psychology, sociology, political science, anthropology, social work, business, education, nursing, and community planning (Yin, 2014 as cited in Henderson, 2015). Another advantage is that case study research can be conducted retrogressively as well as prospectively (Zucker, 2009 and Stake, 1995 as cited in Henderson, 2015).

However, it is important to consider certain issues when dealing with the case study research. In the case of a single-case design, the reliability and generalizability of the findings may be

subject to criticism (Henderson, 2015). Additionally, criticism arises due to the extensive involvement of the researcher in the study, which may potentially influence the results (Yin, 2014 as cited in Henderson, 2015). Some argue that case study results lack a systematic procedure, leading to its dismissal as empirical research (Yin, 2014 and Jonker and Pennick, 2010).

### **3.6.5 Time Horizons**

This study adopted a cross-sectional approach, which involves examining a specific phenomenon or phenomena at a given moment. This researcher acknowledges the inherent limitations associated with this approach.

#### **3.6.5.1 Cross-sectional Study**

While cross-sectional studies often utilize surveys as their primary data collection methods, this particular researcher employed the interviews conducted over a short timeframe. Cross-sectional studies are widely recognized as one of the most common and well established study designs. In such studies, either the entire population or a subset of it is selected, and data is collected to address the research questions at hand. The term “cross-sectional” refers to the fact that the gathered information represents a snapshot of the variables at a single point in time.

### **3.7 Methodology and Data Collection Methods**

The structure and design of case study outline the logical framework that connects the collected data and the conclusions drawn from them to the research questions at hand. This framework serves as a model and a plan that guides the process of data collection, analysis, and interpretation. It also reflects the theoretical constructs and assumptions underlying the research design. In many ways, this logical model resembles the construction of an experiment.

In a case study, the research question should focus on understanding whether an event in its actual environment is desired, when exploring themes within an evaluation, when investigating situations with uncertain outcomes, or when conducting an evaluation study.

### **3.7.1 Primary Data Collection**

#### **3.7.1.1 Questionnaire (interview guide) development**

The development of a questionnaire involves engaging and unique forms of conversation to collect information. This conversation can occur in various ways, such as face to face, over the phone, or through mail. However, it follows distinct rules that differentiate it from regular conversations (Olsen & St George, 2004). In order to ensure clarity and understanding, this research opted for easily comprehensible questions with specific characteristics:

- the use of vocabulary that is appropriate for the target population,
- simple sentence structure,
- minimization of ambiguity and vagueness (Olsen and St George, 2004). While keeping vocabulary and sentence and sentence structure simple is relatively straightforward, eliminating ambiguity in questions can be more challenging (Olsen & St George, 2004).

#### **3.7.1.2 The Interview**

An interview refers to a one-on-one discussion between a researcher and a participant (Sreejesh, et al., 2014 as cited in Henderson, 2015). The primary objective of conducting an interview is to gain a deeper understanding of the interviewee's motivations, beliefs, and perspectives (Henderson, 2015). Generally, there are three types of interviews: standardized, semi-structured, and unstructured. Standardized interviews follow a set format and ask closed-ended questions, while semi-structured interviews offer more flexibility in terms of questions, order and allow the researcher to rephrase or delve deeper into inquiries based on the research objectives (Henderson, 2015). On the other hand, unstructured interviews have no specific format or order, allowing the interviewee to guide the conversation and share relevant information in any direction. In all three types of interviews, the researcher directly interacts with the research subject particularly in unstructured or semi-structured interviews. However, this direct interaction can introduce interviewer bias (c.f Sreejesh, et al., 2014 as cited in Henderson, 2015). Additionally, interviews are susceptible to interview bias, which further increases subjectivity and makes it challenging for another researcher to reproduce the same results due to slight variations in the interview process (Henderson, 2015). Interviewing individuals is an explanatory research approach that relies on verbal and sometimes narrative communication to gather data. Analytical methods such as hermeneutics (Marying, 2002 as cited in Henderson, 2015) or grounded theory (Spencer, et al., 2013 as cited in Henderson, 2015) can be used to analyze this type of data. Conclusions drawn from these analytical tools

are typically inductive (Marying, 2002 as cited in Henderson, 2015). The characteristics described classify interviews as a qualitative research method, aligning with the categorization found in literature (Muijs, 2004 as cited in Henderson, 2015).

### **3.7.2 Pilot testing**

The design of a questionnaire is just one step in the overall process of obtaining answers to research questions. Once the questionnaire had been designed it was important to conduct a pilot study to ensure that it was clear and acceptable to the intended audience. This pilot study served as the initial phase of the research protocol and on a smaller scale that helped in planning any necessary modifications for the main study. Particularly in large-scale studies, the pilot study is conducted before the main trial to assess its validity. The pilot study plays a crucial role in laying the foundation for a research project (Hassan, Schattner & Keluarga, 2006). A pilot study is defined as a small scale study that tests the research protocol, data collection instruments, and sample recruitment strategies in preparation for a larger study (Hassan, Schattner & Keluarga, 2006).

In this case, this researcher conducted a pilot study to identify any potential issues or shortcomings in the research instruments before implementing the full study. This involved administering the questionnaire to a small group of 5 individual people working at the Auto Industrial – Machining Plant. The pilot study aimed to address various aspects, such as the wording of the questions, the respondents' understanding of them, and their comfort level in answering them. Additionally, the pilot study aimed to determine if the questionnaire itself was not excessively long and to identify any potential barriers that could hinder obtaining accurate responses.

The pilot study enabled this researcher to acquaint himself with the protocol's procedure and comprehend the challenge of gathering data solely through a self-administered questionnaire. This was due to the target population's demanding shift schedule, which left them with insufficient time to sit down and independently complete the questionnaire.

## **3.8 Population and Sampling Techniques**

### **3.8.1 Population**

AutoIndustrial (Pty) Ltd, the focus of this case study, is a company in Kempton Park,

Johannesburg, South Africa. It is a comprehensive provider of machining and assembly services, as well as ductile and grey iron castings and hot steel forging for various automotive components. Carbide Solutions and Innovations (Pty) Ltd is its affiliate company ([www.autoindustrial.co.za](http://www.autoindustrial.co.za), 2023).

AutoIndustrial's product range encompasses a wide range of chassis and brake products, such as brake discs, steering knuckles, brake drums, hubs, wheel carriers, differential housing, flywheels, pinions, side gears, and complete corner modules ([www.autoindustrial.co.za](http://www.autoindustrial.co.za), 2023).

The company's main office and manufacturing, known as AutoIndustrial Machining ("AIM"), are situated in Kempton Park. Additionally, there are two cast iron foundries: AutoIndustrial Foundry ("AIF") in Wadeville and Isando Foundry ("IF"). The forging plant is also located in Wadeville. These facilities are in close proximity to each other, with a maximum distance of 30 kilometers ([www.autoindustrial.co.za](http://www.autoindustrial.co.za), 2023).

