

**NARCISSISTIC LEADERS AND TEAMMATES: A TOXIC COMBINATION?**

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**Doctor of Philosophy in Management**

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**FACULTY OF SOCIAL SCIENCES**

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**THE UNIVERSITY OF SHEFFIELD**

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**GODBLESS ONORIODE AKAIGHE**

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**Thesis Summary**

The personality trait of narcissism, concerned with the desire for self-admiration, self-promotion, love of power, and control, has received much research attention, especially in areas of leader emergence, leader effectiveness, leader and follower work-related behaviour, and performance. However, the question of how leader narcissism influences individual and team level well-being and what leader, follower and team characteristics shape this relationship remains largely unresolved in organisational leadership research. In this thesis, I propose and test a multilevel model of the effects of leader narcissism on follower and team burnout and work engagement. Drawing on identity theory, I hypothesise that leader narcissism influence follower burnout and work engagement mediated by core self-evaluations (CSE). Further, based on social identity threat theory, I propose that leader narcissism positively influence team burnout and negatively influence teamwork engagement, via team CSE. Additionally, I test the moderating role of follower gender and follower narcissism on the leader narcissism-CSE link, while leader gender and the team characteristics of team cohesiveness, team resilience, and climate for psychological safety are proposed as moderators of the relationship between leader narcissism and team CSE. The proposed model was tested using multisource data from organisational leaders and team members at three-time points with a sample of 127 leaders and 439 individuals at time 1, 101 leaders, and 348 individuals at time 2, and 96 leaders and 293 individuals at time 3. The findings largely supported the hypothesised relationships and showed that follower-rated leader narcissism predicted CSE and team CSE, and CSE predicted burnout and work engagement at the cross and team levels. However, CSE and team CSE did not mediate the follower rated leader narcissism and CSE links. A moderated mediation was observed at the team level, and team CSE did mediate the effect of follower rated leader narcissism on team burnout and work engagement. Also, team cohesiveness and climate for psychological safety moderated the relationship between follower rated leader narcissism and team CSE but not for leader-rated leader narcissism and team CSE. However, contrary to my prediction, leader gender did not moderate the link between leader narcissism and CSE for both follower-rated and leader-rated leader narcissism, as well as the link between leader narcissism and team CSE for both ratings. Additionally, follower gender and follower narcissism did not moderate the leader narcissism-CSE link. The moderated mediation model that tested the conditional indirect effect of follower narcissism (cross-level) and team cohesiveness, team resilience, and climate for psychological safety (team level) on the outcomes received mixed support. Theoretical contributions, practical implications and directions for future research are discussed.

*Keywords:* leader narcissism, core self-evaluations, burnout, work engagement, multilevel modelling, teamwork.

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# CHAPTER 1- INTRODUCTION

# Development of research problem and research objectives

Scholars have researched the dark personality traits and how they predict organisational behaviour and outcomes extensively, both from single trait (e.g., Narcissism; Grijalva *et al.,* 2015; Nevicka *et al.,* 2018) and multi-trait perspectives (e.g., Narcissism, Machiavellianism, psychopathy; Gaddis & Foster, 2015; Hodson *et al.,* 2009; Kaiser *et al.,* 2015). The term ‘dark personality’ describes a set of socially adverse traits (see Paulhus, 2014), a lack of concern for the feelings of others, being unstable (Vonk *et al.,* 2015), and malevolent and self-serving behaviour patterns (Atkinson *et al.,* 2015). The dark triad thus comprises the personality traits of narcissism, Machiavellianism, and psychopathy, which have distinct theoretical roots but share some common characteristics, for example, a lack of empathy for the feelings of others (Jones & Paulhus, 2014; Paulhus & Williams, 2002). What is dark about dark personality traits is the intensity of desire to promote oneself above others, in disregard of the feelings and well-being of others, causing harm to others (Paulhus & Williams, 2002; Harms & Spain, 2015).

This research focuses on narcissism, arguably the most researched of the dark personality traits (e.g., Campbell *et al.,* 2011; Schyns & Schilling, 2013; Spain *et al.,* 2014), for three main reasons. First, narcissism is relevant to leadership and authority because it is associated with superiority, confidence, and dominance (Campbell & Foster, 2007). Second, various scholars are acknowledging narcissism as a strong predictor of workplace behaviour and outcomes within the organisational leadership domain (e.g., Campbell *et al.,* 2011; de Vries & Miller, 1985; Grijalva *et al.,* 2015; Rosenthal & Pittinsky, 2006). Third, narcissism is more relevant to leadership emergence, and effectiveness, compared to Machiavellianism and psychopathy (e.g., Emmons, 1987; Fehr *et al.,* 1992; Schyns, 2015). Narcissism is defined as “grandiosity with a preoccupation over one’s status compared to, and in the eyes of, others”(Barry *et al.,* 2007, p. 934).

Researchers have examined leader narcissism and employee well-being (Fehn, & Schütz, 2021) because of the increasing awareness that well-being is associated with leadership and the social context of organisations, that is, how employees interact with each other (Inceoglu *et al.,* 2018). For example, it has been shown that leader narcissism negatively affects employee job satisfaction (Bernerth, 2020) and job engagement (Fehn, & Schütz, 2021), both indicators of well-being. Investigating the effects of leader narcissism on employee and team well-being is important as some organisations deliberately employ narcissistic leaders to increase their earnings and performance (e.g., Buchholz *et al.,* 2019; Reina *et al.,* 2014) while ignoring the potential associated liability for teams (Nevicka *et al.,* 2018b). Research shows that narcissistic leaders have challenges in developing team interactions and processes (Grijalva *et al.,* 2020), take actions that lead to legal repercussions for organisations (O'Reilly III *et al.,* 2018) and potentially harm followers’ well-being because they are self-entitled, lack empathy, make selfish decisions, and have difficulties in maintaining relationships with their followers (e.g., Rosenthal & Pittinsky, 2006; Volmer *et al.,* 2016). However, there is limited research on the link between leader narcissism and team well-being, and the underlying processes and boundary conditions of this relationship. For example, how leader narcissism affects team burnout and work engagement, is lacking in leadership studies. This is important to make us understand how narcissistic leaders are perceived by team members (Schyns & Schilling, 2013), and the effects of leader narcissism on teams’ functioning and thriving at work, requiring leaders to consider the well-being of team members in the way they lead. Hence, given the potential destructive tendency of leader narcissism to organisations (see Padilla *et al.,* 2007), there is a need to further examine the leader narcissism-team well-being link and explore the underlying processes and boundary conditions that shape this link.

Similarly, how team characteristics (e.g., team resilience) can amplify or moderate the leader narcissism-team well-being link is lacking. At the individual level, follower core self-evaluations (CSE) have been shown to moderate the negative effects of leader narcissism on follower emotional exhaustion such that the negative effect is stronger for those low on CSE than those high on CSE (Nevicka *et al.,* 2018). CSE is a representation of the fundamental, subconscious appraisal that people hold about themselves, their capabilities, other people, and the world around them (Judge *et al.,* 1997). However, studies on team moderators of the link between leader narcissism and well-being at the team level are lacking. It is important to research the moderating role of team characteristics to understand what teams can potentially do when a leader is the source of mental distress in work teams considering that organisations are mostly structured in teams or departments, that is, work teams are increasingly embedded in organisational structures (West *et al.,* 2009) where individuals work under a leader (Herdman *et al.,* 2017) with implications on their cognition and well-being. Research has shown that participative decision-making accentuated the link between leader narcissism and team information search effort, such that the positive relationship between leader narcissism and the information search effort was more positive in teams that engage in more participative decision making (Zhou *et al.,* 2019). While not directly relevant for this research, this highlights the importance of team-related moderators of leader narcissism on team outcomes. Since organizations typically have team-based structures, to learn, work, and compete in the dynamic world of work (Edmondson, 2012; So *et al.,* 2011), narcissistic leaders can jeopardize the well-being of team members (Biçer, 2020). In light of calls to focus on the effects of leader narcissism on team outcomes (Braun, 2017) and team characteristics that can buffer the effects of leader narcissism (Schyns & Schilling, 2013), I focus on the effects of leader narcissism on team burnout and work engagement, via team CSE which I operationalise as the average of team members CSE and moderated by team cohesiveness, team resilience and climate for psychological safety. Team cohesiveness is “a dynamic process which is reflected in the tendency of a team to stick together and remain united in the pursuit of its instrumental objectives and/for the satisfaction of members' affective needs” (Carron *et al.,* 1998, p. 123). Team resilience is “the capacity to bounce back from failure, setbacks, conflicts, or any other threat to well-being that they may experience” (West *et al.,* 2009, p. 253) while climate for psychological safety is a shared belief by a team that their work environment is safe, with a sense of openness, idea sharing and interpersonal risk-taking (Bradley *et al.,* 2012).

Regarding the relationship between leader narcissism and work outcomes, it is evident that the processes through which leader narcissism contributes to employee behaviour and well-being need more investigation (Schyns & Schilling, 2013). Although research has revealed some individual-level mediators, for example, follower perceptions (e.g., Fehn, & Schütz, 2021; Schyns *et al.,* 2018), leader-member exchange (LMX; Bernerth, 2020), follower affective organisational commitment (Wang *et al.,* 2021), cognitive dependency (Yang *et al.,* 2020), relationship tenure (Zhang *et al.,* 2016) and follower malicious envy (Braun *et al.,* 2018), the important underlying process of core self-evaluations (CSE) as a holistic self-concept (Judge *et al.,* 1997) is yet to be explored. Existing research showed that individual CSE mediates the relationship between organizational dehumanization and employee job satisfaction (Nguyen & Stinglhamber, 2021). In addition, recent research indicates that leader behaviour (e.g., humility) influences followers’ self-views (self-identity change and self-efficacy; Mao *et al.,* 2019). Taken together, such findings point to the potential significance of leader narcissism for individual and team-related cognitions, such as individual and team-member self-perceptions, and outcomes. To advance this line of research, I empirically examine the effect of leader narcissism on individual and team well-being, mediated by CSE at both the individual and team-level of analysis.

Moreover, there is a prevalence of a leader-centric focus on narcissism, that is, research largely ignores followers (e.g., Nevicka *et al.,* 2018; Owens *et al.,* 2015; Thoroughgood *et al.,* 2018), and has thus left a critical gap in knowledge because leadership is incomplete without followership (e.g., Epitropaki *et al.,* 2017; Epitropaki, *et al.,* 2013). Recently, researchers are beginning to explore follower narcissism as an important part of the leadership process (e.g., Benson *et al.,* 2016; Treadway *et al.,* 2019; Wirtz & Rigotti, 2020), how narcissistic followers behave in organisations (Schyns *et al.,* 2019) and their effects on individual outcomes (Wirtz & Rigotti, 2020) and group processes (Härtel *et al.,* 2021). This research follows this trend in exploring follower narcissism by examining the interactions of leader and follower narcissism, considering the importance of followers to the leadership process (Sims *et al.,* 2020). Furthermore, existing research suggests that some followers suffer more than others under narcissistic leaders (e.g., Schyns *et al.,* 2018), such as, followers who are low on self-esteem suffer more than those high on self-esteem when led by a narcissistic leader (Nevicka *et al.,* 2018b). Whereas how followers who are high/low on narcissism respond to narcissistic leaders and whether there are any differences remains largely elusive.

In addition to the above issues, research on leader and follower narcissism suffers from several methodological issues. Fundamentally, researchers tend to use cross-sectional designs which are susceptible to common method bias (Rindfleisch *et al.,* 2008; Podsakoff *et al.,* 2003) or experimental design which are laboratory scenarios (e.g., Braun *et al.,* 2018; Den Hartog *et al.,* 2020) and might have limited external validity (Aguinis & Bradley, 2014). Also, many studies on leader narcissism are based on student samples (e.g., Brunell *et al.,* 2008; Nevicka *et al.,* 2013), rather than data from organisational leaders and followers. Furthermore, despite the benefits of longitudinal research, which include a more precise estimation of relationships and stronger inferences of causality (Ployhart, & MacKenzie, 2015) and calls for studies to employ longitudinal designs when studying leader narcissism to address these (Braun, 2017; Schyns & Schilling, 2013), researchers are yet to employ repeated measurement designs in the study of leader narcissism.

Similarly, research on gender differences in narcissism is of interest to researchers to help understand gender disparity and its effects on leadership outcomes (e.g., Grijalva *et al.,* 2015), but has largely overlooked how leader gender shapes the link between leader narcissism and follower well-being. Also, research is yet to study the role of follower gender in their perception of leader narcissism, that is, how male and female followers perceive leader narcissism, if there are any differences and the effects on their cognition and well-being. While studies have established that males are more narcissistic than females (e.g., Foster *et al.,* 2003), male leaders show greater tendencies to pathological narcissism (Jarl, 1996), and that there are gender differences in the effectiveness of narcissistic leaders, such that female narcissistic leaders were seen as less effective than male narcissistic leaders (De Hoogh *et al.,* 2015), it is not known if leader gender moderates the effect of leader narcissism on team cognition and well-being. It is important to know the effect of leader and follower gender in leader narcissism research as gender difference may be a vital factor for assessing narcissistic leaders and how to manage them.

Finally, research on leader narcissism and other negative forms of leadership in the context of African countries is largely absent (see Kets de Vries *et al.,* 2016, for a review on destructive leadership in Africa). Most studies on leader narcissism and employee outcomes have been conducted in Western countries (e.g., Braun, 2017; Wang, 2021), which are insufficient to inform us of the generalisability of research findings on leader narcissism across countries and cultures (Jonason *et al.,* 2017; Pellegrini *et al.,* 2010). To address the concerns regarding study design and generalizability of findings, I conducted a multi-level, longitudinal survey-based study using a sample of Nigerian employees working in teams.

To build theoretical understanding around leader narcissism and individual and team well-being, I draw on identity theory (Stryker, 1968) that explains how individuals in defined positions verify their positions which leads to cognitions about their self-worth. I also draw on social identity threat theory (Breakwell, 1986) which explains how teams react in the face of threats against their collectiveness and preserve their affective needs in the face of stressors against them. The theoretical lenses in which leader narcissism have been examined in previous studies have been mostly from individual and social perspectives, for example, social exchange theory (e.g., Bernerth, 2020; Erkutlu, & Chafra, 2017; Forsyth *et al.,* 2012; Zhang *et al.,* 2016; Zhang *et al.,* 2021), social learning theory (e.g., Martin *et al.,* 2016; Sosik *et al.,* 2014), social information processing system (e.g., Azam & Rizvi, 2021; Fehr *et al.,* 2020), attention theory (Zhou *et al.,* 2019) and other social cognitive approaches which explain how leaders’ traits and behaviour exerts influence over their followers (Liu *et al.,* 2021). These social theories explain that the influence of leaders on followers is the result of an exchange system and frequent interactions and how followers look to leaders for cues that guide their behaviour (Bandura, 1986). However, the theoretical lens through which leader narcissism influences team well-being is not clear. It is important to theoretically establish this to strengthen our understanding of the processes in which leader narcissism influences individual and team well-being. Thus, I complement existing theoretical lenses in which leader narcissism has been examined in previous studies through using identity and social identity threat theories. Therefore, I build on and extend the existing theorising on leader narcissism to better understand the processes and boundary conditions of leader trait influences on individual and team well-being. Previous research has established that narcissistic leaders have challenges in developing team interactions and processes (Grijalva *et al.,* 2020), potentially harm followers’ well-being because they are self-entitled, lack empathy, make selfish decisions, and have difficulties in maintaining relationships with their followers (e.g., Rosenthal & Pittinsky, 2006). Thus, I further examine leader narcissism and its effect on individual and team well-being. In detail, I propose that narcissistic leaders influence individual and team members’ evaluation of their self-worth, as captured by CSE, because such leaders pose a threat to their identity. I expect the level of followers’ narcissism to shape the relationship between leader narcissism and individual self-worth drawing on identity theory (Stryker, 1968). Similarly, I expect that teams with protective features will be inclined to engage in behaviours to protect their identity. Specifically, I propose that team cohesiveness, team resilience and climate for psychological safety will buffer the effects of leader narcissism on team self-worth according to the social identity threat theory premise that team members will be protective of each other and have a shared identity (Breakwell, 1986). Additionally, I propose CSE as a mediator in the relationship between leader narcissism and employee well-being at the individual and team levels. Finally, I test leader, follower, and team characteristics as moderators in the leader narcissism-well-being links. In sum, this research examines a moderated mediation model in which leader narcissism influences individual and team burnout and work engagement via individual and team CSE, moderated by team cohesiveness, team resilience and climate for psychological safety, employing a longitudinal design.