Since 1970, the company has been supplying the automotive industry and has established itself as the leading provider of brake components in the South African market. Throughout the years, it has built strong relationships with major automotive original equipment manufacturers (OEMs) and has become a trusted partner. The company's success can be attributed to its efficient manufacturing processes, long standing customer relationships, and strategic plant locations in South Africa's most developed industrial region ([www.autoindustrial.co.za](http://www.autoindustrial.co.za):2023).

The company's customer base primarily consists of automotive OEMs that have vehicle production operations in South Africa. Notable customers include the local subsidiaries of BMW, Renault-Nissan, Daimler, Schaeffler, Ford, Toyota, Isuzu, Volkswagen, and Mercedes-Benz. Additionally, AutoIndustrial (Pty) Ltd exports some of its products to India and Germany ([www.autoindustrial.co.za](http://www.autoindustrial.co.za):2023).

### **3.8.2 Sample Sizes**

Forty-three plant employees, that is, machine operators, their supervisors and foremen were interviewed.

### **3.8.3 Sampling Methods**

Case studies are qualitative in nature and generally do not subscribe to the quantitative conventions of sampling. One of the best sampling methods suitable for case studies is called purposive sampling. It is called a purposive sample, where the informants are chosen to be able to provide data that are most relevant to this researcher's study.

#### **3.8.3.1 Purposive Sampling**

The researcher used this type of non-probability sampling because it has integral advantages over all other sampling methods in the sense that, through the participants' expertise and experience, the most resolute data is provided.

Purposive or judgement sampling is a deliberate strategy used to gather information that cannot be obtained through other means. This sampling technique, also known as selective or subjective sampling, relies on the researchers' own judgement when selecting participants from a population. The researcher includes cases or participants in the sample based on their belief that they are relevant to the study. Purposive sampling is employed to enhance the research sample by selecting individuals with knowledge, relationships, and expertise related to the research topic. It is also chosen to represent the population being studied and the specific qualities possessed by the participants. By using purposive sampling, researchers are able to address their research questions and achieve their objectives. This type of sampling is commonly used in studies with small sample sizes, such as case studies, and when the researcher wants to select cases that provide particularly informative insights.

### **3.9 Questionnaire Administration / Conducting Interviews**

After receiving feedback from participants in the pilot study, the questionnaire was prepared for distribution to a sample of the population. The process of responding to interview-administered questionnaires relies on the interaction between the respondent, the interviewer or researcher, and the understanding between the respondent, the interviewer or researcher, and the understanding of the research study and questionnaire by the interviewer/researcher. The researcher. This researcher demonstrated consistency in their questioning style, use of prompts, and interaction with the participants. This consistency was maintained not only from respondent to respondent, but also from one interview to the next.

In case studies, self-administration is the most commonly used method for administering questionnaires. Self-administered questionnaires are simple to implement, cost-effective, and effective in maintaining confidentiality (Song, Son & Oh, 2015). Interview-administered questionnaires can be conducted through telephone, email, or face to face interactions. In this particular study, the researcher opted for a face to face approach to accommodate participants with lower literacy levels and to address any potential ambiguities.

### **3.10 Methods of Data Analysis**

#### **3.10.1 Statistical Package for Social Sciences**

The process of data analysis began with the data extraction and coding. The responses were entered into Excel and initially coded. To gain insight into the characteristics of each variable, descriptive statistical analysis was performed using SPSS. This analysis included calculating the mean and the standard deviation of each factor.

To examine trends, the descriptive statistics approach was used, which included analyzing the mean, standard deviation, and the frequency distribution. Microsoft Excel was used to create charts and tables to visually represent the data. The frequencies, percentages, means and standard deviations of both dependent and independent variables were calculated and plotted on charts.

### **3.11 Validity and Reliability**

To minimize the chances of providing an incorrect answer, it is crucial to focus on two aspects of research design: reliability and validity (Saunders, et al., 2009).

#### **3.11.1 Construct Validity**

Construct validity pertains to the establishment of suitable operational measures for the matters or phenomena under scrutiny or investigation (Henderson, 2015).

#### **3.11.2 Internal Validity**

To establish or illustrate the presumed cause-and effect connections among observations, it is necessary to provide or showcase them (Henderson, 2015). The concept of validity revolves around determining if the findings truly pertain to what they seem to pertain to (Saunders et

al., 2009).

### **3.11.3 External Validity / Generalizability**

The researcher may have concerns about the generalizability of the results obtained from the specific case study. Replicating the results in other cases within the same research domain is necessary to determine the extent to which these findings can be explained and can be applied more broadly. This is particularly important in the context of this research, which utilized a case study research strategy focused on a single company. It is possible that the resulting strategy focused on a single function of accompaniment that has four functions. It is possible that the resulting theory may not be applicable to all populations.

### **3.11.4 Threats to validity**

Validity may be threatened by issues of history, testing, instrumentation, mortality, and maturation. This researcher gave special attention to all these threats to validity issues.

### **3.11.5 Reliability**

The re-execution of the case study, when applying the same theory and investigative steps, should yield identical results (Henderson, 2015). In other words, reliability pertains to the degree to which the data collection techniques and analysis procedures employed by the researcher would consistently produce similar findings (Easterby-Smith, et al., (2008). To assess reliability, one can consider the following inquiries:

- Will the measures produce consistent outcomes on different occasions?
- Will different observers arrive at similar observations?
- Is there transparency in the process of deriving meaning from the raw data?

(Easterby-Smith et al., 2008 as cited in Saunders et al., 2008).

### **3.11.6 Threats to Reliability**

According to Robson (2002) as cited in Saunders, et al., (2009), there are four potential threats to reliability. These threats include subject or participant error, subject error, subject error, and observer bias. To mitigate subject or participant error, the researcher carefully selected neutral times for data collection, avoiding periods of high or low emotional states among employees. In terms of subject or participant bias, the researcher took measures to ensure anonymity and minimize the influence of authoritarian management styles or

employment insecurity on interviewees' responses. Additionally, the researcher conducted a thorough analysis of the collected data to ensure its capacity. To address observer error, the researcher structured and standardized, minimizing the potential for errors in observation. Lastly, the researcher was mindful of observer bias and made sure that interpretations of answers remained consistent.

### **3.12 Ethical Consideration**

Considering the nature of this project, it is imperative to address specific ethical considerations. Primarily, utmost respect and courtesy was extended to all participants. In order to ensure transparency, an informed consent form approach was implemented to all participants. Confidentiality and anonymity of individual respondents was strictly upheld, and consent was obtained for the administration of the questionnaires as well as the collection and analysis of data. It is important to note that no participant was identified by name. The credibility and validity of the research was maintained through discussions on issues of reliability and validity.