# 1.2 Theoretical and practical contributions

This thesis contributes to the leadership, teamwork, and well-being literatures in several ways. First, it builds on existing research on leader narcissism and employee well-being (e.g., Bernerth, 2020; Fehn, & Schütz, 2021) by exploring the effects of leader trait narcissism on employee well-being at the individual and team levels. Specifically, this research examines the effects of leader narcissism on employee burnout and work engagement at the individual and team levels. In doing so, this study contributes to the well-being literature by exploring the important well-being outcomes of burnout and work engagement at the individual and team levels which are influenced by leader narcissism. This is relevant because of the contagious nature of burnout and its negative consequences for organisations including interpersonal relationship problems, unproductive work behaviours, and poor physical health (Bakker *et al.,* 2001; Kahill, 1988). It is also relevant to work engagement because employees that are highly engaged in their work achieve work faster and are less likely to quit their jobs (Du Plooy & Roodt, 2010; Saxena & Srivastava, 2015). Thus, the findings from this research strengthen our understanding of the affective states of individuals and teams under a narcissistic leader.

Second, this study explores whether CSE will mediate the effect of leader narcissism on individual and team burnout and work engagement. This is relevant because of the way individuals and teams see themselves under a narcissistic leader, which is debased sense of self-worth and cognition about their emotions (Nevicka *et al.,* 2018a). This contributes to the leadership narcissism literature because it highlights an important pathway through which leader narcissism affects individual and team burnout and work engagement.

Third, by studying the leader narcissism-team-CSE relationship, this study answers calls for the study of team boundary conditions in the context of leader narcissism (Schyns & Schilling, 2013). By exploring the team related conditions under which narcissistic leaders affect team CSE, this study contributes to the leadership and teamwork literatures by highlighting important moderators of leader narcissism and team outcomes. Specifically, I propose that team cohesiveness, team resilience and climate for psychological safety will exert a buffering effect on the link between leader narcissism and team CSE. This insight will inform team members on what they can do to preserve their collectiveness as a team, increase teamwork engagement and reduce team burnout in the face of a narcissistic leader. It will also provide an evidence- base for organizational development initiatives and policies on team-building mechanisms and structures that can cushion the negative influence of leader narcissism on team outcomes.

Fourth, this research contributes to the leadership narcissism literature by embracing the multi-trait approach from two perspectives: the leaders’ gender in combination with their narcissism and combination to follower gender and their narcissism. By exploring the interaction of leader and follower narcissism on the relationship between leader narcissism and CSE at the individual and team levels, I propose that leader gender will moderate the relationship between leader narcissism and individual and team CSE more for male leaders than female leaders. I also propose that follower narcissism will moderate the leader narcissism-CSE link more for male followers than female followers. This is relevant in understanding how followers respond to narcissistic leaders based on their gender and highlights the role of followers’ narcissism as a buffer of leader narcissism. By doing so, it contributes to the literature by highlighting leader and follower gender as moderators of the relationship between leader narcissism and CSE. The knowledge gained from this study will aid the evaluation and management of leaders and followers based on their gender. Practically, the insights from this research will inform organisations to look closer at the leader and follower gender characteristics, to ensure an appropriate match that promotes a psychologically safe and thriving workplace.

Fifth, by studying the effects of leader narcissism at the team level, this research contributes to the teamwork literature by highlighting cross-level and team-level processes and outcomes. While the dynamics in which leader narcissism affects individual burnout and work engagement are like the team level, certain conditions are different, for example, how team members react collectively, discuss their leader’s behaviour, and develop a shared mental model. By exploring the effects of leader narcissism on team processes, cognition and well-being, this research contributes to the teamwork literature by highlighting the importance of teamwork considering that organisations are mostly structured in teams (West *et al.,* 2009) where individuals work under a leader (Herdman *et al.,* 2017) as opposed to individual work-based structures. The knowledge gained from team level model will inform organisations to build strong team structures and provide team-building opportunities that are protective against the negative effects of leader narcissism.

Finally, this thesis contributes to the leadership literature methodologically by exploring leader narcissism longitudinally. That is, employing multisource and repeated measures of narcissism and well-being constructs over three waves of data collection, which allows for the inference of causality by using multi-source longitudinal data and reducing inflated findings arising from the same source data (Chen *et al.,* 2019; Spector, 2019). Specifically, this thesis makes a unique methodological contribution in showing the repeated measures of self and other ratings of leaders’ trait narcissism, to assess the level of consensus among team members regarding their leader narcissism (Schyns & Schilling, 2013). The knowledge gained from this study will aid a more comprehensive understanding of trait narcissism and outcomes and further inform leadership theory development. Similarly, a strength of this thesis is using data from multiple organisations in Nigeria, a high-power distant collective culture (Van der Vegt *et al.,* 2005) that has largely been neglected in Western-based research. In so doing, it contributes to the literature by increasing the generalisability of narcissism research across countries. In other words, the research shows that narcissistic leaders exist in Nigeria, and they affect individual and team well-being.

In sum, this thesis examines a multilevel moderated mediation model. At the individual level, it is proposed that leader narcissism influences individual burnout and work engagement via individual CSE, moderated by leader gender, follower gender and follower narcissism. At the team level, it proposes a relationship between leader narcissism and team burnout and work engagement via team CSE, moderated by leader gender, team cohesiveness, team resilience, and climate for psychological safety.

# 1.3 Thesis structure

Chapter 2

This chapter presents an extended literature review of the extant literature on narcissism and well-being. Specifically, it reviews the various theoretical perspectives of narcissism, and existing research on the antecedents and outcomes of narcissism. Also, this chapter provides a historical review of the various theoretical models of narcissism and synthesises research on the facets of narcissism, narcissism in an organisational context and levels of analysis in leadership studies. Furthermore, this chapter reviews the literature on two conceptualisations of well-being, namely general and context-specific well-being.

Chapter 3

This chapter focuses on the theoretical framework and hypotheses development of the thesis, highlighting the theoretical underpinnings of the research and developing the hypothesised research model. Specifically, this thesis draws on identity theory (Stryker, 1968), social identity threat theory (Breakwell, 1986) and role congruity theory (Eagly & Krau, 2002) to support the hypothesized relationships. The research hypotheses are first developed at the individual and cross-level, followed by the team level.

Chapter 4

This chapter describes the methodology used in this thesis to test the hypothesised model. Specifically, it describes my research philosophy and strategy, the sample size, data collection procedure and constructs measures. Additionally, the methods of data analysis, financial reimbursement, ethical considerations, and study settings are extensively discussed in this chapter. Lastly, this chapter presents the findings of preliminary data analytical techniques including confirmatory factor analysis, intra-class correlation coefficient and within-group agreement of the study constructs.

Chapter 5

This chapter presents the results of the data analysis. Specifically, the data were analysed using various statistical techniques including bivariate correlations, hierarchical linear regressions, mediation, moderation and moderated mediation analysis, and multilevel analysis. The results and their meaning are also reported in this chapter.

Chapter 6

This is the concluding chapter of this thesis that pulls together the different parts of the research. Specifically, it reviews the findings, discusses these in the context of previous research and elaborates on their theoretical and practical contributions and implications. Furthermore, this chapter highlights the strengths and limitations of the research and articulates suggestions for further research. The chapter ends with a concluding note.

# CHAPTER 2- EXTENDED LITERATURE REVIEW

# 2.1 Introduction

In this chapter, I review the literature of the two core constructs of interest, namely narcissism and well-being. The constructs are defined and the main theoretical approaches to studying them are briefly reviewed, with a focus on their relevance in the workplace. Specifically, I review the literature on antecedents, perspectives, outcomes, facets, and theoretical models of narcissism. I also discuss leaders’ and followers’ narcissism from an organisational perspective. Lastly, I review the literature on employee well-being from the perspectives of general and job-specific well-being.

# 2.2 Narcissism

## *2.2.1 Perspectives*

There are three broad approaches to studying narcissism, namely, narcissistic leadership, pathological (clinical) narcissism, and non-pathological (subclinical) narcissism. First, narcissistic leadership sits within the leadership and industrial/organisational psychology domain and has received broad research attention (e.g., Brunell *et al.,* 2008; Rijsenbilt & Commandeur, 2013; Rosenthal & Pittinsky, 2006). Rosenthal and Pittinsky (2006, p. 629) propose that narcissistic leadership “occurs when leaders' actions are principally motivated by their own egomaniacal needs and beliefs, superseding the needs and interests of the constituents and institutions they lead”. This style is different from other leadership styles because the leaders’ actions are mostly self-serving and are at the expense of the followers and organisations they lead (Braun, 2016; Ouimet, 2010), with severe effects on followers and organisations. This style has been categorised by scholars as part of the ‘dark side of leadership’ or negative form of leadership (e.g., Conger, 1990; Harms & Spain, 2015; Rosenthal & Pittinsky, 2006; Schyns, 2015; Schyns & Schilling, 2013).

Second, pathological narcissism originates from clinical theory and has been defined by several authors (e.g., Kernberg, 2008; Rosenfeld, 1971) as a mental illness or personality disorder involving an inflated self-view, emotional deficit, incapability of showing guilt, with a feeling of insecurity and grandiose display of self-admiration (see Kernberg, 1985). It is manifested because of a defect of normal narcissism in the development of an individual from childhood to adulthood (Kernberg, 1984, 1988). Normal narcissism is the instinctive desire to love oneself, also called primary narcissism (Freud, 1957/1914). Pathological narcissism is excessive self-love which “can be ascertained only by psychoanalytical exploration” (Kernberg, 1975, p. 327). Amernic and Craig (2010, p. 83) provide a list of nine criteria from the American Psychiatric Association’s Diagnostic Statistical Manual (fourth edition, text revised version, DSM-IV-TR), stating that a person who possesses five or more of the following features has pathological narcissism; including, “ (1) a grandiose sense of self-importance, (2) pre-occupation with fantasies of unlimited success, power, brilliance, and beauty, (3) belief that he or she is special and unique, (4) requests excessive admiration, (5) a sense of entitlement, especially favourable treatment, (6) interpersonally exploitative, (7) lacks empathy, with the feelings and needs of others, (8) envious of others or believes that others are envious of him or her, (9) shows arrogant haughty behaviours and attitudes”. The emphasis of this perspective is its excessiveness and that it requires clinical intervention or therapy. In other words, individuals with clinical narcissism cannot relate normally with other people because of their excessive and compulsive manifestation of grandiosity (see Paulhus, 2014).

Third, non-pathological narcissism, also known as subclinical narcissism, has been described by several authors (e.g., Freud, 1957/1914; Jones & Paulhus, 2011) as normal (e.g., Paulhus, 2014) and is classed as a personality trait (see Braun, 2017; Paulhus & Williams, 2002). For example, while trait expression of narcissism in some individuals is overt because they are extroverts, the expression of narcissism in other individuals is covert because they are introverts (e.g., Uher, 2017; Wink & Donahue, 1997). Narcissism as a personality trait is a relatively stable set of characteristics that individuals possess, propelling their emergence into leadership positions and endearing them to followers through traits towards organisational goals (ROS not be in leadership position, to influence leaders, susceptible followers and conductsuch as charisma, creativity,innovativeness, role modelling, andself-confidence(seeCampbell *et al.,* 2004; Galvin *et al.,* 2010; Nevicka *et al.,* 2018b; Resick *et al.,* 2009).Trait narcissism is demonstrated in various measures and magnitudes in individuals while they are followers and is likely to become more pronounced when they assume leadership positions because they wield authority and can influence other people towards implementing goals (Nevicka *et al.,* 2011; Rosenthal & Pinnisky, 2006). Trait narcissism expresses more when leaders are triggered by situational and organisational structures. That is, leaders lead in a narcissistic way under certain conditions (Rosenthal & Pinnisky, 2006). In their model of emotion, stress and well-being, Spain *et al.* (2016) articulated that dark personality characteristics are moderated or amplified by environmental stress triggers, arguing that stress changes the functional value of leaders’ behaviour to become dysfunctional or destructive.

The focus of this thesis is on non-pathological (subclinical) narcissism, which is in line with research in the leadership and organisational psychology domain where leader narcissism is more commonly measured as a trait, that is, a stable form of the narcissistic personality (e.g., Grijalva *et al.,* 2015; Judge *et al.,* 2006; Judge *et al.,* 2009). Majority of the literature focus on trait narcissism because it is easily measured (Tamborski & Brown, 2011) identified (Campbell & Campbell, 2009) and continuously expressed by individuals (Miller & Campbell, 2010). Therefore, for this research, I adopt the trait perspective of narcissism for both leaders and followers. In the next section, I discuss the antecedents of narcissism.

## *2.2.2 Antecedents*

There are some antecedents of narcissism, amongst which are parenting, behaviour and lifestyle, and other environmental and genetic factors. For parental factors, Kernberg (1975, 1980) argued that children who experienced parental rejection or abandonment subsequently in their early development believe that only the self can be trusted and loved, because the parents have let them down, and there was no parental figure to model, trust or love. Similarly, Kohut (1971, 1976) proposed a developmental self-theory that argues that narcissism stems from the failure of a child to idealise the parents, because of inadequate care, love, and sympathy. In furtherance of this argument, the child is unable to develop a good sense of self-worth and becomes ‘self-absorbed' due to the absence of parental acceptance or inadequate parental sympathy and this causes the "narcissistically injured child" to grow into adulthood searching for an idealised parent substitute or acceptance that cannot be found in another person (see Deluga, 1997, p. 51; Kohut, 1972; Solnit, & Stark, 1961). Research shows that parental factors account for the development of the narcissistic personality in individuals mostly during the early years of individuals’ growth because of the ‘care-giving’ influence that parents have over their children (see Dentale *et al.,* 2015).