### **3.13 Chapter Summary**

The methodology section restated the research inquiries, and introduced the proposition, presented the research design, discussed the participants, the instruments that were used to collect the data, the procedures, and the method for data analysis.

## **Chapter 4: Results Presentation and Discussion**

### **4.1 Introduction**

This segment of the investigation showcases and deliberates on the research outcomes in alignment with the research goals. The aim of the study is to investigate group psychological safety, group level personality and proffer recommendations on group psychological safety and personality in non-western countries. The research findings were presented through descriptive statistics, that is, mean, standard deviation and frequency distribution.

### **4.2 Demographic Profile of Respondents**

The demographic information of the respondent was examined using the frequency distribution method, and the findings are presented in Table 4.1. The demographic information entailed the gender, ethnic background, home language, educational level, and job description of the respondents.

Demographic Factor	Classification	Frequency (n)	Percent (%)
Gender	Female	13	30.2
	Male	30	69.8
Ethnic Background	Black Pedi	18	41.9
	Black Tshonga	8	18.6
	Black Zulu	7	16.3
	Other	10	23.3
Language	Sepedi	15	34.9
	Tshonga	7	16.3
	Zulu	8	18.6
	Other	13	30.2
Educational Level	Grade 12	24	55.8
	Diploma and/or Certificate	14	32.6
	Degree	5	11.6
Job description	Machine Operator	38	88.4
	Supervisor	5	11.6

**Table 4.1: Respondents Demographic Information (n = 43)**

Source: Survey data (2023)

The majority of the respondents were males (69.8%, n = 30) whereas 30.2% (n = 13) were females suggesting that the study population was dominated by males as opposed to females. This is also an indication that most of the employees at Auto Industrial are males as compared to females, possibly because the company specializes in assembling and manufacturing car parts which require masculinity. As for educational background, 55.8% (n = 24) had grade 12 whereas 32.6% (n = 14) had a diploma and/or certificate whilst 11.6% (n

= 5) had a bachelor's degree. This suggests that the sampled population had basic education inferring that they were well able to participate in the study.

Out of the 42 respondents, 41.9% (n = 18) had an ethnic background of Pedi whilst 18.6% (n = 8) who were Tshonga while 16.3% (n = 7) were Zulu and the remaining 23.3% (n = 10) were from various ethnic backgrounds such as Venda, colored, white Afrikaner and Indian. In regard to home language, 34.9% spoke Sepedi followed by 30.2% who spoke various languages such as Venda, Sesotho, English, Siswati and Afrikaans, followed by 18.6% who spoke Zulu and lastly 16.3% who indicated that their home language was Tshonga. As for job description, 88.4% (n = 38) highlighted that they were machine operators whereas 11.6% (n = 5) were supervisors. The results suggested that most of the respondents were machine operators with diverse personalities and vast psychological safety.

#### 4.3 Research Instrument Reliability Test Results

The reliability of a research instrument refers to its internal consistency. According to Yang & Green (2011), the criteria for assessing research instrument reliability are as follows: a reliability coefficient of less than 0.40 indicates unreliability, 0.40 – 0.59 suggests marginal reliability, 0.60 – 0.79 indicates reliability, and 0.80 – 1.00 signifies high reliability. Yang & Green, (2011), concluded that, in general, a research instrument with internal consistency should have a reliability coefficient above 0.60. Additionally, they noted that reliability coefficients of 0.95 or higher may indicate redundancy or duplication. Consequently, the summarized reliability results can be found in Table 4.2.

Item	Alpha	Number of Items	Remark
All items	0.658	25	Reliable

**Table 4.2: Research Instrument Reliability Results**

Source: Survey data (2023)

The findings in Table 4.2, highlighted that the research instruments had a Cronbach alpha value of 0.658, suggesting its reliability in achieving internal consistency. Consequently, these outcomes suggest that the research instruments effectively assessed the intended measurements.

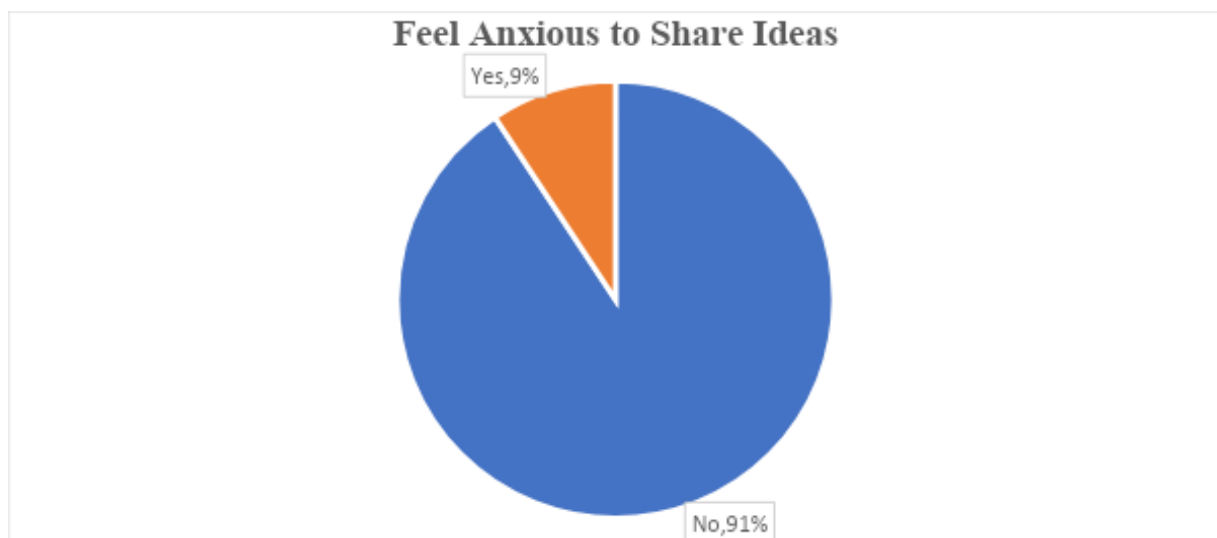
#### 4.4 Research Findings

The aim of this study is to examine the psychological safety within groups, the personality traits at the group level, and provide suggestions regarding both psychological safety and personality in non-western countries. To achieve this goal, descriptive statistics analysis was conducted with emphasis on the average response measured by the mean and the degree of consistency in responses as indicated by the standard deviation (Std.Dev).

##### 4.4.1 To examine group psychological safety in non-western countries.

In order to examine the psychological safety within the group, participants were asked to express their views on whether they experience apprehension when voicing their thoughts or offering suggestions to their team members, and if they can make mistakes without worrying about being judged by their colleagues, co-workers never reject others for being different, how often does teammates go ahead with a task that is unclear because of seeming incompetency and ever worried to talk about the concert attended over the weekend at work.

Figure 4.1 illustrates the degree of anxiety of study participants to share ideas or make suggestions to workmates. The results highlighted that most of the participants (91%) do not feel anxious to share and/or make suggestions to workmates whereas 9% confirmed that they feel anxious to make suggestions to workmates. The results imply that the employees at Auto Industrial are comfortable sharing ideas and making suggestions to improve their work.



**Figure 4.1: Respondents extent of anxiety to share and/or make a suggestion to workmates.**

Source: Survey data (2023)

In order to gain a more profound comprehension of the psychological safety of the participants, the research of the participants investigated the level at which they feel comfortable making mistakes without the worry of facing judgement from their colleagues, as well as the absence of rejection based on their own differences. The findings of this are outlined in Table 4.3.

Indicator	Disagree	Agree	Mean	Std Dev	Response
Feel free to make errors without worrying about colleagues harboring any grudges towards you	7%	93%	3.44	0.629	Agree
This team always embraces diversity and never rejects individuals for their differences	7%	93%	3.63	0.618	Agree

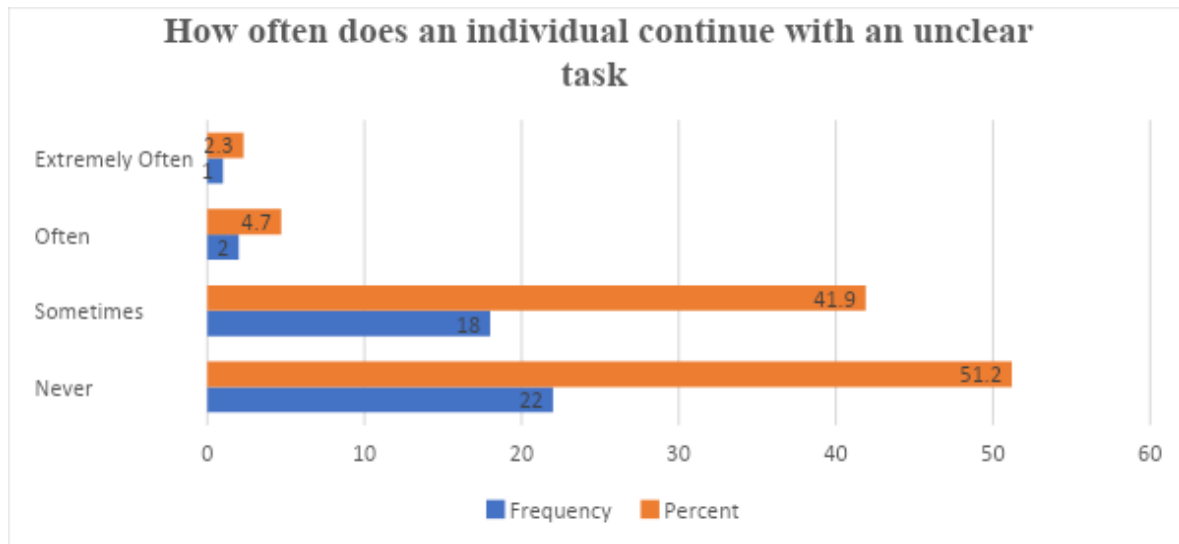
**Table 4.3: Respondents Psychological Safety**

Source: Survey data (2023)

Out of the 43 participants, 93% expressed their agreement in making mistakes without fear of being judged by their colleagues, while 7% admitted to being apprehensive about making mistakes due to the potential judgement from their co-workers. The average response was 3.44, with a standard deviation of 0.629, indicating a consistent agreement among the respondents that they can make mistakes without facing repercussions from their colleagues. Furthermore, when asked about whether people on their team reject others for being different, the mean response was 3.63, with a standard deviation of 0.618, suggesting that the respondents agreed that individuals on their work teams do not reject others based on their differences. This finding was supported by 93% of the respondents who agreed, while 7% disagreed.

In the same veins of group psychological safety, majority of the study participants 51.2% (n = 22) indicated that their team member will never go ahead with a task that is unclear because of seeming incompetency whereas 41.9% (n = 18) stated that sometimes it happens, whilst 4.7% (n = 2) and 2.3% (n = 1) indicated that it happens often and extremely often

respectively. Given that the majority stated that it never and sometimes happens the study concluded that it rarely occurs for a team mate to go ahead with a task that is unclear because of seeming incompetency.



**Figure 4.2: How often does a team member go ahead with an unclear task.**

Source: Survey data (2023)

Lastly, the study examined the degree to which an individual is worried to talk about the concert attended over the weekend with work colleagues at work and the results are presented in Table 4.5.

Indicator	Response	Frequency	Percent
Worried to talk about the concert attended over the weekend with colleagues at work	No	34	79.1
	Yes	9	20.9

**Table 4.4: Extent to which an individual is worried to talk about weekend activities at work**

Source: Survey data (2023)

From Table 4.4, it can be noted that most of the respondents 79.1% (n = 34) were not worried to talk about the activities such as concerts attended over the weekend with work colleagues at work whilst 20.9% (n = 9) stated that they were worried to talk with workmates on weekend activities they took part in. Some of the key reasons why they were afraid is that, as a leader it is a strategy to draw a line with workmates, the focus is on work, not inclined to

share their business, only talk to people they are familiar with, some things should only be told to close friends and some indicated that they are worried about social media. Therefore, the major reasons were to maintain a separate work life and personal life matters.

Group norms play a very important role in defining group psychological safety and group personality in non-Western countries. For example, if the most senior member in a work team feels psychologically safe, everyone on his team feels quite safe. If participants generally feel “that they have oneness” (*ubuntu*), they generally feel safe as a group and identify as one - regardless of ethnic and cultural differences. Group psychological safety and group personality of teams in different parts of the plant are generally solid regardless of ethnic stereotypes. Unfortunately, the same does not translate to nor permeate other teams so that there is one big group personality and the same measure of group psychological safety in the plant. Teams form clichés based on level of education, seniority, experience, and rank. The research proves that there are individual characteristics, groups of traits, or amalgamations of traits and environmental resources are the components that define an individual, especially in non-WEIRD countries that speak to issues of multi-culture, multilingualism, multi-ethnicity, minority populations, previously disadvantaged groups and so on and so forth.

#### **4.4.2 To investigate group personality traits in non-Western countries.**

To explore the group personality traits in non-western countries, participants were initially asked to indicate their level of agreement or disagreement with the group traits statement presented in Table 4.5.