Apart from childhood upbringing, personal factors such as lifestyle, associations, and preferences have been associated with how individuals develop and express their narcissistic personalities. For example, the use of social media sites for networking, self-expression, relationship building, privacy, intimacy and ‘showing-off’ has been associated with personal narcissistic choices amongst young adults (Livingstone, 2008; Sung *et al.,* 2016). In addition, organisational factors are considered useful in explaining how individuals develop and express their narcissistic personalities. Organisational factors account for the attraction, hiring, support and promotion of narcissistic individuals. For example, the desire or ambition of individuals to hold leadership positions in organisations arises within an organisational context, because of the perks of such and the authority attached to such positions (see Padilla *et al,* 2007). On top of that, narcissistic dispositions are tolerated or aided by weak or ambitious followers in many organisations (Padilla *et al,* 2007; Ouimet, 2010). Narcissistic individuals tend to take advantage of organisational lapses, weak corporate governance, poor institutional controls, and weak followership to exploit organisations and perpetuate their selfish ambitions, thus extending their previously held narcissistic disposition or developing their narcissistic personality based on the enabling environment in the organisation (see Duchon & Burns, 2008; Post, 2004; Rosenthal & Pittinsky, 2006). For example, when an individual sees themselves as central to organisational identity, it predicts individual narcissism that exploits the organisation for personal gains (Galvin *et al.,* 2015). The organisational factors that account for the development and expression of narcissism in individuals can also be viewed as environmental factors or internal organisational factors (Spain *et al.,* 2016).

Lastly, external environmental factors are also accountable for the development or expression of narcissism in individuals. This includes societal values, which an individual imbibes from the environment. Scholars have discussed the ‘nature versus nurture' interplay or dichotomy in personality development and the trans-contextual nature of human personality (e.g., McCrae *et al.,* 2000; Owen, 2006). For example, the environment one is born into and grows has significant influences on the functioning of the personality system and character development of an individual, in terms of, e.g., food preferences, religious beliefs, style of interpersonal relationships, vocational interest, educational system, language choices and media use (McCrae *et al.,* 2000), which may temper or amplify the narcissistic dispositions of people (see Pearson & Hussain, 2015). In addition, research has revealed that certain cultural factors promote or legitimise narcissism (Pearson & Hussain, 2015; Twenge & Campbell, 2013). For example, Twenge and Campbell (2013, p. 2) described narcissism as a "psycho-cultural disease" and drew attention to what they call "the narcissism epidemic", arguing that narcissism in America has increased at an alarming rate in comparison to the increase in obesity (see Pearson & Hussain, 2015). It is safe to argue that with the advancement of technology, social laws, human rights, and other forms of human expressions, more narcissistic individuals are prevalent than ever before (see Koterba *et al.,* 2021; Twenge & Campbell, 2008) and this has implications for the development of future leaders and followers’ (see Benson & Jordan, 2018). The focus of this project is on the effects of leader narcissism on employee and team well-being. Thus, it is outside the scope of this project to explore antecedents of leader narcissism. However, individual characteristics (gender) and internal environment (follower and team characteristics) are considered, not as antecedents, but potential environmental contributors to the effects of leader narcissism. In the next section, I review the literature on leader narcissism and outcome variables.

## *2.2.3 Outcomes*

Leader narcissism has been studied with several outcomes at the individual, team, organisational, and across multiple levels. The studies summarised in this section are selected on the basis that the predictor variable is leader narcissism, and they provide an indication of the breadth and richness of research, in terms of the variety of methodologies and outcomes that have been studied in the leadership and organisational psychology domain. It should be noted that a lot of the research on individual-level outcomes looked at group-level outcomes as the phenomenon studied have cross-level influences. Regarding individual-level outcomes, research has examined leader narcissism in relation to several individual-level work behaviours and performance outcomes. For example, Braun *et al.* (2018) used both field survey and experimental research designs to examine the link between leader narcissism and supervisor targeted counterproductive work behaviour (CWB). The results across five studies showed that leader narcissism positively related to follower malicious envy, which in turn mediated the relationship between leader narcissism and supervisor targeted CWB. In a related study, Carnevale *et al.* (2018) investigated the relationship between leader narcissism and employee citizenship and antagonistic behaviour via their organisational based self-esteem (OBSE), drawing on survey data from 262 leader-employee dyad and survey data collected at two-time points. The findings revealed that leader narcissism negatively related to OBSE and OBSE in turn was positively associated with employee promotive voice and helping. However, leader consultation moderated the link between leader narcissism and OBSE in the presence of high leader consultation with employees. Pointing in the same direction, Norouzinik *et al.* (2021) examined the relationship between leader narcissism and employee innovative behaviour, with survey data from 455 employees and managers. The findings revealed that leader narcissism negatively influenced employee innovative behaviour via job embeddedness and job engagement. In a related study on leader narcissism and employee performance, Liu *et al.* (2021) employed survey and archival data to examine leader narcissism and follower job performance. The study established that leader effectiveness moderated the relationship between leader narcissism and followers’ narcissistic supervision perception as well as followers’ charismatic leadership perception. Also, followers’ narcissistic supervision perception was negatively related to followers’ job performance. Studies at the individual level have also tested leader narcissism and well-being outcomes. Bernerth (2020) examined the relationship between leader narcissism and well-being of both followers and leaders, that is, followers' job satisfaction and emotional exhaustion and leaders’ identification, job satisfaction and perceived self-worth. The study used survey data from 1017 followers nested under 424 leaders. The findings revealed that leader narcissism had an indirect negative relationship to followers’ job satisfaction and emotional exhaustion via LMX. Similarly, leader narcissism (self-rated) indirectly negatively influenced their well-being. In another study, Fehn and Schütz (2021) used data from 122 followers nested under 68 leaders to explore the influence of leader narcissism on employee well-being. The results revealed that follower rated leader narcissism negatively influenced perceived supervisor support, and perceived supervisor support mediated the relationship between leader narcissism and LMX, leader narcissism and follower performance-based self-esteem but did not mediate the leader narcissism-job engagement link. Lastly, Nevicka *et al.* (2018b) examined the relationship between leader narcissism and follower task performance and follower exhaustion, mediated by perceived abusive supervision, using multisource data of 85 leaders and 128 followers. The study found support for the moderating role of follower self-esteem in the leader narcissism-abusive supervision link, while abusive supervision was related to lower follower job performance and higher follower exhaustion.

At the team level, only a few scholars have examined leader narcissism with team outcomes. In a sample of 211 team leaders and 1205 matched leader-follower dyads, Liu *et al.* (2017) examined leader narcissism and its relationship with team prosocial behaviour and team voice and found that leader narcissism negatively affected team prosocial behaviour and team voice when leader unfairness perception was high. Similarly, Nevicka *et al.* (2011) examined leader narcissism and group performance with 150 student samples and computer simulation, where students were assigned to a group and given a decision-making task. The findings revealed that leader narcissism was negatively related to group performance, which in turn, mediated the effect of leader narcissism on group performance. Furthermore, at the group level of analysis, Zhou *et al.* (2019) examined leader narcissism and team creativity via team information search using a survey of 667 team members and their team leaders. The findings showed that leader narcissism was positively related to information search, which in turn, mediated the leader narcissism-team creativity link. Also, participative decision making accentuated the relationship between leader narcissism and information search effort, such that the positive relationship between leader narcissism and information search effort was more positive in teams that engage in more participative decision making.

At the organisational level, leader narcissism has been explored on a range of variables mostly focusing on Chief Executive Officers (CEO’s) of organisations. Chatterjee and Hambrick (2007) examined narcissistic CEO’s and their effect on company strategy and performance using unobtrusive measures including the prominence of the CEO’s photographs in the company’s annual reports, the prominence of the CEO in the company’s press release, the prominence of the CSE’s use of the first pronoun in interviews, cash, and non-cash compensation of the CEO. The study revealed that narcissism in CEO’s is positively related to strategic dynamism, number, and size of company acquisitions, and fluctuating organisational performance. Similarly, Reina *et al.* (2014) explored CEO grandiose narcissism and firm performance drawing on a sample of 97 CEO’s collected using both survey and firm return on assets data. The findings showed that CEO narcissism was negatively related to firm performance, and organisational identification moderated the CEO narcissism-firm performance link. Wales *et al.* (2013) also explored CEO narcissism, entrepreneurial orientation, and firm performance variability with survey data from 173 CEO’s and found support for the model that firms led by narcissistic CEO’s exhibited higher levels of entrepreneurial orientation and the firms experienced greater variability in performance. Other studies examined CEO narcissism and firm vulnerability to law cases (O'Reilly III *et al.,* 2018) using field, archival data of 32 firms. The findings confirm that more narcissistic CEO’s have more lawsuits against them, and the lawsuits last for long periods. Kashmiri *et al.* (2017) study on CEO narcissism focused on firm innovative strategy, drawing on panel data from annual reports, press releases and other archival reports of 395 publicly listed US companies. The findings showed that firms with narcissistic CEO’s were found to introduce marginally new products and were competitively aggressive. In another study, Petrenko *et al.* (2016) used third-party ratings of video samples of CEOs of fortune 500 companies and found a positive relationship between CEO narcissism and firm corporate social responsibility (CSR), and CEO narcissism weakened the relationship between CSR and firm performance. O'Reilly III *et al.* (2020) examined leader narcissism and organisational culture in two field studies and three laboratory studies and found support for the hypothesis that narcissistic leaders prefer and lead organisations with less collaborative cultures and with less integrity, implying that leader narcissism is exacerbated through culture. Gruda *et al.* (2021) in another study used a machine-learning algorithm to predict leader narcissism based on Twitter profiles of 2377 organisational leaders and found that leader narcissistic admiration was positively related to corporate fund-raising success while leader narcissistic rivalry was negatively associated with corporate fund-raising success. Lastly, research on leader narcissism at the organisational level have examined risk-taking spending and decision outcomes. Oesterle *et al.* (2016) used panel data from 31 manufacturing firms in Germany between 2004-2013 to evaluate the growth of a firm’s degree of internalisation in relation to leader narcissism. The findings showed a positive significant relationship, implying that CEO narcissism is a predictor of firm behaviour towards internationalisation decisions.

From the above, leader narcissism has been linked to a wide range of individual, team, and organisational outcomes. More closely, research on leader narcissism have mostly focused on the individual, team, and organisational levels. At the individual level, researchers mostly employ survey and experimental research designs to examine leader narcissism and outcomes. At the organisational level, most studies employ archival data and other secondary data to examine leader narcissism and firm outcomes. From the review above, it is established that leader narcissism can have both positive and negative consequences depending on the context or perspective. For example, while narcissism accounts for leader emergence (Brunell *et al.,* 2008) and increased innovative strategy (Kashmiri *et al.,* 2017), individuals and groups can be adversely affected in their emotions, cognitions, and effectiveness, such as the exhibition of malicious envy (Braun *et al.,* 2018), emotional exhaustion (Bernerth 2020), team prosocial behaviour (Liu *et al.,* 2017) and group performance (Nevicka *et al.,* 2011). Additionally, from the review of the articles on leader narcissism, variety and combination of methodologies used, scholars use multi-source data and study leader narcissism from a multi-level perspective, accounting for the nested nature of leadership phenomena. For example, some studies (e.g., Braun *et al.,* 2018; O'Reilly III *et al.,* 2018) combined field survey and experimental design, which gives us strong evidence of the causal direction of leader narcissism, adding to my confidence that it is leader narcissism, and not something else, that is the cause of the individual, team, and organisational outcomes that have been studied. Thus, these studies and their evidence have shown me that leader narcissism needs to be studied from a multi-source, multi-level perspective. Therefore, the focus of this project is on the effects of leader narcissism on employee and team well-being. Next, I discuss the facets of narcissism in the literature.

# 2.3 Facets of Narcissism

In the conceptualisation of narcissism, there have been various labels used to distinguish the various forms, or variants of narcissism, to better understand the nature and expression of the narcissistic personality and its influence on leadership. Researchers (e.g., Dickinson & Pincus, 2003; Wink, 1991; Miller *et al.,* 2011) suggest that narcissism is not a unitary construct and distinguish between two forms, namely, grandiose, and vulnerable narcissism.

## *2.3.1 Grandiose narcissism*

This form of narcissism has received the most research attention in the leadership and organisational psychology domains because it is an overt expression of the feeling of superiority and entitlement, which is further characterised by interpersonal dominance and the tendency to overestimate one’s ability (Miller *et al.,* 2011; Zajenkowski *et al.,* 2018). Grandiose narcissism is a form of narcissism that reflects traits related to dominance, aggression, attention-seeking, grandiosity, and exhibitionism, as well as a fantasy of unlimited power (Fatfouta, 2019; Miller *et al.,* 2011). Individuals high on grandiose narcissism often aspire to leadership positions and emerge as organisational leaders because they view themselves as better than average (Campbell *et al.,* 2002), with high self-esteem and overconfidence (O'Reilly & Hall, 2021). For example, research on grandiose narcissism in CEOs shows that grandiose narcissists negotiate firm takeover processes faster (Aktas *et al.,* 2016) and undertake bold and challenging actions for their organisations to satisfy their need for regular praise and admiration (Rijsenbilt & Commandeur, 2013). However, grandiose narcissism is also associated with managerial fraud and questionable behaviour (Cragun *et al.,* 2020; Rijsenbilt & Commandeur, 2013). Grandiose narcissism correlated negatively with agreeableness and neuroticism and positively with extraversion (Miller *et al.,* 2011). Put differently, individuals high in grandiose narcissism are less likely to value harmony in their relationship with others, will be less emotionally stable and will tend to focus on gratification from outside the self (extraversion; Miller *et al.,* 2011).

## *2.3.2 Vulnerable narcissism*

This form of narcissism is largely covert and reflects an insecure and hypersensitive narcissism, characterised by a feeling of inadequacy, negative affect, anxiety, withdrawal, and incompetence (Miller *et al.,* 2011). Individuals high on vulnerable narcissism can be described as “being the inhibited, shame-ridden, and hypersensitive shy type, whose low tolerance for attention from others and hypervigilant readiness for criticism or failure makes him/her more socially passive” (Ronnigstam, 2009, p. 113). Researchers are examining vulnerable narcissism in leadership (e.g., Braun *et al.,* 2019; Wirtz & Rigotti, 2020). For example, vulnerable narcissism predicted leader’s abusive supervision intent, due to the leader’s internal feelings of shame (Braun *et al.,* 2019). Vulnerable narcissism is associated with lower extraversion, lower sense of self-esteem and higher neuroticism (Miller *et al.,* 2011). Individuals high on vulnerable narcissism are likely to be more defensive, avoidant, sensitive to criticism and need validation from other people to boost their sense of worth (Miller *et al.,* 2018; Maciantowicz & Zajenkowski, 2020).

Despite the conceptual differences between grandiose and vulnerable narcissism and how the expression of these traits results in different personality phenotypes, they share some common characteristics (Jauk & Kaufman, 2018). Both facets of narcissism share the features of self-entitlement, callousness, self-centredness, self-absorption, mood variability, disagreeableness, and interpersonal antagonism (Miller e*t al.,* 2016; Zajenkowski *et al.,* 2018). For this research, I focus on grandiose narcissism which is more easily observable and can thus be observed and rated by others (e.g., followers) in organisations (Zajenkowski *et al.,* 2018). Next, I discuss theoretical models of narcissism and their implications for leadership.

# 2.4 Theoretical Models of Narcissism

A variety of theoretical models have been proposed by authors to describe the role of narcissism in human interactions and organisational contexts. The theoretical models of narcissism discussed include the structural model (Freud, 1914), narcissism as a strategy model (Raskin *et al.,* 1991), self-orientation model (Campbell, 1999), dynamic self-regulation processing model (Morf & Rhodewalt, 2001), emotion-based model of addictive narcissism (Baumeister & Vohs, 2001), minimalist model (Paulhus, 2001), self-conscious model (Tracy & Robins, 2004), chocolate-cake model (Campbell, 2005), agency model (Campbell, Brunell, & Finkel, 2006), extended agency model (Campbell & Foster, 2007), and contextual reinforcement model of narcissism (Campbell & Campbell, 2009). The models relevant to my thesis are the agency and extended agency models. These two models are most relevant for my project as they highlight the multi-trait approach from two perspectives, that is, the leaders’ gender in combination with their narcissism and follower gender and their narcissism, to address my research question on what leader and follower characteristics shape the relationship between leader narcissism and individual/team outcomes. In this section, I review the following models to highlight the development of narcissism from various lenses and how they inform theorising and research.