Indicator	Disagree	Agree	Mean	Std. Dev	Response
My colleagues embrace diverse viewpoints that differ from their own.	7%	93%	3.53	0.631	Agree
My efforts are not intentionally undermined by any member of this team.	11.6%	88.4%	3.6	0.695	Agree
Asking for assistance from the members on this team is a straightforward task.	4.6%	95.4%	3.81	0.588	Agree
My team members highly value and make use of my unique skills during our collaborative work.	9.3%	90.7%	3.67	0.644	Agree
Coworkers in my team see the good in other workmates, no matter what the circumstance is	9.3%	90.7%	3.65	0.72	Agree
Members on my team possess the capability to raise concerns and challenge each other's awareness.	7%	93%	3.56	0.765	Agree

**Table 4.5: Group Personal Traits Statements**

Source: Survey data (2023)

According to the findings in Table 4.5, it can be deduced that 93% of the participants agreed that their colleagues welcome opinions that differ from their own, while 7% disagreed. The mean response was 3.53 (Std. Dev = 0.631), indicating an overall agreement among the respondents regarding their co-workers' acceptance of differing opinions.

Furthermore, a significant majority of 88.4% indicate that they agree that no one on their team would intentionally undermine their efforts, whereas 11.6% disagreed. The mean response for this statement was 3.6, suggesting a general agreement among the respondents.

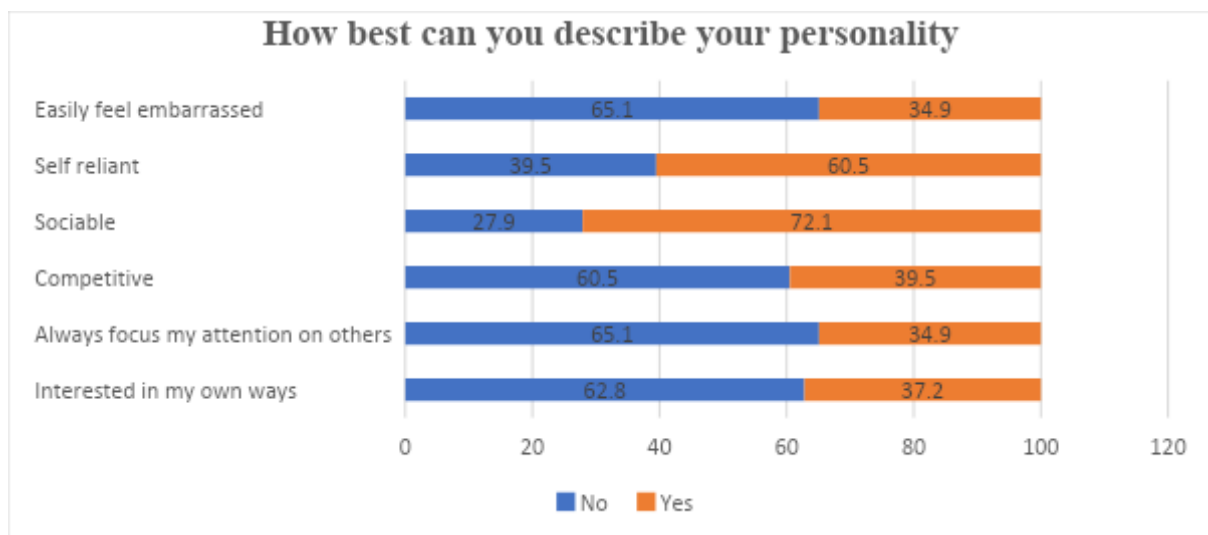
In addition, a large majority of the interviewees, 95.4% stated that it is easy for them to seek help from their team members, compared to 4.6% who disagreed. The average response strongly supported this notion, with a mean of 3.81.

Regarding the assertion that their unique skills are valued and utilized when working with their team members, the mean response was

Regarding the assertion that their unique skills are valued and utilized when working with their team members, the mean response was 3.67, with a standard deviation of 0.644. This indicates agreement among the respondents. Moreover, 90.7% of the responses favored this assertion while only 9.3% did not.

The results further revealed that 90.7% of the responses were in support of the notion that coworkers in my team see the good in other workmates, no matter what the circumstances is whilst 9.3% disagreed. The mean was 3.65 and standard deviation 0.72 implying that generally the respondents agreed with the above notion. Lastly, the mean response for members on a team who are able to bring up problems and tough issues to the attention of one another was agreed (mean = 3.56) as supported by 93% of the respondents who were in favor whilst 7% were not in favor.

The above analysis further prompted the researcher to understand the degree to which the respondents described their personality. The key aspects that were summarized to best understand how best the respondents describe their personality are presented in Figure 4.3.



**Figure 4.3: How best to describe personality traits.**

Source: Survey data (2023)

The majority of the respondents, 5.1% indicated that they do not easily feel embarrassed whereas 34.9% stated that they easily feel embarrassed. Also, 60.5% of the respondents stated that they are self-reliant whereas 39.5% were not self-reliant, however, 72.1% of the

participants highlighted that they are sociable against 27.9% who stated otherwise (unsociable). Furthermore, out of the 43 respondents, 60.5% indicated that they were not competitive whereas 39.5% were competitive. Most of the sampled population, 65.1% specified that they always focus on others whilst 34.9% stated that they do not always focus on others. Lastly, 62.8% of the respondents highlighted that they were not interested in their own way whilst 37.2% stated that they were interested in their own way. Overall, the results revealed that the majority of the respondents do not easily feel embarrassed, not competitive, not interested in their own way, and always focus on others.

The participants further revealed that the most important shift change norm that they practise during a shift change transition was confidently knowledgeable which implies that in every shift change the Auto Industrial employees are confidently knowledgeable about the shift change which in turn enforces a smooth transition during shift changes. The results further revealed that 73.81% (n = 31) of the respondents had the perception that their direct line managers value their ideas whilst 26.19% (n = 11) were of the perception that their line managers do not value their ideas. More so, 93% (n = 40) of the respondents stated that finding out that their wrong is even more valuable than being right whereas 7% (n = 3) were of the view that finding out that they are wrong is not even more valuable than being right (refer to Table 4.6).

Indicator	Response	Percent
Direct line managers value their ideas	No	26.19%
	Yes	73.81%
Finding out that their wrong is even more valuable than being right	No	93%
	Yes	7%

**Table 4.6: Respondents perception on line managers and being corrected**

Source: Survey data (2023)

Lastly, the study examined the degree to which their respective team or department is likely to reach out to another team or department to ask for advice or share bad news about deadlines not met and the results are presented in Table 4.7.

Indicator	Response	Percent	Mean	Std Dev
How likely is your team or department likely to reach out to another team or department to ask for advice or share bad news about a deadline not met?	Unlikely	9.3%	3.58	0.731
	Likely	90.7%		

**Table 4.7: Likelihood to reach out to other teams and/or departments.**

Source: Survey data (2023)

The results in Table 4.7 indicated that 90.7% of the respondents are more likely to reach out to another team or department to ask for advice or share bad news about a deadline not met whereas 9.3% showed that they were more unlikely. The average response was 3.58 suggesting that the respondents agreed that they are more likely to reach out to another team or department to ask for advice or share bad news about a deadline not met. Some of the reasons highlighted by the respondents who stated that they would reach out included a problem shared is a problem solved, avoiding problems growing, career growth, common goal, engineering is about accuracy, holding back information disturbs the whole line and it should be seen as a learning opportunity. However, for those respondents who stated that they would not reach out was mainly because they did not want to get others into trouble, fear of leaders, returns and rejects are stressful, and worried about gossip.

Leaders, returns, and rejections can be sources of stress, causing individuals to worry about gossip. Psychological safety is a crucial factor that cannot be overlooked when it comes to occupational stress. It significantly affects the physical and mental well-being of employees, as well as their motivation at work. When employees feel a strong sense of psychological security, they are more likely to perceive the organization as providing stability, fair promotion opportunities, and room for growth. This perception enables them to envision future development prospects and maintain their enthusiasm for work, leading to their willingness to dedicate themselves to their tasks. On the other hand, without psychological safety, employees may experience job burnout.

To conclude, in non-Western cultures, teams will feel psychologically safe amongst their team members and their group personality will gravitate around their shared values, for example, where employees in individual teams do not concern themselves with self-perception, status, or the adverse effects of work, freely express themselves and exhibit the diverse personas within various situations; they however, struggle to exhibit the same

characteristics across teams and across the plant, departments and lines of command. This was evidenced in the fact that charge hands (supervisors) are normally psychologically safe with their machine operators and their foremen, but the machine operators relate quite “psychologically unsafely” ways with the foremen to whom their charge hand (direct line manager / supervisor) reports to. There is also evidence of group apathy when teams feel change is very distant and hard to come by owing to long held stereotypes.

Individual psychological safety and individual personality traits were least important in defining group psychological safety and group personality. What emerged strongly was that the team is more important than the individual, with senior staff (longevity and experience and through rank) dictating the tone of group psychological safety and group personality. The juniors are seniors experienced “mutually beneficial exchanges” within their respective environments, resulting in a decrease in challenging behaviors and allowing the juniors to actively engage with their peers and tasks. On the other hand, well trained and highly qualified professionals who shared the same rank were perceived as outsiders by the less qualified machine operators. The interaction between individual traits and contextual elements highlights the importance of considering safety in a comprehensive manner, particularly in non-WEIRD countries. It should be understood as a combination of various factors that collectively contribute to a distinct perception of safety, rather than simply the sum of its individual components.

## **Chapter 5: Conclusion and Recommendations**

### **5.1 Introduction**

The preceding chapter introduced and examined the research results, which required the current chapter that outlines the study's conclusions and recommendations. Initially, the chapter will present the study's conclusions, followed by recommendations, and finally, avenues for future research will be discussed.

### **5.2 Research Conclusion**

The research proposed that the interplay between individual characteristics and aspects of the context result in the accumulation of many factors (for example, language, race, ethnicity, culture, rank, education, seniority), that feed into the psychological safety of the group and its group personality; that are qualitatively distinct from the sum of its parts. The study shows that in non-western, non-English speaking; (non-WEIRD) countries, elements of culture, socio-demographics, race and ethics also play a significant role in shaping and defining group psychological safety and groups personality in ways specifically and especially different from those already proven in western and mainly English-speaking countries. *Ubuntu*, for example and a sense of belonging among people of color have a strong bearing on the group psychological safety and group personality of their work teams.

Therefore, the following conclusions were derived:

#### **To examine group psychological safety in non-western countries**

From the study findings it was concluded that employees at Auto Industrial are comfortable sharing ideas and making suggestions to improve their work. The respondents agreed and the response was consistent that they make mistakes without fear that co-workers will hold it against him/her. Additionally, on whether people on the team never reject others for being different the mean was 3.63 with standard deviation of 0.618 inferring that the respondents agreed that people on their work teams never reject others for being different. The study concluded that it rarely occurs for a team mate to go ahead with a task that is unclear because of seeming incompetency. From the study findings it was further concluded that most employees are not worried to talk about the weekend private activities they took part in.

Some of the key reasons why they were afraid is that, as a leader it is a strategy to draw a line with workmates, the focus is on work, not inclined to share their business, only talk to people they are familiar with, some things should only be told to close friends, and some indicated that they are worried about social media. Therefore, the major reasons were to maintain a separate work life and personal life matters.

### **To investigate group personality traits in non-Western countries**

Based on the study findings, it can be inferred that the participants reached a consensus on several aspects. Firstly, they agreed that their colleagues were open to different opinions. Secondly, they acknowledged that their team members do not intentionally undermine their efforts. Thirdly, they found it easy to seek assistance from their team members. Additionally, they felt that their unique skills were valued and utilized within the teams. Moreover, they observed that their coworkers always see the positive qualities in their colleagues, regardless of the circumstances. Lastly, they highlighted the ability of team members to address problems and difficult issues with one another.

Furthermore, the results indicated that the majority of respondents do not easily feel embarrassed, are not competitive, and prioritize the needs of others over their own.

The participants also revealed that the most important norm they adhere to during shift change transitions was being confidently knowledgeable. This implies that AutoIndustrial (Pty) Ltd employees are well-informed and confident during shift changes, which attributes to a seamless transition process shift to shift and from team to team which in turn enforces a smooth transition during shift changes. Lastly, the respondents agreed that they are more likely to reach out to another team or department to ask for advice or share bad news about a deadline not met. Some of the reasons highlighted by the respondents who stated that they would reach out included a problem shared is a problem solved, avoiding problems growing, career growth, common goal, engineering is about accuracy, holding back information disturbs the whole line and it should be seen as a learning opportunity. However, for those respondents who stated that they would not reach out was mainly because they did not want to get others into trouble, fear of leaders, returns and rejects are stressful, and worried about gossip.

### **5.3 Recommendations**

Many of the factors that contribute to psychological safety are not easily changeable, especially in resource-poor environments. Additionally, certain factors that promote psychology may be unique to each team, influenced by individual personalities and stresses within the specific environment. By gaining a better understanding of the factors that contribute to psychological safety and recognizing the importance of situational context, it may be possible to identify some factors that can be modified. This information can then be utilized by team leaders and management to foster psychological safety and group personality.

Furthermore, it is recommended that Auto Industrial (Pty) Ltd establish a comprehensive and fair performance evaluation system, training system, and effective communication channels to enhance employees' psychological security. This will ultimately lead to improved employee performance and personal growth and development.

Recognizing the impact of personality on creating a positive work environment and cohesive teamwork, it is advantageous to form teams with aligned personality traits, or at the very least, understand the personalities within the team to enhance team cohesiveness. Therefore, team leaders may consider utilizing personality assessments to familiarize with their team members, particularly their individual strengths, their shared attributes as informed by race, culture and ethnicity and; change over time, their personality report can be used as an ongoing reference, especially during challenging times, to identifying coping strategies and potential reasons form behaviors and responses.