## *2.4.1 Structural model of narcissism*

The structural model of narcissism (Freud, 1914) was used to explain the developmental process of an individual from childhood to adulthood, using libido or sexual development as a foundation. This model is an exploration into the psychoanalytical domain of the narcissism construct by Freud (1914) representing the ego ideals in which individuals develop and maintain their self-esteem at different stages in their lives. The model, using the libido metaphor of Freud (1914), argues that there is a storage of love that individuals possess. It further posits that narcissistic individuals (those high in narcissism) use their ‘tank of love’ towards themselves, making them less affectionate, whereas those low in narcissism express love to others, thereby enhancing interpersonal relationships (see Campbell & Foster, 2002). The model has three components including id, ego, and superego. First, the id explains that individuals possess an inherent biological instinct, which must be responded to in various forms. For example, the drive for sex is inherent in human beings. The id operates in the realm of the unconscious from birth and is developed as individuals develop into adults (McLeod, 2016). The id is an instinct, for example, the pursuit of sexual gratification (see Freud, 1923). The id demands satisfaction when the drive comes on, which brings pleasure when achieved and pain when denied, regardless of the consequences (Freud, 1920; McLeod, 2016). Second, the ego is the aspect of the id that has been tempered by the interaction of the individual with the external environment (Freud, 1923). Put differently, individuals regulate their demanding id, e.g., libido instincts, through reasoning, restraining actions and delaying the drive for gratification using any strategy. The model suggests that education, exposure, and status can serve as amplifiers in regulating the id of individuals from expressing itself uncontrollably. Third, the superego applies the ideals of social and moral values to the satisfaction of the id, subject to the local environment and global norms known to the individual (Rennison, 2015). Thus, the superego controls the id to acceptable societal standards and forbids the individual from inordinate impulses such as rape and violence. Where the individual violates the superego’s control, punishment is served by the conscience, for example, the individual experiences guilt, and society punishes the individual if caught in such violations (McLeod, 2016; Rennison, 2015). In summary, this model explains the developmental process of personality and narcissism, from childhood to adulthood, and how individuals unfold their ideal selves to meet the demands of society in a social relationship. This model relates to the leadership field because it exposes the emergence of leadership and insinuates the role of followers as Freud (1931) argued that narcissistic personalities “impress others as being ‘personalities’; it is due to them that their fellowmen are especially likely to lean; they readily assume the role of leader” (Freud, 1931, p. 218). This position has influenced research investigations and shaped research in understanding the qualities that account for narcissistic personalities to attain leadership positions, such as their physical attractiveness, confidence, charisma, charm, and visionary boldness (e.g., Grijalva *et al.,* 2015; Nevicka *et al.,* 2011).

## *2.4.2 Narcissism as a strategy*

Narcissism and the need for approval were suggested by Raskin *et al.* (1991) as a self-esteem regulating strategy. This model stems from the background of infant development and how the narcissistic personality is formed to regulate normal self-esteem (Raskin *et al,* 1991). That is, self-regard is an important component of human personality, theorized previously as "primary narcissism or narcissistic libido" (Freud's 1914/1957, p. 98). Narcissism is a strategy to regulate self-esteem because people tend to feel unloved, unsatisfied and falls into depression due to fragile self-esteem, that is, their feeling of insecurity or vulnerability (Raskin *et al.,* 1991). Hence, a high level of narcissism is a scheme to enhance or protect their self-esteem (Raskin *et al,* 1991). Self-esteem has three components including individuals' delight from their aspirations, the satisfaction from having one’s aspirations fulfilled, and the feeling of loving others and being loved by others (Raskin *et al.,* 1991). An important underpinning is the role of aggression in the self-regulating strategy of narcissism. Individuals resort to defensive anger as a reactionary means to protect their self-esteem when they face unfavourable assessments. Thus, defensive self-esteem (one that is affected by evaluation from other people) as a strategy is activated by individuals when their desire for love, approval, validation, recognition, acceptance and favourable consideration is faced by rejection (e.g., Bushman, & Baumeister, 1998; Crowne & Marlowe, 1964; Pulver, 1970; Raskin *et al.,* 1991). In summary, narcissism as a strategy is anchored on the fragile self-esteem that individuals have and how to protect and regulate their self-esteem against rejection and unfavourable assessment, in a bid to attract the love and satisfaction that narcissistic individuals desire. This model has influenced research in the leadership field, especially in the top echelon of organisations (e.g., Chatterjee & Hambrick, 2007; Resick, Whitman *et al.,* 2009; Wales *et al.,* 2013; Zhu, & Chen, 2015). From this research, CEO’s apply defensive self-enhancement in the form of grandiosity and social desirability through, for example, promoting an inflated self-view of their achievements, their prominence in press conferences, ensuring their pictures are portrayed in annual reports and other official documents of the company, resist corporate strategies that fellow directors suggest because their strategy involves attracting attention to themselves (Chatterjee & Hambrick, 2007; Zhu, & Chen, 2015).

## *2.4.3 Self-orientation model of narcissism*

The self-orientation model of narcissism (Campbell, 1999) was developed from the perspective of romantic attraction and relationships to explain the aetiology of attraction to self and the strategy of self-regulation of narcissistic individuals. Campbell (1999) observed from the psychodynamic literature that narcissism is associated with the self-concept, in terms of how narcissistic individuals maintain their self-enhancement through romantic relationships and their inability to experience true intimacy because of the fear of abandonment. Narcissists apply self-orientation strategies to enhance the self-concept, for example, the use of interpersonal self-regulation without a commitment to intimacy and the consistent use of the word ‘I' in their speeches, to attract self-focus. The self-orientation model, therefore, argues that narcissistic individuals are more attracted to people who admire them and identify with them. Conversely, they are less attracted to people who provide intimacy and caring towards them, in what is differentiated as "self-oriented targets and other-oriented targets" (Campbell, 2009, p. 256). For example, narcissistic individuals will be attracted to a person who regularly compliments them and will be more inclined to identify with a television star, to enhance their self-image, while being less desiring of a romantic partner who expects mutual self-disclosure and is willing to provide care, because emotional attraction is of less priority to narcissists than the enhancement of their self-image (Campbell, 1999). In summary, the self-orientation model of narcissism explains how narcissists enhance their self-view through interpersonal self-regulation by avoiding commitment to intimacy in relationships. This model is based on romantic relationships and is not directly applicable to the leadership context, but it has implications for interpersonal relationships between leaders and followers. Research has established that narcissistic leaders have challenges in sustaining relationships with followers. When followers realise that their leader lacks empathy, is insensitive, with domineering behaviour towards them, the relationship goes sour (e.g., Chatterjee & Hambrick, 2007; Peterson *et al.,* 2012. Resick *et al.,* 2009). In addition, on the backdrop of the prevalent use of “I” in speeches of narcissists as proposed by this model, further researchers have theorised and empirically confirmed that narcissistic leaders enhance their self-image in speeches and texts using personal pronouns such as me, I, and myself (e.g., Amernic, & Craig, 2007; Amernic, & Craig, 2013; Craig, & Amernic, 2011; DeWall *et al.,* 2011; Chatterjee & Hambrick, 2007).

## *2.4.4 Dynamic self-regulation processing model of narcissism*

The dynamic self-regulation processing model (Morf & Rhodewalt, 2001) explains the interplay and processes in which narcissistic personalities navigate their social environment to maintain a positive self-view. The model proposes that people owe it to themselves how they organise their self-regulatory strategies to interact with their environment, in a bid to express their narcissistic behaviour (Morf & Rhodewalt, 2001). This model has four components that inform how the self-regulation processes are demonstrated by individuals, including social relationships, self-knowledge (self-concept: content and structure, valence), intrapersonal self-regulatory processes (cognitive, affective, and self-evaluatory) and interpersonal strategies (behaviour) (Morf & Rhodewalt, 2001) as seen in Figure 2.1 below. The self-knowledge component is explained by the self-regulatory processes inherent in narcissistic individuals to view themselves within a social context. It further involves a cognitive self-view of how his/her current traits and competence are appraised by others in the environment as well as their outlook, goals, and ideals. The other part of the self-knowledge component is the valence statement, which reflects one's sense of value because of how others perceive one (Morf & Rhodewalt, 2001). Second, the intrapersonal self-regulatory processes involve cognitive, affective, and self-regulatory assessments that incite one’s behaviour. Here, narcissistic individuals apply a biased selection and interpretation of social activities and performance outcomes of past events, that is, how the environment perceives them. With this, behaviour is regulated to achieve the desired self-view (Morf & Rhodewalt, 2001). Third, interpersonal strategies are used to maintain the self-knowledge of narcissists. This applies to specific instances where an individual adjusts contents of the self, to define a particular self-view or to be seen positively. Last, the social relationship component is the context in which the dynamic self-regulation is displayed. Here, narcissistic individuals cleverly select relationships with people who can enhance their self-image and self-esteem, but they have challenges maintaining these relationships when people no longer perceive them in the same positive light. In summary, through self-regulatory processes, narcissistic individuals bring about their desired identity, relying on the interpersonal processes and social interactions in the environment until people no longer provide admiration for them, resulting in depression or anxiety for them (Morf & Rhodewalt, 2001; Campbell & Campbell, 2009; Miller, Campbell & Pilkonis, 2007). This model has informed research on how narcissistic individuals organise their self-regulatory strategies, manipulate the social environment and promote their self-view. Particularly, this model has influenced research in social networking aspects of narcissism studies, such as, what narcissists do on social media and why (Bergman *et al.,* 2011). Self-promotion, and anti-social behaviour are associated with Facebook (Carpenter, 2012; Sorokowski *et al.,* 2015), selfie-taking and posting on Facebook and Instagram (Halpern *et al.,* 2016; Sheldon & Bryant, 2016). In the leadership field, there is a dearth of research on how narcissistic leaders manipulate the social environment to enhance their self-image. However, there is increased social media presence of organisational leaders to project their positive perception of the public towards them as a form of self-regulation strategy with the public (e.g., Barry *et al.,* 2019; Men, & Tsai, 2012).

Figure 2.1: Self-regulatory processing model

INTRA-PERSONAL SELF-REGULATORY STRATEGIES

(Cognitive, affective, & self-regulatory)

INTERPERSONAL STRATEGIES

(Behaviour)

SELF-KNOWLEDGE

(Self-concept: content, & structure; Valence)

SOCIAL RELATIONSHIPS

Source: Morf and Rhodewalt (2001, p.180)

## *2.4.5 Emotion-based model of addictive narcissism*

The addictive model of narcissism (Baumeister & Vohs, 2001) explains narcissism as an addictive self-view, attention, fame, and status-seeking motivation of individuals. From this perspective, narcissistic personalities are addicted to a self-enhanced image of themselves, their positions, and status, by relying on others as the source of all these and more, albeit in a fluctuating manner. Baumeister and Vohs (2001, p. 206) theorised that "as a result, a narcissist's life may be characterised not by a stable sense of inflated self-regard, but by periods of relative normality punctuated by phases of self-aggrandizing inflation, possibly leading to destructive consequences that may occasionally cause the person to revert to a more normal, balanced view of self". This proposition by Baumeister and Vohs (2001) clearly emphasizes that narcissism can wax or wane in different phases and cycles, that is, there are times when the cravings of individuals for approval from other people is high and low. This can be due to the successes achieved by narcissists at a particular time, encouraging the thinking of superiority but subsequently, the satisfaction gained from the same success levels declines and the individuals then looks for something else to boost their admiration and self-esteem (Baumeister & Vohs, 2001). In summary, the addictive model of narcissism stands on the precipices of fluctuations of narcissism in narcissistic personalities. While the cravings to seek attention and think of oneself as superior to others may be constant, the strategies to achieving the self-gratifying goals may not be constant, and consistent; described in the literature as the phases and cycles of narcissism (see Baumeister & Vohs, 2001). The addictive model (Baumeister & Vohs, 2001) that views narcissism as an inconsistent manner of narcissistic cravings appear to be lacking in leadership theorising as scholars are yet to examine the fluctuating nature of leader and follower narcissism. However, consistent with the premises of the additive model of narcissism, researchers have argued that narcissism in leaders is triggered by situational and environmental factors, for example, stress (Spain *et al.,* 2016) and public ego threat (Ferriday *et al.,* 2011).

## *2.4.6 Minimalist model of narcissism*

The minimalist model (Paulhus, 2001) is a two-aspect model of narcissism, including the big five factors of personality and the self and other liking models. This model explains narcissism first from the extraversion and agreeableness personality taxonomy. Relying on the previous aetiology of the narcissistic personality as comprising of a high-individualist structure and low communal motivation (e.g., Helgeson & Fritz, 2000; Wiggins & Pincus, 1994), the proponent of this model identifies narcissists as "disagreeable extraverts" (Paulhus, 2001, p. 228). This means that narcissists have a high preference for the pre-eminence of their status through the pursuit of profitable and pleasing goals while at the same time showing disregard for others in the pursuit of rewards. However, narcissistic individuals react with aggression and anger when their efforts are futile, or when they face disappointments (Paulhus, 2001). The second part of the minimalist model is the lopsided positive view of the self and the negative view of other people by narcissists. That is, narcissists view themselves positively but are viewed negatively by other people. Through this, attempts by narcissists into relationships with other people will be faced by this "asymmetry self-other liking" situation (Paulhus, 2001, p. 229), making it difficult for such relationships to be sustained (e.g., Back *et al.,* 2010; Heider, 1958; Paulhus, 2001). In summary, the minimalist model explains narcissism from the two-component taxonomy of the big five personality traits and the self and other liking dimensions, showing narcissists as disagreeable extroverts and ones who like their view but are not liked by others. This model has informed research on narcissism as a personality configuration (Miller & Campbell, 2010) and research relating to other personality traits and work outcomes. For example, narcissism in combination with the big five-factor personality and workaholism (Clark *et al.,* 2010), narcissism and overconfidence (Macenczak *et al.,* 2016), narcissism and charisma (Galvin *et al.,* 2010) narcissism and achievement goal orientation (Watson, 2012).