### **5.4 Avenues for Future Research**

1. In this study, there is potential for additional research upon analyses conducted. It would be advantageous to delve deeper into the correlation between psychological safety and prominent personality traits, as well as investigate how personalities (nuanced by culture, race and ethnicity) can impact the establishment of a psychologically secure environment.
2. Furthermore, gathering longitudinal data offers a more robust theoretical basis compared to the cross-sectional data. Replicating this study using longitudinal data collection could be considered by future researchers allowing them to reproduce the study's findings.

## References

Aggarawal, R., & Ranganathan, P., (2019), Study Designs: Part 2 - Descriptive Studies, Perspectives in Clinical Research, Jan-Mar; 10 (1): 34-36

Arshad, M., & Chung, J.M., (2022), Practical Recommendations for considering culture, race and ethnicity in personality psychology. Social and Personality Compass, 16(2) e12656.  
<https://doi.org/10.1111/spc3.12656>

Chen, M., Gao, X., Zheng, H., Ran, B., (2015), International Conference on Social Science and Technology

Crawford, L.M., (2020), Conceptual & Theoretical Frameworks in Research, Foundations in Research Design

Cresswell, J.W., (2014), Research design: qualitative, quantitative and mixed methods approach, 4th Ed, Thousand Oaks, Los Angeles, California: SAGE

Deckers, M., Altmann, T., & Roth, M., (2018), Conceptualizing and Measuring Group Openness and Cohesion as Dimensions of Group Personality, Psychology, 9, 80-100,  
<https://doi.org/10.4236/psych.2018.91006>

Edmondson, A., (1999), Psychological Safety and Learning Behavior in Work Teams, Administrative Science Quarterly, Vol 44, No 2, pp 350-383,  
<http://www.jstor.org/stable/2666999>

Edmondson, A.C., (2019), The Fearless Organization: Creating Psychological Safety in the Workplace for Learning, Innovation and Growth, Hoboken, New Jersey: John Wiley and Sons

Edmondson, A.C., Bransby, D, P., (2022) Psychological Safety Comes of Age: Observed Themes in an Established Literature, Annual Review of Organizational Psychology and Organizational Behavior, 10:55-78,  
<https://doi.org/10.1146/annurev-orgpsych-120920-055217>

Frazier, M.L., Fainschmidt, S., Klinger, R.L., Pezeshkan, A & Veselina, V (2017), Psychological Safety: A Meta-Analytic Review and Extension, Management Faculty Publications. 13, [https://digitalcomms-odu.ed/management\\_fac\\_pubs/13](https://digitalcomms-odu.ed/management_fac_pubs/13)

Friedman, L.P., Graham, W., & Brazier, E., et al., (2007), Practical Lessons from global safe motherhood initiatives. Time for a new focus on implementation, *Lancet*, 370 (9595): p 1383-1391

George, T., & Merkus, J., (2023), Explanatory Research/ Definition Guide and Example, Scribbr, <https://scribbr.com/methodology/explanatory-research/>

Gouveia, V et al., (2021), A Short Version of the Big Five Inventory (BFI-20): Evidence of Construct Validity, *International Journal of Psychology*, Vol, 55, No. 1 e1312

Gurley, T., Lin, S., & Ballou, S., (2005), Consumer demand modeling: how leadership better understand buyers' choices and leadership, 33(3) 30-40

Halfhill, T., Sundstrom, E., Lahner, J., Calderone, W., & Nielsen, T.M. (2005) Group Personality and Group Effectiveness: An Integrative Review of Empirical Research, *Small Group Research*, Vol 36, No 1, pp 83-105, <https://doi:10.1177/1046496404268538>

Hair, J.F., Money, A. H., Samuel, P., & Page, M., (2007), *Research Method for Business, Education and Training*, Vol 49, No 4, pp 336-337, <https://doi.org/10.1108/et.2007.49.43362>

Hassan, Z.A., Schattner, P., Mazza, P, & Keluarga, K., (2006), Doing a pilot study: Why is it essential? *Malaysia Family Physician*, Academy of Family Physicians of Malaysia, Volume 1, Number 2 & 3, <https://www.ejournal.afpm.org.my/>

Henderson, S., (2016), *Research Methodology*, *International Journal of Sales, Retailing & Marketing*, Vol 4, No 9

Hofstede, G., Hofstede, G. J., & Minkov, M., (2010), *Cultures and Organizations: Software of the Mind*, 3<sup>rd</sup> Edition, USA: McGraw-Hill

Hulme, D., (2007), *Integrating quantitative research for country case studies of development*, Global Poverty Research Group, Economic and Social Research

Kesmodel, U.S., (2018), *Cross Sectional Studies - What are they good for?* *Acta Obstet Gynecol Scand*, 97:388-393, <https://doi:10.1111/aogs.13331>

Malhorta, G., (2017), *Strategies in Research*, *International Journal of Advance, Research and Development*, Vol 2, Issue 5

Maholtra, N.K., & Birks, D.F., (2007), *Marketing Research: An Applied Approach*: Pearson Education Limited

Mendez, J.D., & Rodriguez, R.S., (2017), *Total Productive Maintenance (TPM) as a tool for improving productivity: a case study of application in bottleneck of auto-parts machining line*, *The International Journal of Advanced Manufacturing Technology*, 92, 1013-1026, <https://doi.org/10.1007/s00170-017-0052-4>

McAdams, D.P., (1995), *What do we know when we know a person?* *Journal of Personality*, 63, 365-296 <https://doi.org/10.1111/j:1467-6494.1995.tb00520X>

McAdams, D.P., (2006), *A New Big Five: Fundamental Principles for an integrative science of personality*. *American Psychologist*, 61, 204-217, <https://doi.org/10.1037/0003-066X:61.3.204>

Newman, A., Donohoue, R., & Eva, N., (2017), *Psychological Safety: A systematic review of literature*, *Human Resource Management Review*, 27, pp 521-535

Olsen, C., & St. George, D.M.M., (2004), *Cross Sectional Study Design and Data Analysis*, Colleague Entrance Examination Board

Omair, R., (2015), Selecting the appropriate study design for your research: Descriptive Study Designs, Journal of Health Specialties, Vol 3, Issue 3

Saunders, M., Lewis, P., & Thornhill, A., (2009), Research Methods for Business Students, 5th Edition, Edinburg Gate: Harlow: Pearson Education Limited

Schulte, Mathis & Cohen, N.A., & Klein, K.J., (2012), The Coevolution of Network Ties and Perceptions of Team Psychological Safety, Articles in Advance, pp. 1-18, <https://doi.10.1287/0rsc.1100.0582>

Shein, E. H., & Bennis, W.G., (1965), Personal and Organizational Change through Group Methods: The Laboratory Approach, New York, John Wiley & Sons