## *2.4.7 Self-conscious emotions model of narcissism*

The self-conscious model of narcissism (Tracy & Robins, 2004) is applied to the narcissistic self-esteem regulation and explains the self-conscious emotions of the narcissistic personality, such as pride and shame. Self-conscious emotions differ from basic emotions, such as sadness and joy. These basic emotions are everyday occurrences in individuals because of the biological origin of the emotion, while the self-conscious emotions are not universally the same across cultures (Tracy & Robins, 2004). Self-conscious emotions prompt and regulate the thoughts, feelings, and behaviour of individuals, in terms of engaging or refraining from social interactions or romantic relationships. For example, shame and guilt cause people to become angry and depressed because they are conscious of such feelings (Tracy & Robins, 2004). Self-conscious emotions have five distinguishing characteristics which are that they require self-awareness and self-representation, they emerge later in childhood than basic emotions, they serve primarily social needs, they do not have discrete universally recognised facial expressions and they are cognitively complex (Tracy & Robins, 2004). Next, I explain the five distinguishing characteristics of self-conscious emotions more clearly. First, individuals can be self-aware which is part of self-identity. Put differently, for individuals to have the thoughts or feelings of guilt and shame, they must have the mental capacity to be aware of their emotions and represent their self-identity in such emotions. Second, the self-conscious emotions become more apparent in an individual later in childhood. For example, a child does not get the feeling of embarrassment compared to the basic emotion of happiness in children. This is because children must first realise rules and regulations that govern social behaviour, which happens much later in their adult development. Third, the self-conscious emotions serve primarily social needs, in terms of achieving survival and social goals. For example, the emotion of fear makes an individual flee a dangerous scene, which is, on the one hand, a survival goal that motivates an individual to behave appropriately to escape reproof by other people, which is, on the other hand, a social goal (Tracy & Robins, 2004). Fourth, self-conscious emotions do not have discrete, universally recognised facial expressions, that is, there is no one singular global identification of the facial expressions of embarrassment, anger, or pride. Lastly, the self-conscious emotions are cognitively complex, which means that for individuals to experience embarrassment or guilt, it takes a complex evaluation of an occurrence both internally and externally in relation to his/her behaviour and the societal standard (Tracy & Robins, 2004). The self-conscious model as shown in Figure 2.2 below depicts that for embarrassment to occur there must be a public self-representation of an event, which has relevance to the survival goal. The model emphasizes that there must be an appraisal of the survival goal by individuals and an attention focus directed towards self-representation, leading to identity-goal relevance. Thereafter, the appraised event will generate self-conscious emotions and identity goal congruence, that is, an assessment that the event aligns with the survival goals of the individual. Furthermore, the individual makes an internal attribution analysis, asking why the event occurred, either because of something about the individual or an external factor that caused the event. The appraisal then leads to stability and generalisability attribution of the event, for example, a student can attribute failing an exam to a global lack of knowledge on the subject or lacking the specific skills (Tracy & Robins, 2004). The outcome of this appraisal by individuals then leads to feelings of either shame or pride on the one hand, and guilt or achievement-oriented pride on the other hand (Tracy & Robins, 2004). In summary, this model applies to narcissism in terms of how narcissistic individuals promote their feeling of hubristic pride and play down their shame. This is achieved through the process of positive appraisal of oneself and appraising positive events as identity goal congruence while appraising negative events as identity goal incongruence (Tracy & Robins, 2004). The self-conscious model of narcissism (Tracy & Adams, 2004) has informed research on romantic relationships (e.g., Feeney, 2004; Santore, 2008; Tracy, & Robins, 2006), pride in leaders through their emotional dynamics (e.g., Bodolica, & Spraggon, 2011; Tracy *et al.,* 2011), and lack of guilt and honesty in academics (Brunell *et al.,* 2011).

Figure 2.2: A process model of self-conscious emotion

Survival Goal Relevance

Appraisals

Event

No Emotion

Attentional Focus on Self; Activation of Self -Representations

Identity Goal Relevance

Identity Goal Congruence

Stability & Globality Attribution**s**

Locus attribution

Guilt/A-O Pride

Shame/Hubris

Embarrassment

Basic Emotions

Yes

No

No

No

External

Internal (public)

Yes

No

Yes

Source: Tracy and Robins (2004, p. 110)

## *2.4.8 Chocolate cake model of narcissism*

The chocolate cake model (Campbell, 2005) relates the possible experiences that people can get from starting and keeping relationships (e.g., romantic relationships) with narcissistic individuals, with insights into other types of relationships such as business relationships and leadership selection in organisations involving narcissistic individuals, as highlighted by Campbell *et al.* (2011). This model explains why people enter romantic relationships with narcissistic individuals and the excitement and enthusiasm involved, like the sweet and pleasant taste of eating chocolates (Campbell, 2005). This feeling is likely to be enjoyable at the beginning or short-term when compared to relationships with non-narcissists (Campbell, 2005). The chocolate cake metaphor of this model compares the sweet taste of chocolates (at first taste) to the attractive characteristics of narcissistic individuals such as confidence, creativity, charisma, charm, beauty, and elegance. However, the paradox is that the good feeling from the relationship with narcissistic individuals turns sour with time, when the referent other(s) experience their domineering behaviour, controlling tendencies, and insensitive actions, which are contrary to the interests and well-being of others. Thus, it leaves people querying if they would have been better off in relationships with non-narcissistic individuals who were not charming and as charismatic, such as normal food that is not as sweet and attractive as chocolate cake but more nutritious to the body e.g., vegetables (see Campbell *et al.,* 2011). In summary, the chocolate cake model of narcissism explains the experience of starting relationships with narcissistic individuals and how they turn out in the long term. The narcissistic personality appears charming and attractive to other people in the short term but in the long term, the relationship goes sour because their behaviours are now obvious to the people around them, and it negatively affects their well-being. This model centred on romantic relationships and has influenced research into narcissism and romantic relationships and the inability of narcissistic individuals to maintain these long-term because of their unappealing behaviour that becomes known to others (Ong *et al.,* 2016; Roberts *et al.,* 2018; Wurst *et al.,* 2017).

## *2.4.9 Agency model of narcissism*

The term agency (Bakan, 1966) generally describes the existence of humans as an individual unit in society and the capacity to act within a social structure, as opposed to communal, which describes the existence of humans as a group. The agency model of narcissism (Campbell *et al.,* 2006) is built on the assumption of “agentic-communal asymmetry”, which implies that people can be either agentic or communal in their orientation (Campbell *et al.,* 2006, p. 64). It further describes that narcissists are more concerned with self-enhancement, self-entitlement, and self-esteem as compared to building communal relationships with others. An important proposition of this model is that agentic concerns, such as authority, power, prestige, physical appearance, status, and intelligence, are of greater priority to narcissists in a bid to boost their self-image than communal concerns, which include emotional warmth, friendship, and networking (see Campbell *et al.,* 2007). The priority of narcissistic personalities under this model is to establish dominance and superiority over others, and they hence place less importance on communal concerns. In instances where narcissists build communal relationships with others, such relationships are usually no threat to their drive for dominance and control (Campbell *et al.,* 2006). For example, those with narcissistic personalities are low on relationship commitment and intimacy to their emotional partners (Foster *et al.,* 2006). The core of the system of agency model is enshrined in interpersonal aspects of narcissistic self-regulation and the narcissist’s romantic life, based on the assumption that narcissism is an offensive approach to self-esteem (Campbell *et al.,* 2006). The model is a system describing four basic components including fundamental narcissistic qualities, interpersonal strategies, interpersonal skills, and narcissistic esteem. The interpersonal skills of narcissists (e.g., charm, charisma, extraversion, confidence, and self-perceived awareness) are used to actualize their interpersonal strategies (e.g., self-evaluation maintenance, better than average effect, self-promotion, and game-playing). The interpersonal skills and strategies are linked together in a feedback system to strengthen the narcissistic self-view, with the outcomes of narcissistic self-esteem, as seen in Figure 2.3 below. Narcissistic self-esteem is defined as domineering self-esteem, coloured with pride, which is different from the simple self-esteem of a non-narcissist. The narcissistic self-esteem is fed back into the self-regulatory system to strengthen the other components (Campbell *et al.,* 2006). The interpersonal skills, interpersonal strategies, and narcissistic self-esteem relate to the fundamental narcissistic qualities in how they draw from and feed the core characteristics of a narcissistic personality. Put differently, narcissists' basic personality structure is to be alone, rather than build communal relationships, having a feeling of entitlement and inflated self-view with fragile self-esteem. The individual, therefore, applies interpersonal skills and strategies in a self-regulatory way to achieve narcissistic self-esteem. This is done through looking good to attract the admiration and love of people, for example, looking for a ‘trophy spouse' to increase their status (Campbell *et al.,* 2006). In summary, the agency model of narcissism is a self-regulatory model explaining the fundamental narcissistic qualities, their approach to relationships, and how they use interpersonal skills and interpersonal strategies to enhance their narcissistic self-esteem. This model has influenced research in the personality domain, mostly relating to cultural dispositions of narcissistic personality as either agentic or communal (e.g., Gebauer *et al.,* 2013; Fatfouta & Schröder-Abé, 2018). For example, research supports the agency-communal narcissism model with evidence that individuals who are agentic in their disposition satisfy their core motives through self-esteem, power, grandiosity, and entitlement, while individuals high on communal narcissism satisfy their self-motives through communal means, such as helping other people and humanitarian actions (Luo *et al.,* 2014). Similarly, research shows support for the agentic and communal narcissism differentiation such that the relationship between agentic narcissism and psychological entitlement was stronger than between communal narcissism and psychological entitlement (Żemojtel‐Piotrowska *et al.,* 2017).

Figure 2.3: The agency model: an esteem-generating system

**Fundamental Narcissistic Qualities**

* Agentic vs. communal concerns
* Approach orientation
* Desire for self-esteem
* Entitlement
* Inflated self-views

**Interpersonal Strategies**

1. Trophy partners

2. Game playing

3. Better-than-average effect

4. Self-evaluation Maintenance

5. Self-promotion

6. Etc.

**Interpersonal Skills**

1. Confidence

2. Charm

3. Charisma

4. Self-perceived attractiveness

5. Extraversion

6. Etc.

Narcissistic Esteem

Source: Campbell *et al.* (2006, p. 65)

## *2.4.10 Extended agency model of narcissism*

The extended agency model of narcissism (Campbell & Foster, 2007) is a system of interpersonal and intrapersonal narcissistic self-regulation, with three underlining assumptions. First, the attributes of narcissism, interpersonal skills, and interpersonal strategies function as a system. Second, narcissistic self-esteem is a pleasurable feeling produced by the system. Third, there are goal-directed behaviours but no goal of narcissism (Campbell & Foster, 2007). The model has various components that inform narcissism, as shown in Figure 2.4 below. The first component of the model is the fundamental narcissistic qualities, which highlights a narcissist's desire for self-esteem, inflated self-view, sense of entitlement, and agentic orientation compared to communal orientation. The second component is the interpersonal skills, which narcissists possesses, such as confidence, charm, charisma, and extraversion. The third is the intrapsychic strategies, which mean the plans that occur in the psyche or mind of narcissists to reinforce their self-esteem, such as self-serving bias, fantasies of power, and inflated view of their intelligence quotient. The fourth component is the interpersonal strategies, such as trophy partners, game playing and self-promotion, which are applied jointly with the other components by narcissists to achieve narcissistic esteem (Campbell & Foster, 2007). An important proposition of this model is that the activation of one component will reinforce other components and help to serve a self-regulatory function for narcissists. The narcissistic esteem is the ‘good feeling’ dominance outcome that narcissists get from the effective use of interpersonal skills, intrapsychic strategies, and interpersonal strategies in a cooperative social environment (Campbell & Foster, 2007).

In summary, the extended agency model of narcissism builds on the agency model by introducing intrapsychic strategies to the existing interpersonal skills, interpersonal strategies, and fundamental narcissistic qualities that a narcissist employs to reinforce their narcissistic esteem in a self-regulatory way using a cooperative social environment. Like the agency model of narcissism, this model has influenced theorising and research in leadership, for example, the recent meta-analysis on CEO narcissism (Cragun *et al.,* 2020).

Figure 2.4: The extended agency model of narcissism

Source: Campbell and Foster (2007, p.123)

**Narcissistic Esteem**

**Fundamental Narcissistic Qualities**

* Agentic vs. communal concerns
* Approach orientation
* Desire for self-esteem
* Entitlement
* Inflated self-view

**Intrapsychic Strategies**

1. Self-serving bias

2. Fantasies of power

3. Self-perceived attractiveness

4. An inflated view of IQ

5. etc.

**Interpersonal Skills**

1. Confidence

2. Charm

3. Charisma

4. Extraversion

5. etc.

**Interpersonal strategies**

1. Trophy partners

2. Game-playing

3. Better-than-average effect

4. Self-evaluation maintenance

5. Self-promotion

6. etc.

## *2.4.11 Contextual reinforcement model of narcissism*

The contextual self-regulation model of narcissism (Campbell & Campbell, 2009) explains narcissism from the perspective that it is effective in certain contexts. Put differently, it brings benefits to the narcissistic individual and less benefit to others. The model was proposed with the backdrop of arguments on the trade-off of narcissism, namely the differentiation of narcissism into bright and dark sides (see Paulhus, 1998). This model proposes that narcissism can be effective or ineffective depending on the context in which it is expressed and the outcomes it brings to narcissists or those close to narcissists (Campbell & Campbell, 2009). For example, someone with a narcissistic personality feels good about their behaviour in that it enhances their self-view, and it appears that others love them due to the exuberance of confidence, charisma, and innovation, especially in the short term. However, this love and admiration by others is not always sustained and can become counterproductive for the narcissists such as the inability to maintain interpersonal relationships, failure to learn from mistakes and weakness in accepting negative criticisms (e.g., Hogan & Kaiser, 2005; Campbell *et al.,* 2011). Therefore, the contextual reinforcement model is useful for explaining narcissism in a diverse context where benefits and costs conflict, as seen in Figure 2.5 below. From figure 2.5, the pattern of benefit and cost is shown in relation to a narcissist and others (those who relate with or are influenced by the narcissist). The emerging zone implies the early stage of relationships or work settings (Campbell & Campbell, 2009). In the emerging zone, the narcissist has benefits such as a positive self-view, appeal in meetings, successful emotional relationships, and emergent leadership. Similarly, there are costs for the narcissist in the emerging zone, such as poor decision-making, and poor private performance. For the others, the benefits of the emerging zone are relationship satisfaction and excitement while the costs are aggression after threats from the narcissist and overconfident decision-making (Campbell & Campbell, 2009). In the emerging zone, the narcissist benefits more than others do, reflected in the scores of +9 and -3 for others. In addition, the narcissist records less cost of -2 while the others have -3 scores (Campbell & Campbell, 2009). As time progresses, the process moves into the enduring zone, which is the long-term context, and the narcissist has other benefits such as celebrity status, and unrestricted sexuality while those interacting with the narcissists have no benefits because the relationship has become strained. For the costs, the narcissist experiences depression, compulsive spending, addiction to rush, poor management rankings, reduced likeability, pathological gambling, difficulty in learning from feedback and romantic relationship trouble while others have costs such as confusion, aggression, sexual assault, poor management, and overconfident decision making (Campbell & Campbell, 2009). In the enduring zone, the benefit to the narcissist is scored at +3 and 0 for others, while the costs are -11 and -12 respectively. Summing the benefits and cost in all the cells shows the overall outcome for both the narcissist and others. While the narcissist records an overall outcome of -1, the others have an overall outcome of -12, implying that others bear greater negative consequences from the experience of interacting with the narcissist (Campbell & Campbell, 2009).

In summary, the contextual reinforcement model of narcissism explains the cost and benefits of narcissism to narcissists and people who are close to them in the short and long term, showing that narcissism eventually has negative repercussions for narcissistic individuals, while those who interact with or are influenced by narcissists are considerably worse-off. This model has also influenced research in areas such as the bright and dark side of narcissism, regarding the issue of context, that is, how the positive side of leader narcissism plays out in the short term and the negative side of leader narcissism in the long term (Czarna & Nevicka, 2019; Sedikides & Campbell, 2017; Fatfouta, 2018). In addition, this model has influenced theorising of consequences of narcissism to individuals and organisations, which scholars have ascribed as destructive outcomes, e.g., loss of organisational goodwill, ethical failures, and fraud (Schyns & Hansbrough, 2010; Schyns & Schilling, 2013; Rijsenbilt & Commandeur, 2013).

Figure 2.5: The overall pattern of benefits and cost of narcissism

Source: Campbell and Campbell (2009, p.221)

Natural time course drift

Emerging Zone

Enduring Zone

Benefits

Costs

Total pay off for self: -1

Total pay off for others: -12

self

self

self

self

other

other

other

other

+9

-3

+3

0

-2

-3

-11

-12

Next, I reflect on the models of narcissism, highlighting their similarities and differences.

## *2.4.12 Reflection on the models of narcissism*

I reviewed several models of narcissism, highlighting the basic characteristics and nuances of the narcissistic personality. The models are multi-dimensional and span several decades of research beginning from Freud's (1914) structural model of narcissism from the clinical psychology domain. The model dominated the literature on narcissism and other scholars such as Kernberg (1975) and Kohut (1977) leveraged it to theorise narcissism as a function of parental abonnement or over-pampered treatment in the early years of child development. It took about eight decades after Freud's (1914) model for scholars to propose other models of narcissism. The 1990s then saw a resurgence of interest in narcissism as researchers developed self-report measures of narcissism (see Wink, 1991). Thereafter, scholars in the social and personality psychology field between the years 2001 and 2009 proposed several models to expand our understanding of narcissism and to set the research agenda for further studies (e.g., Campbell & Campbell, 2009; Morf & Rhodewalt, 2001; Tracy & Robins, 2004).

The models of narcissism have significance for the understanding of the narcissistic personality. There are some similarities and differences in the models as they build on each other. Four similarities in the models are the pursuit of self-regulation and self-esteem by narcissists, their need for attention, the social relationship context of the models and the inability of narcissists to sustain relationships. First, all models build on the premise of the development and regulation of narcissistic self-esteem. That is, narcissists use the social environment to promote their self-view and service their self-enhancement; in a way, that favours the narcissists (Campbell *et al.,* 2006; Raskin *et al.,* 1991). Second, narcissists’ need for love, affection, and favourable assessment is the underlying reason for their fragile self-esteem. Narcissists organise their self-regulatory strategies, apply their interpersonal strategies, interpersonal skills (e.g., Campbell *et al.,* 2006) and intrapsychic strategies (e.g., Campbell & Foster, 2007) to attract love, affection, likeability, and followership from other people around them. Third, is the social relationship context of the models, that is, the models directly apply to the social relationships of the narcissistic personality, such as romantic relationships and interpersonal relationships in an ‘accommodating’ social environment. Fourth, the difficulty in sustaining relationships with other people stems from the lopsided view of the self and the lack of reciprocity of narcissists in giving love and admiration to other people.

Conversely, there are four main differences in the models, including the issue of time context (e.g., chocolate cake model and contextual reinforcement model), inconsistent narcissistic cravings (addictive model), basic and self-conscious differentiation of the narcissistic personality (self-conscious model) and prevalence of the word "I" in the speeches of narcissists (self-orientation model). The other models do not capture the role of time in their discussions. First, the time context is interpreted from the perspective that narcissists attract likeability at the initial stages of their relationships with other people because of their charisma, confidence, and charm but when other people get to know them better, for example, their domineering behaviour and insensitivity (Campbell, 2005), the collapse of their relationship, which happens in the long term (e.g., Campbell & Campbell, 2009). Second, the addictive model offers a difference in viewing narcissism as an inconsistent craving of the narcissistic personality, that is, the desire for self-promotion may be consistent but the strategies to achieving such desires are inconsistent because the individual goes through reflections and waned satisfaction from previous successes or feelings of superiority (Baumeister & Vohs, 2001). The other models do not highlight the inconsistent cravings of the narcissistic personality. Third, the self-conscious emotions model differs from other models as it explicates the complex processes of self-conscious emotions and the narcissistic personality, using the example of embarrassment, with emphasis on how narcissists evaluate the occurrence of an event, with internal and external attributions, to suppress their shame and increase their pride (Tracy & Robins, 2004). Fourth, the self-orientation model shows a unique proposition of how narcissists prevalently use the word “I” in their speeches to portray a self-enhanced image of themselves (Campbell, 1999).

Overall, the models of narcissism drawn from social and personality psychology shows the various perspectives of narcissism and have helped in shaping research in the leadership and organisational psychology field, in terms of their applications for both leadership theory development and practice. Next, I discuss the implications of the models of narcissism for leadership and gaps for my research.

## *2.4.13 Implications of the models of narcissism for leadership and research gaps*

The models of narcissism have influenced leadership theorizing in many ways. Research on narcissism has been linked with leadership because narcissism in its characteristics is suitable to express leaders’ self-satisfying goals, such as the need for power, prestige, social status, and control over others (Campbell & Campbell, 2009). As research on narcissism and leadership continues to increase in the industrial/organisational and leadership field (e.g., Chatterjee & Pollock, 2017; Grijalva *et al.,* 2015; Nevicka *et al.,* 2018), scholars have applied the models on narcissism in their research investigations on the narcissistic personality, as reviewed above. Areas of research investigation influenced by the various models of narcissism includes leader emergence (e.g., Nevicka *et al.,* 2011), promoting the inflated self of leaders (e.g., Chatterjee & Hambrick, 2007), personality configuration of leaders such as overconfidence (e.g., Macenczak *et al.,* 2016), emotional dynamics in leaders (e.g., Bodolica, & Spraggon, 2011), and cultural dispositions of leaders as either agentic or communal (e.g., Luo *et al.,* 2014).

The models applicable to my thesis are the agency and extended agency model of narcissism (Campbell *et al.,* 2006; Campbell & Foster, 2007). The models have received research interests as scholars attempt to examine narcissism from a cultural perspective, that is, that narcissism culture is either agentic or communal (e.g., Gebauer *et al.,* 2012; Gebauer *et al.,* 2013). The research suggests that agentic narcissists (narcissists that rely on agency) and communal narcissism (narcissists that rely on communion) share the same motive of self-promotion, grandiosity, and entitlement but they achieve their motives in different ways (Gebauer *et al.,* 2012). Research also suggests that it is possible to be both agentic and communal (Konrath *et al.,* 2009) and the agency-communal asymmetry mostly applies to gender differences in individuals. However, few studies have explored the agency and extended agency models of narcissism in relation to leader narcissism in organisational context. Most of the studies (e.g., Luo *et al.,* 2014; Rentzsch, & Gebauer, 2019) explore the agency and communal models with data from individuals in random context (e.g., student samples) and not in relation to leader narcissism, with exception to Owens et al. (2015) that controlled for leader and follower gender expecting female leaders to be more communal and male leaders to be more agentic. Recently, Grijalva *et al.* (2020) drew on the agency model of narcissism to examine the influence of team personality composition on the narcissism trait in the National Basketball Association teams in the United States and Canada using the Twitter profiles of players as a measure of their narcissism (see Grijalva *et al.,* 2020). These studies majorly point to the gender-related implications of narcissism to leadership, for example, that male leaders are more agentic than communal (Owens *et al.,* 2015). However, the studies reveal a gap on the role of gender and narcissism in relation to follower outcomes, that is, how leader gender shapes the link between leader narcissism and follower well-being. In this research, I draw on the agency model (Campbell *et al.,* 2006) to explore the multi-trait of gender and narcissism from two perspectives. First, how leader gender in combination with leader narcissism influence follower cognition and well-being. Second, how follower gender and follower narcissism shape the relationship between leader narcissism and follower cognition and well-being. This is relevant in understanding how gender influences the relationship between leader narcissism and follower self-worth and how followers respond to narcissistic leaders based on their gender, drawing on the agency model of narcissism (Campbell *et al.,* 2006) and role congruity theory (Eagly & Karau, 2002). In the next section, I discuss leader and followers’ narcissism from an organisational perspective.

# 2.5 Leader and followers’ narcissism in the organisational context

In an organisational context, narcissism is most studied from the trait perspective and manifests itself in both leaders’ and followers’ behaviour. As the leadership process is characterised by high status, power, reporting authority, and control over followers, narcissists seek leadership positions as these are aligned with their natural dispositions (Benson *et al.,* 2016). This explains the prevalence of research on leader narcissism and its effect on individual and organisational outcomes. Leader narcissism in academic research has been largely approached from the destructive and constructive sides, also known as dark and bright sides respectively (de Vries & Miller, 1985; Padilla *et al.,* 2007; Schyns & Schilling, 2013; Stein, 2013). In relation to the models of narcissism discussed in the previous section, the contextual reinforcement model (Campbell & Campbell, 2009) has mostly been used to explore the dark and bright sides of narcissism, as it explains the cost and benefits of narcissism to narcissists and people who are close to them. Next, I discuss both sides of narcissism in leaders and followers from the organisational context.

## *2.5.1 The dark side of leader narcissism*

The dark side of leader narcissism is concerned with a negative form of narcissistic leadership (Conger, 1990). Research in this area aims to help organisations identify leaders with destructive tendencies and how to manage such leaders (Khoo & Burch, 2008). What is dark about the dark side of leader’s narcissism is the ruthless desire to lead, low empathy for others and their high level of self-seeking ambition. Research shows that leader narcissism is associated positively with leader emergence and negatively with leader effectiveness (Brunell *et al.,* 2008; Nevicka *et al.,* 2011). Other research into leaders’ narcissism shows negative outcomes for individuals and organisations, for example, damaged organisational reputation (e.g., Hogan *et al.,* 2004) and poor interpersonal relationships with others (e.g., Furnham, 2009). This is because of the grandiosity, manipulativeness, self-promoting strategies for decision-making, poor professional judgement, and personal conduct of narcissistic leaders (see Rosenthal & Pittinsky, 2006). Recently, O'Reilly III *et al.* (2018) investigated leader narcissism and established its link to fraud, risk-taking, manipulating accounting details and overpaying for acquisitions, showing that these manifestations are destructive and have led to numerous court cases for organisations.

## *2.5.2 The bright side of leader narcissism*

Scholars have also pointed to the bright side of leader narcissism (e.g., Back *et al.,* 2013; Campbell *et al.,* 2011). There are aspects of narcissism in leaders that are good and attractive, that account for such individuals’ likeability, especially in the short term (see Padilla *et al.,* 2007; Rosenthal & Pittinsky, 2006) and qualify them for leadership roles (e.g., Grijalva, *et al.,* 2015; Paunonen *et al.,* 2006; Post, 1986). Examples of characteristics in narcissistic leaders that fall into the bright side classification include self-confidence, charisma, sense of humour, dynamism, creativity, drive for achievement, enthusiasm, inspiration to followers, visionary, and mentor role play (e.g., Galvin *et al.,* 2010; Grijalva & Harms, 2014). Maccoby (2000, p. 70) makes a case for leaders who defy the odds through their visionary qualities and drive for power and glory; they break rules, put their personalities on the turf and shape the future of their organisations through innovation and charisma, described as "productive narcissists". In his words, they are "not only risk-takers willing to get the job done but are charmers who can convert the masses with their rhetoric". This argument by Maccoby (2000) further gives credence to the position of Post (1986, 1993) that narcissistic leaders are dominant and goal-getters and may not be exclusively toxic considering their unique personalities, vision, and mental strength. This is related to the chocolate cake and contextual reinforcement models of narcissism (Campbell, 2005; Campbell & Campbell, 2009) discussed in the previous section, which emphasised that positive outcomes might be short term and negative outcomes long term.

Despite the divergent research findings between the bright and dark sides of leader narcissism, some scholars have tried to provide a balance. For example, Stein (2013) argued that constructive narcissistic leaders are good for organisations during good or stable times, and they help organisations in the short term with their charismatic and visionary leadership but become problematic in the long term or when organisations face challenging situations. Similarly, Sosik *et al.,* (2014) developed a research model showing mediated moderated relationships between constructive and destructive narcissism interacting with leader charisma and followers’ psychological empowerment, such that the positive association between leader charisma and followers’ psychological empowerment is weaker when destructive narcissism is high. The underlining argument is that narcissistic leaders provide innovativeness, and organisational change through their ingenuity and personal risk-taking behaviour on behalf of organisations to steer the ship in times of crises or uncertainty, endearing them to followers in terms of loyalty and commitment. However, this is not often sustained due to the deficiency of interpersonal functioning and insatiable need for power and superiority associated with such leaders (see Conger & Kanungo, 1998; Sosik, & Dinger, 2007). The onus, therefore, lies with organisations to harness the constructive side of narcissistic leaders and constrain their destructive dimension through control systems, counselling, training, peer review actions, and organisational policies (Kets de Vries, 2006; Padilla *et al.,* 2007; Sosik *et al.,* 2014). However, research examining potential control systems and moderators of leader narcissism at the individual and team levels are scant. This project aims to address this gap by exploring individual and team characteristics as moderators in the relationship between leader narcissism and well-being at the individual and team levels.

## *2.5.3 Follower narcissism*

Followers are integral to the leadership process as they contribute to the effectiveness of leaders and organisations (Benson *et al.,* 2016; Sims *et al.,* 2020), prompting scholars to, more recently, emphasize followers’ narcissism as an important individual difference in the leadership process (Treadway *et al.,* 2019). For example, narcissistic followers view themselves as more competent to perform tasks (Campbell *et al.,* 2000), they enact behaviours that do not benefit group objectives (Treadway *et al.,* 2019), and they are likely to engage in strategic behaviours to achieve their own goals (Schyns *et al.,* 2019). Follower narcissism interacts with leader characteristics to shape the dynamics of a team or organisation, for example, leader-member exchange, team leader emergence, team member interactions, group formation and functioning (London, 2019). It is therefore important to examine follower narcissism more closely. Recently, Wirtz and Rigotti (2020) examined follower vulnerable narcissism in an organisational context and its link with their well-being and established that narcissism (vulnerable) is positively related to their emotional exhaustion and positively to work engagement, with leader narcissism (grandiose) exacerbating these relationships. Considering that followers are traditionally more in number than leaders and the integral part they play in organisational functioning (Benson *et al.,* 2016), more research on follower narcissism could be beneficial to the leadership process. This will potentially inform us on the uniqueness of follower narcissism (if any), the role of follower narcissism in leadership emergence, and the interaction of follower narcissism with leader narcissism in the leadership process. For this research, I examine leader and follower narcissism in team contexts. In the next section, I review the literature on levels of analysis in leadership studies and with reference to narcissism research.

# 2.6 Levels of analysis (entities) in leadership studies and narcissism research

Levels of analysis in leadership studies is an important categorisation of research for the purpose of gap analysis, integrative knowledge, and theoretical predictions of the literature (e.g., Antonakis *et al.,* 2014; Braun, 2017; Markham, 2010). Level of analysis signifies the interest or entities to which the focus of research applies and its generalisation (Dionne *et al.,* 2014; Dansereau *et al.,* 1984; Yammarino *et al.,* 2005). The levels of analysis in leadership research are discussed.

## *2.6.1 Individual level*

This comprises of persons who are independent human beings, who think, perceive, act, and react differently from one another (Yammarino *et al.,* 2005). This unit of analysis is important because of the individual differences and variability in research outcomes. Put differently, individuals as entities are independent in their perceptions, feelings, and experiences of events and happenings in their work environments (Yammarino & Bass, 1991). Within the leadership research context, an individual can be a leader or follower (Yammarino *et al.,* 2005). The individual level of examination is more prominent than the team and organisational levels in leadership and organisational studies, because of the possibility of assessing human beings in an independent form. In relation to leader narcissism, studies at the individual level have examined leader narcissism and follower CWB (Braun *et al.,* 2018), follower citizenship behaviour (Carnevale *et al.,* 2018), and employee innovative behaviour (Norouzinik *et al.,* 2021). From previous studies, it can be established that the circumstances in which the individual level of analysis is appropriate in narcissism research are, for example, when studying the effect of leader’s self-view of narcissism on leader behaviour or well-being. In general, leadership research tests baseline employee outcomes for assessing individual effects without prejudice to other levels of analysis in some cases while at other instances, they are aggregated to higher levels of analysis (Chan, 1998).