Sidorenkov, A.V., & Borokhovski, E.F., (2023), The role of Cohesion and Productivity Norms in Performance and Social Effectiveness of Work Groups and Informal Subgroups, Behavioral Sciences, 13, 361, <https://doi.org/10.3390/bs13050361>

Song, Y., Son, Y., & Oh, D., (2015), Methodological Issues in Questionnaire Design, Journal of Korean Academy of Nursing, Vol, 45(3): 323-329, <https://doi://10.4040/jkan.2015.45.3.323>

Spiggle, S., (1994), Analysis and interpretation of quantitative data in consumer research, Journal of Consumer Research, 491-503

Steyn, R., & Ndofirepi, T.M., (2022), Structural validity and measurement invariance of the short version of the Big Five Inventory (BFI-10) in selected countries, Cogent Psychology, 9:1, 2095035, <https://doi:10.1080/23311908.2022.2095035>

Syed, M., (2021), Where are race, ethnicity and culture in personality research, <https://doi.10.31234/osf.io/m57ph>

Taherdoost, H., (2016), Sampling Methods in Research Methodology: How to choose a sampling technique for research, International Journal of Academic Research in Management (IJARM), Vol 5, No 2 p 18-27, [www.elvedit.com](http://www.elvedit.com)

Wanless, S.B., (2016), The role of psychological safety in human development: Research in Human Development, 13(1), 6-14, <https://doi:10.1080/15427609.2016.1141283>

[www.autoindustrial.co.za](http://www.autoindustrial.co.za) accessed on 03.09.2023

Yilmaz, K., (2013), Comparison of Quantitative and Qualitative Research Traditions, epistemological, theoretical and methodological differences, European Journal of Education, Vol 48, No 2

Zainal, Z. (2007), Case Study as a research method, Jurnal Kemanusiaan Universiti Teknologi, Malaysia

Zikmund, W.G. & Babin, B.J., (2007), Exploring marketing research: Thomson-Southwestern

**Abbreviations**

SPSS: Statistical Package for Social Sciences

WEIRD: Western Educate, Industrialized, Rich and Democratic

AIM: Auto Industrial - Machining

APA: American Psychology Association

## Appendices

Unit 8  
Franhan Place  
1 Numerosa Street  
Croydon  
Kempton Park  
1619

5 September 2023

**Subject: Motivational letter for permission to use your organization as a target population for a Masters of Business Leadership academic research project.**

Dear Sir / Madam

I am writing this motivational letter for an academic research project as a student who loves to research, analyze, and report on business projects. As a highly motivated final year student with very strong interpersonal skills, well developed research skills and attention to detail, I would like to apply for permission to conduct an academic business research using your esteemed organization, as my target population.

I am studying towards a Masters in Business Leadership (MBL) at Bindura University of Science Education in Zimbabwe. I work in Spartan and stay in Croydon. As part fulfillment of my qualification, I am required to conduct academic business research between August and December 2023.

I have coined my research topic around group psychological safety and group personality because, generally speaking, reading between the lines and finding the missing piece is something that excites me. Most importantly, I have chosen the topic because a lot of research has been done on an individual's psychological safety and how it is impacted by personality traits. I, however, feel that there is a research gap in which very little is known on how group-level psychological safety affects group personality, especially in Africa, let alone South Africa yet healthy group-level psychological safety and positive and pro-productive group personalities are pivotal to the success of an organization.

I have developed strong research and analytical skills, not only through studying and completing two degrees and a diploma prior to studying at postgraduate level. I have also been in a managerial role for the past 3 and a half years.

My data collection tool will be a self-designed questionnaire. Most of the data will be gathered through the self-administered questionnaire and a few interviews with a couple of

team members and team leaders. I commit to uphold myself to the highest ethical practices throughout the duration of the research project.

I have attached my university research recommendation letter for your reference.

I look forward to hearing from you at your earliest convenience.

Kind regards

Hilton Hatikundwi Samuriwo

## Questionnaire for Auto-Industrial - Machining

My name is Hilton Hatikundwi Samuriwo (B213568B) and I am a second year, semester 2 student at Bindura University of Science Education (BUSE), Zimbabwe, studying towards the fulfillment of a Masters in Business Leadership (MBL). I would like to kindly ask for your cooperation and participation in responding to the following questions. Your answers will make a great and invaluable contribution to the study. All your contributions will be regarded as highly private and confidential. Thank you so much for your support in advance.

### Instructions

For each of these questions listed below, kindly:

- a) Place an X in the appropriate box corresponding to your responses.
  - b) Where space is provided full in your responses.
1. How do you identify your ethnic background? Please fill your response in the black space below.

---

---

2. What is your primary language spoken at home? Please fill in your response in the blank space below.

---

---

**(This information is needed to make sure that the researcher is giving equal opportunities to all potential respondents.)**

3. What is your highest education completed?

Please tick the appropriate box

	12th grade or less
	Graduated high school or equivalent
	Some college, no degree
	Associate degree
	Bachelor's degree

	Post Graduate degree
--	----------------------

4. Please state your job description.

\_\_\_\_\_

5. Do you feel anxious to speak up to share ideas or make suggestions to your team?

Yes

No

6. We make mistakes without fear that our co-workers will hold it against us.

Strongly agree	Agree	Disagree	Strongly Disagree

7. People on this team never reject others for being different.

Strongly agree	Agree	Disagree	Strongly Disagree

8. How often does my team go ahead with a task that is unclear because of seeming incompetency?

Extremely often	Often	Sometimes	Never

9. Are you worried about talking about the concert you went to over the weekend with your colleagues on Monday?

Yes

No

If, Yes, please state your reason(s):

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10. Please show your extent of agreement or disagreement with the following statements. on a scale of 1 - 4; where 1 is strongly agree and 4 is strongly disagree.

Descriptor	1	2	3	4
My co-workers welcome opinions different from their own.				
No one on this team would deliberately act in a way that undermines my efforts				
It is easy to ask members on this team to help				
Working with members of my team, my unique skills are valued and utilized.				
Coworkers in my team see the good in other workmates, no matter what the circumstance is?				
Members on my team can bring up problems and tough issues to the attention of one another.				

11. How best can you describe your personality using the descriptors below. Please choose from the YES or NO option.

Personality Descriptors	Yes	No
I am interested in my own ways.		
I always focus my attention on others.		

I am competitive.		
I am sociable.		
I am self-reliant.		
I easily feel embarrassed.		

12. Kindly state the most important shift change norms that you practise during a shift change transition.

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13. My direct line manager values my ideas.

Yes

No

14. Finding out I am wrong is even more valuable than being right.

Yes

No

15. How likely is your team or department likely to reach out to another team or department to ask for advice or share bad news about a deadline not met?

Extremely likely	Likely	Unlikely	Very Unlikely

Kindly explain why.

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