## *2.6.2 Dyadic level*

This comprises of two individuals, that is, a group of two persons who are interdependent based on the pair, within a formal work setting, such as a leader-follower dyad or other informal interpersonal relationships such as a father-son dyad (Yammarino *et al.,* 2005). For a relationship between two individuals to be classified as a dyad, Becker and Useem (1942, p. 13) stated that the relationship must be “intimate, and face-to-face relations have persisted over a length of time sufficient for the establishment of a discernible pattern of interacting personalities”. From this position, time context for an enduring relationship, mutual action in interactions and personal independence are three important components of a dyadic relationship (see Thompson & Walker, 1982). Research on dyads has strengthened the study on relationships because it offers more insights into experiences from both members of a relationship than the report from a single individual. It further helps to understand the complexities of the relationship between two people, their biases, perspectives, and issues around generalisability of individual perspectives (Thompson & Walker, 1982). In relation to narcissism research, studies have examined leader narcissism in leader-follower dyads in areas such as employee taking charge behaviour (Chen *et al.,* 2020) and employee self-promotion (Den Hartog *et al.,* 2020). From the examples, it is safe to argue that most relationship-based research questions are best answered at the dyadic level of analysis.

## *2.6.3 Group/team level*

This level signifies a collection of individuals working together either face to face or in a virtual arrangement (Fisher & Hunter, 1997). Technically, a group is different from a team, such that while a group is a collection of individuals who share a common aim and strive to achieve individual goals, a team is a collection of two or more individuals who work together to achieve a common goal with a high degree of interdependence and the team members know their interdependence (e.g., Fisher & Hunter, 1997; Stott & Walker, 1995; Sundstrom *et al.,* 1990). In relation to narcissism research, studies have examined leader narcissism in groups/teams in areas including leader emergence and performance (Brunell *et al.,* 2008; Nevicka *et al.,* 2011), team voice (Liu *et al.,* 2017), group performance (Nevicka *et al.,* 2011) and team creativity (Zhou *et al.,* 2019). From the previous research on team effects, scholars explore team processes and outcomes to better understand the experiences and outcomes of a collection of individuals in their aggregate form, rather than in their individual capacities. This is because leadership is inherently a team level phenomenon, with people who share the same leader and organisations are mostly structured in teams (West *et al.,* 2009) where individuals work under a leader (Herdman *et al.,* 2017). Thus, the individuals are likely exposed to the same traits and behaviour of the leader and have similar experiences and reactions. Similarly, since they are working together and communicating about the leader, they reinforce the shared experience and cognition.

## *2.6.4 Organisational level*

This is viewed as a collection of interdependently based individuals in a formal hierarchical structure, sharing the same identity, values, and common goals (Becker, 2005). The organisational level includes all individuals in groups, departments, units, divisions, and functional areas of a formal entity. They may not interact regularly, but they share the same vision, mission, and objectives and are held together under one management structure and hierarchy of authority (Becker, 2005; Yammarino *et al.,* 2005). In narcissism research, organisational level of analysis is predominant in both theoretical and empirical predictions of CEO’s narcissism and outcomes, such as company strategy (Chatterjee & Hambrick, 2007), firm performance vulnerability (Wales *et al.,* 2013), firm CSR (Petrenko *et al.,* 2016), firm performance (Reina *et al.,* 2014) and firm innovative strategy (Kashmiri *et al.,* 2017). From the previous research, it can be established that the circumstances in which organisational level of analysis is appropriate in narcissism research are, for example, when studying the effect of leader traits on the collective performance or corporate functioning of organisations.

## *2.6.5 Multiple levels*

This is a combination of two or more of the singular levels of analysis, also called multilevel. In other words, the individual, dyads, group, and organisational levels are not viewed individually, rather one or more of the levels are viewed simultaneously in multilevel research (Snijders, 2011; Yammarino *et al.,* 2005). Multilevel analysis has become important in leadership research to understand patterns of relationships across individual units and levels. Due to the complexities of individuals and situational factors, it is important to view leadership from multiple levels of analysis and capture the various perspectives across levels. Thus, multilevel analysis of leadership comprises the parts and whole of various persons, situations, and person-situation views of leadership (Dansereau *et al.,* 1984; Yammarino & Bass, 1991). It is important to clarify the difference between multi-level and cross-level. Multi-level models “specify patterns of relationships replicated across levels of analysis” (Rousseau, 1985, p. 22), for example, the influence of individual CSE on individual well-being and the link between team CSE and team well-being. Whereas cross-level models describe “the relationship between independent and dependent variables at different levels” (Rousseau, 1985, p. 20), for example, the influence of leader narcissism on individual CSE. However, many scholars consider cross-level research as a form of multilevel research (e.g., Costa *et al.,* 2018; Zohar & Luria, 2005). Thus, for this thesis, I will use the term multi-level to describe all types of research that study more than one level. In relation to narcissism research, few studies have examined leader narcissism at cross-level, for example, the effect of leader narcissism on follower job performance (Liu *et al.,* 2021), and leader narcissism on employee voice (Huang *et al.,* 2020). Similarly, research have examined leader narcissism combining group level and cross-level, for example, the effect of leader narcissism on leader well-being (group level) and follower subordinates job satisfaction and emotional exhaustion (cross-level; Bernerth, 2020). From the previous research, multilevel approach is appropriate in examining higher levels, for example, the effects of leader traits on leader behaviour and follower outcomes. However, research on multilevel is sparce on the effects of leader traits on both individual and team/organisational levels. The focus of this project is a cross-level perspective in terms of the effects of leader narcissism on individual CSE and well-being. It also examines a single-level perspective in terms of the effects of leader narcissism on team CSE and well-being, moderated by leader gender and team characteristics of team cohesiveness, team resilience, and climate for psychological safety. In the next section, I review the literature on well-being which is the outcome variable of this research. Specifically, I focus on well-being from burnout and work engagement perspectives because interacting with narcissistic leaders typically affects the emotional resources and involvement of individuals in their jobs (Leary *et al.,* 2013).

# 2.7 Well-being: General and job-related well-being

There is increasing recognition of the importance of employee well-being in the workplace (e.g., Juniper *et al.,* 2009; Van Dierendonck *et al.,* 2004). Defining well-being has been problematic because of its various classifications and dimensions, variants, and complexities, resulting in a lack of consensus in the literature (Dodge *et al.,* 2012; Forgeard *et al.,* 2011). Well-being has been described as either context-specific or context-free. ‘Job-specific’ well-being falls in the former category, indicating how an individual feels about his/her job. ‘Context-free’ well-being is broader and concerns the general state of happiness, satisfaction with life and general feelings (e.g., Compton *et al.,* 1996; Warr, 1999; Warr & Nielsen, 2018). The focus of this thesis is on job-specific well-being relating to the workplace context, rather than general well-being.

## *2.7.1 General well-being*

Shin and Johnson (1978, p. 478) defined well-being as a “global assessment of a person’s quality of life according to his/her own chosen criteria”, while Danna and Griffin (1999) defined well-being as the general state of an individual’s mental, physical, and psychological health and satisfaction both at work and with life in general. General well-being has been operationalised by scholars through life satisfaction (Diener *et al.,* 1985; Pavot *et al.,* 1991), happiness (Lyubomirsky, 2001; Pollard & Lee, 2003; Ryff, 1989) and the ability to fulfil one’s goals (Emmons, 2003; Zika & Chamberlain, 1992).

## *2.7.2 Job-related well-being*

Job-related well-being is concerned with a person’s job and experiences on the job (Warr & Nielsen, 2018). Research on job-related well-being has examined some of its antecedents, such as perceived job insecurity (Mauno & Kinnunen, 2002), role stress (Orgambídez-Ramos *et al.,* 2014), work-family conflict (Rantanen *et al.,* 2008), and personal resources (Xanthopoulou *et al.,* 2007). While research on well-being continues, what remains undisputed is the importance of job-related well-being, which is gaining more attention in the context of the workplace (see Nielsen *et al.,* 2017’s meta-analysis for a review in this domain).

In early leadership research, job-related well-being was not seen as an outcome. It was treated mostly as a mediator to explain the link between leadership and performance or as a secondary outcome (Inceoglu *et al.,* 2018). In other words, the focus has been more on employee performance as a primary outcome of leadership (Grant *et al.,* 2007). The happy worker-productive worker hypothesis has proposed a link between job-related well-being and performance on the premise that a satisfied worker is a productive worker and vice versa (Cropanzano & Wright, 2001; Wright & Cropanzano, 2000) but without much insight as to how to make workers happy in terms of their well-being (Nielsen *et al.,* 2017).

Job-related well-being has become an important outcome in management and organisational psychology research for several reasons. First, there is increasing awareness that the lack of attention regarding well-being has serious implications for employees and organisations, such as reduced organisational performance, tardiness, absenteeism, accidents at work, high employee turnover and lower employee commitment (e.g., Lin *et al.,* 2013; Van Dierendonck *et al.,* 2004). Second, well-being is attracting attention globally as part of the United Nations sustainable development goal (SDG) of promoting good health and well-being (George *et al.,* 2016; Grant *et al.,* 2007). Third, job-related well-being has been associated with leadership and the social context of organisations, such as the support system, supervisor-subordinate relationship, and the quality of communication at work, given that employees spend a large part of their lives at work (e.g., Cooper & Cartwright, 1994; Inceoglu *et al.,* 2018). Hence, there is a need for more research to focus on job-related well-being as an outcome (Inceoglu *et al.,* 2018).

Job-related well-being is operationalised through job satisfaction, burnout, job strain, occupational stress, work engagement, career satisfaction, job affective well-being and other related variables (e.g., Warr & Nielsen, 2018). For this research, I adopt burnout and work engagement as indicators of well-being as they cover both pleasant and unpleasant experiences of individuals at work (opposite poles of well-being measures; González-Romá *et al.,* 2006). The justification for selecting burnout and work engagement as measures of job-related well-being is based on the premise that interacting with narcissistic leaders who typically lack empathy, protect their self-view, and blame others for their failure influences employees’ ability to function on their jobs and their emotional resources (Leary *et al.,* 2013). Next, I review the literature on burnout.

## *2.7.3 Burnout*

Burnout is the emotional depletion of an individual because of stressors or negative experiences at work (Maslach & Jackson, 1981). It is also conceptualised as the exhaustion of an individual physically, cognitively, and emotionally (Melamed *et al.,* 2006) that occurs when employees are exposed to job strain caused by a stressful working environment and low resources (Bakker & Demerouti, 2007). People experience burnout when their emotional resources are exhausted and they can no longer cope psychologically with emotional and interpersonal job stressors (Maslach & Leiter, 2016; Maslach *et al.,* 2001). Burnout is a potential problem within a broad range of occupations as organisations seek to reduce burnout and identify solutions to employee burnout in the workplace (Maslach *et al.,* 2009).

Since the term burnout was coined by Herbert Freudenberger in 1974 (Freudenberger, 1974), it has received research attention as researchers described some of the symptoms of burnout to include loss of interest in one’s job, extreme fatigue, and loss of idealism (e.g., Maslach & Leiter, 2017; Näring *et al.,* 2006). It is a serious health issue in employees, and the effects overlap with anxiety and depression (Golonka *et al.,* 2019), potentially affecting co-workers. In other words, burnout is contagious in organisations (Bakker *et al.,* 2001) and associated with interpersonal relationship problems, negative attitudes, unproductive work behaviours, job turnover, and poor physical health (Kahill, 1988). Burnout has been researched as an outcome of several leadership styles including ethical leadership (Mo & Shi, 2017), supervisory leadership (Seltzer & Numerof, 1988), transformational leadership (Hildenbrand *et al.,* 2018; Tafvelin *et al.,* 2019), authentic leadership (Laschinger & Fida, 2014), and abusive supervision (Wu *et al.,* 2019). It has been operationalised by the Maslach Burnout Inventory (MBI; Maslach & Jackson, 1981) with three sub-dimensions including exhaustion, cynicism or depersonalisation, and professional inefficiency or reduced personal accomplishment (Maslach, 1993; Maslach & Leiter, 2016). Another measure of burnout is the Burnout Measure (BM; Pines & Aronson, 1988), originally named Tedium Measure (Pines *et al.,* 1981), which captures burnout as a unidimensional construct (Schaufeli & Van Dierendonck, 1993). Due to psychometric limitations of the MBI measure of burnout, Demerouti *et al.* (2002) introduced an initial construct validity evidence of the Oldenburg Burnout Inventory (OLBI; Demerouti, 1999) as an alternative measure (Halbesleben & Demerouti, 2005). This measure has two sub-dimensions, namely, exhaustion and disengagement (Demerouti, 1999), and is not limited to human service professionals like the MBI (Demerouti *et al.,* 2001).

Regarding the sub-dimensions of burnout (Maslach & Jackson, 1981), exhaustion is the feeling of being tired, drained and depleted in one’s physical and emotional resources. It also represents a lack of energy to face further challenges or problems at work (Maslach, 1998), which occurs because of job stressors (Maslach *et al.,* 2001) and the inability of an individual to replenish lost energy. This is the basic level aspect of burnout (Maslach, 1998). Cynicism is described as negative detachment from one’s job as a reaction to an overload of emotional exhaustion. It implies cutting down from work and reacting negatively to co-workers and the job (Maslach, 1998). It is an interpersonal aspect of burnout and manifests in an individual doing the barest minimum instead of doing the best on a job (Maslach, 1998). Inefficiency is the feeling of incompetence or a lack of ability to carry out work, as well as a lack of results. It is the self-evaluation aspect of burnout that makes individuals feel like a mistake was made in their career path or have a negative feeling towards themselves and others (Maslach, 1998).

Regarding the two components of burnout, namely, exhaustion and disengagement by Demerouti *et al.* (2001), exhaustion is described as “a consequence of intensive physical, affective, and cognitive strain, that is, as a result of the long-term consequence of prolonged exposure to certain job demands” (Demerouti *et al.,* 2010, p. 201). This differs from Maslach and Jackson’s (1981) conceptualisation of exhaustion in that it refers directly to the whole (physical, affective, and cognitive) personal energetic resources of an individual (Basinska & Gruszczynska, 2020). Disengagement refers to the “distancing of oneself from one’s work in general, work object, and work content” (Demerouti *et al.,* 2010, pp. 210-211), which is like cynicism or the depersonalisation component in Maslach and Jackson’s (1981) components of burnout (Basinska & Gruszczynska, 2020). For this research, I adopt the two dimensions conceptualisation of burnout (Demerouti *et al.,* 2010). Next, I discuss work engagement.

## *2.7.4 Work engagement*

Work engagement is a positive work-related state characterised by vigour, dedication, and absorption (e.g., Schaufeli & Bakker, 2010; Schaufeli *et al.,* 2002). It is also conceptualised as the total investment of an individual in a role, that is, they are enthusiastic and fully involved in their job (Rich *et al.,* 2010). Work engagement is an emotional resource that may reduce the demands of the job and show the level of thriving or functioning of individuals in their jobs (Bakker *et al.,* 2011; Xanthopoulou *et al.,* 2007). Work engagement has continued to develop as a positive construct in organisational psychology and was initially defined as employees’ identification with their work (Leiter, 2019). It was first used as a term in the business context in the 1990s and academic research from the year 2000 onwards (Kahn, 1990; Schaufeli, 2012). In relation to leadership research, work engagement has been linked to several leadership styles. For example, transformational leadership (Amor *et al.,* 2020), servant leadership (Haar *et al.,* 2017), inclusive leadership (Choi *et al.,* 2015), ethical leadership (Naeem *et al.,* 2020) were all positively linked to work engagement, while abusive supervision was negatively related to work engagement (Wang *et al.,* 2020).

Work engagement is conceptualised through the three sub-dimensions of vigour, dedication, and absorption. Vigour is defined by high levels of energy and mental strength. Dedication is described as strong involvement in one’s work with a sense of enthusiasm, while absorption is characterised by being fully integrated or engrossed in one’s role without easily detaching from the work (Schaufeli & Bakker, 2010; Schaufeli & Bakker, 2004). Work engagement is influenced by both personal and environmental factors (Tziner *et al.,* 2019). Research shows that employees that are highly engaged in their work achieve work faster and are less likely to quit their jobs (Du Plooy & Roodt, 2010; Saxena & Srivastava, 2015). Similarly, job resources, learning opportunities, performance feedback, co-workers and supervisor support are positively related to work engagement (Bakker & Leiter, 2010; Pinna *et al.,* 2020).

The most popular measure of work engagement in the literature is the Utrecht Work Engagement Scale (UWES; Schaufeli & Bakker, 2003; Schaufeli *et al.,* 2002), comprising of vigour, dedication, and absorption. This measure was developed to assess work engagement as an opposite pole of burnout (González-Romá *et al.,* 2006). Thus, burnout and work engagement are conceptually and operationally different (Schaufeli *et al.,* 2008). While burnout explains the state of emotional, physical, and cognitive weariness (Schaufeli *et al.,* 2008), work engagement relates to a positive work-related state of mind (Schaufeli *et al.,* 2002).

Burnout and work engagement are both driven by personality dimensions (Kim *et al.,* 2009). They are psychological reactions that develop when individual characteristics interact with work characteristics (Montgomery *et al.,* 2015). Regarding levels of analysis, burnout and work engagement have been conceptualised at the individual and team levels. Originally conceptualised as an individual psychological state, work engagement is rooted in the job demands-resource (JD-R) model (Costa *et al.,* 2014). The JD-R model has two aspects. First, is the job demand aspect which explains that work environments have the physical, organisational, or social aspects of a job that have associated costs and require physical and psychological effort and skills from an employee. Second, the resources aspect that comprises the physical, social, psychological, or organisational features of a job that help in achieving organisational goals or reduce the psychological cost associated with the job (Demerouti *et al.,* 2001). However, scholars have extended the work engagement construct to teams, arguing that teamwork engagement, for example, is relevant for explaining work performance and well-being beyond individual work engagement (Bakker *et al.,* 2006; Costa *et al.,* 2014). Similarly, Torrente *et al.* (2012) examined teamwork engagement as a mediator between social resources and team performance using aggregated team data and drawing on the JD-R model. The findings established that teamwork engagement fully mediated the social resources perceived at the team level and team performance. In addition, using multilevel analysis, Bakker *et al.* (2006) research established that team burnout and engagement are related to individual team members’ burnout and work engagement.

The focus of this project is on the effects of leader narcissism on employee and team burnout and work engagement. This thesis also examines the interaction of leader, follower, and team characteristics in these relationships. Next, is a concluding note of the extended literature review chapter of this thesis.

# 2.8 Conclusion

This chapter reviewed various conceptualisations of narcissism ranging from approaches, antecedents, outcomes, facets, and models of narcissism. Furthermore, this chapter regarded leader and follower narcissism in the organisational context, highlighting the bright and dark sides of leaders’ narcissism and the latest interest by scholars in followers’ narcissism, considering that followers are an integral process of leadership that accounts for leadership effectiveness. The review also captured levels of analysis in leadership studies, highlighting various narcissism research at various levels of leadership including individual, team, organisational, multilevel, and cross levels. Lastly, this chapter discussed the concept of well-being from a general and job-related perspective. Burnout and work engagement as conceptualisations of job-specific well-being were extensively reviewed. This research focuses on the links between leader narcissism, follower narcissism, and burnout and engagement; the underlying mechanisms and boundary conditions at the individual and team level that shape these relationships. In the next chapter, I discuss the theoretical background of this thesis, provide the hypothesised model, theoretical and empirical justifications as well as the hypothesised relationships between the constructs in this research.

# CHAPTER 3- THEORETICAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

# 3.1 Introduction

In the previous chapter, I established that trait narcissism has significant implications in the context of leadership in organisations and that burnout and work engagement are important consequences of workplace experiences and interactions both of individual employees and teams. In this chapter, I bring together theses to argue that trait narcissism has an influence on these outcomes and propose a framework of potential mechanisms and boundary conditions in order to understand why and how narcissism affects these outcomes. Specifically, I review three theories that underpin my hypothesised research model. First, I draw on identity theory (Stryker, 1968) to hypothesise that leader narcissism is negatively related to individual members’ CSE, which in turn, relates to individual members’ burnout and work engagement. Second, I draw on social identity threat theory (Breakwell, 1986) to hypothesise that leader narcissism is negatively related to team CSE, which in turn, relates to team burnout and work engagement. Third, based on the agency and extended agency models of narcissism (Campbell *et al.,* 2006; Campbell & Foster, 2007) in the previous chapter, I draw on role congruity theory (Eagly & Karau, 2002) to hypothesise that followers’ gender will moderate the relationship between leader narcissism and individual CSE in such a way that the effects will be stronger for female followers. I also hypothesise that leader gender will moderate the relationship between leader narcissism and CSE at the individual and team levels, in such a way that the effect will be stronger when the leader is female as opposed to male. To further explore the complex relationship between leader narcissism and employee and team burnout and work engagement based on the gaps identified in the previous chapters, I consider the moderating effects of team characteristics (cohesiveness, resilience, and climate for psychological safety) and follower characteristics (narcissism), with hypotheses developed first for the individual-level and cross-level relationships, followed by the team-level effects.

## 3.2 Theoretical frameworks

Theory is defined as “a set of well-developed categories, such as themes and concepts that are systematically interrelated through statements of relationships to form a theoretical framework that explains some phenomenon” (Strauss & Corbin, 1998, p. 22). The theoretical framework shapes the direction of research in explaining and predicting relationships amongst concepts within some set assumptions and boundaries (e.g., Bacharach, 1989; Haugh, 2012; Whetten, 1989).

I draw on identity theory (Stryker, 1968), role congruity theory (Eagly & Karau, 2002) and social identity threat theory (Breakwell, 1986) to propose a theoretical framework of the relationship between leader narcissism and follower and team outcomes. These theories are related to each other in such a way that they highlight the perceptions of individuals in relation to their roles or society and how their perceptions lead to actions or behavioural reinforcements. For example, when followers perceive that their self-esteem has declined under a leader, they may develop cognitions consistent with the change of identity (identity theory). On their part, when a team perceives that their unity as a team is threatened, they may react negatively to protect their oneness (social identity threat theory). To explore the possible outcomes of leaders’ narcissism, the dominant theory of this research is identity theory while for developing hypotheses on the team states, social identity threat theory serves as the dominant theory. The theories are explained below.

**3.2.1 Identity theory**

Identity theory (Burke, 1980; Stryker, 1968, 1980; Stryker & Burke, 2000) explains the nature of self-concept and how individuals demonstrate their behaviour within roles and societal norms. An identity represents the array of feelings, meanings, and expectations that individuals have about themselves in relation to a social position they occupy (Stryker & Burke, 2000). The proposition of identity theory (Stryker, 1968) is that the self consists of multiple identities that individuals conceive, depending on the role and positions they occupy within the larger society. Extending this theory further, when individuals conceive and verify their position, they enact behaviours that are consistent with such positions, for example, the role of a leader or follower (Cast & Burke, 2002; Hogg *et al.,* 1995). The confirmation of the self (how people perceive themselves) within a defined role accounts for the worth they place on themselves. Thus, when individuals enact and verify their identity, they demonstrate corresponding behaviours in line with their identity, which can lead to a sense of value and self-esteem (Cast & Burke, 2002). The verification of the self helps individuals to maintain their self-esteem, which implies that when individuals have problems verifying the self, they use up their reservoir of self-esteem (Cast & Burke, 2002). In other words, if the verification of their self-esteem is successful, self-esteem is increased but if the problem of self-verification continues, their self-esteem will decline (Cast & Burke, 2002). Applying this theory to narcissism and leadership, when followers have problems with the verification of themselves under a narcissistic leader, their self-esteem and well-being potentially reduce, such that followers low on self-esteem suffer more in terms of the effects of leader narcissism on their emotional exhaustion (Nevicka *et al.,* 2018a).

**3.2.2 Role congruity theory**

Role congruity theory (Eagly & Karau, 2002) explains prejudice in groups, where one group is favourably assessed because it aligns with societal expectations regarding the social roles typical of the group, while another group is negatively evaluated or punished because it falls short of meeting societal role expectations or norms (Eagly & Diekman, 2005; Eagly & Karau, 2002). Role congruity theory applied to gender proposes that men are agentic by nature, which means that men are typically expected to be more assertive, dominant, unemotional, decisive, and independent. Conversely, women are communal by nature, which implies that they are typically expected to be more disposed of warmth, friendliness, affection, sensitivity, and showing concern for others in the form of motherly care (Eagly & Karau, 2002; Hoyt, Simon, & Reid, 2009). For example, research has established that the need for power, control, and expressions of anger, typical of the narcissistic personality, resembles stereotypical masculine characteristics (Corry *et al.,* 2008).

**3.2.3 Social identity threat theory**

Social identity threat theory (e.g., Breakwell, 1986; Branscombe *et al.,* 1999) states that groups face different types of threats to their unity as a group and those individual members feel that their collectiveness, group values, and distinctiveness have been negatively evaluated or breached. This theory assumes that when individuals in a group perceive that their sense of uniqueness, commonness and collectiveness has been violated by internal or external factors, they react negatively and reinforce behaviours to protect their oneness as a group and group norms (Branscombe *et al.,* 1999). People who are more identified with a group's values and norms in a collective manner react to threats against other members of the group, that is, what affects one member, affects all. Conversely, people who have no strong affinity with their group respond less with the group when other members are faced with threats to their position or well-being (Branscombe *et al.,* 1999; Jetten *et al.,* 2002). Applying this theory to group resistance in the face of narcissistic leadership, group members under a narcissistic leader are likely to form a shared mental model and react negatively to narcissistic leaders to protect their group values (Godkin & Allcorn, 2011).

## 3.3 Research model

The proposed research model is a cross-level model. In leadership studies where individuals are nested in teams, that is, the individuals share a common leader, scholars have argued in favour of a multilevel view for better understanding the interactions between leader and followers at more than one level of analysis (e.g., Hitt *et al.,* 2007; Klein & Kozlowski, 2000). Put differently, leadership does not happen between a leader and a follower in a vacuum and employees often work in teams managed by the same leader. This means that the leader will affect team states and processes and leaders’ influence will determine how a team and its members respond to leaders’ behaviour (Chan, 1998; Chen *et al.,* 2007). My hypothesised model is depicted in Figure 1 below. For this research, the hypothetical relationships are developed first at the individual and cross-levels and then at the team level.

Figure 3.1. A multilevel model of the effects of leader narcissism on follower and team outcomes

H5a &b

H4a &b

H6a &b

H7a&b, 8a&b, 9a&b

H5c &d

H1c &d

H3a &b

H2a &b

H1a &b

Team level

Individual level

*Note. H10-H14 represented moderated mediation hypotheses*

## 3.4 Hypotheses development

### **3.4.1 Individual level and cross-level hypotheses**

**Leader narcissism and individual core self-evaluation**

CSE is a representation of the fundamental, subconscious appraisal that people hold about themselves, their capabilities, other people, and the world around them (Judge *et al.,* 1997; Judge *et al.,* 1998). CSE assesses oneself in four interrelated traits, namely, self-esteem, generalised self-efficacy, neuroticism, and locus of control (Judge *et al.,* 1998). Self-esteem is the “favourable or unfavourable attitude towards the self” (Rosenberg, 1965, p. 3). Generalised self-efficacy is conceptualised based on Bandura’s (1997) self-efficacy theory to signify the belief that individuals can achieve specific tasks, which is a cognitive resource (Judge *et al.,* 1997). Neuroticism is the extent to which people are likely to feel distressed or insecure (Bolger & Schilling, 1991) and is in its reverse form is emotional stability (Chang *et al.,* 2012). Lastly, locus of control constitutes the extent to which people take responsibility for situations that happen to them, that is, when people believe that they have control over events in their lives, they have an internal locus of control, but when they believe that the environment or other people determine their fate, they have an external locus of control (Rotter, 1996).

Identity theory posits that people evaluate their self-worth through reflections on the meanings and experiences that they have in relation to the roles they occupy and their relationships with other people within these roles, including leaders (Stryker, 1968). The evaluation of individual capacities, therefore, depends largely on their experiences with their leader, which is likely to result in a lowered CSE under a narcissistic leader compared to a non-narcissistic leader (Lipman-Blumen, 2006; Resick *et al.,* 2009). The reason that interacting with a narcissistic leader can influence people’s self-view is that leaders and followers often have a connection (Kellerman, 2008). This leader-follower connection allows narcissistic leaders to create illusions that captivate their followers in a way that the followers can hardly distinguish between the leaders’ noble visions and grandiose illusions, thus influencing followers’ self-views (Lipman-Blumen, 2006). Leaders have a profound influence on follower’s identity such that followers see themselves in the light of their relationships with their leaders (Kark & Shamir, 2002) and this influence is likely to rob-off on followers’ identity, in terms of their self-worth (Mao *et al.,* 2019), in line with the proposition of identity theory.

Drawing on theory and research on the consequences of leader narcissism on followers’ cognition, I argue that leaders influence followers’ CSE. CSE is traditionally conceptualised as a trait (e.g., Erez & Judge, 2001; Judge *et al.,* 1998; Kacmar *et al.,* 2009). However, it has intrapersonal fluctuations which are shaped by external or environmental demands such that CSE changes considerably from situation to situation (e.g., Dóci & Hofmans, 2015; Thoroughgood *et al.,* 2012). From their relationship with narcissistic leaders, followers tend to have a feeling of not being good enough because of the leader’s lack of empathy towards them (Rosenthal & Pittinsky, 2006).

Past research has shown that followers with low CSE suffer most under narcissistic leaders, such that they show reduced performance and more symptoms of burnout through an indirect effect of abusive supervision (Nevicka *et al.,* 2018a). However, there is reason to believe that leader narcissism also directly influences followers’ cognition about their emotions. Studies have examined follower state CSE arguing that there are considerable amounts of within and between-person variability in CSE (e.g., Debusscher *et al.,* 2016; Judge, & Kammeyer-Mueller, 2011). In other words, state CSE is not conflicting with trait CSE but “represents another side of the same coin” (Nübold *et al.,* 2013, p. 31). State CSE is conceptualised as a condition of evaluation of individuals' current worthiness (self-esteem), effectiveness (self-efficacy), emotional feeling (neuroticism), and ability to control a situation (locus of control) (Nübold *et al.,* 2013). Previous studies show that leader narcissism is negatively associated with followers’ self-esteem (Fredah Mainah & Perkins, 2015), positively with negative emotions, such as malicious envy (Braun *et al.,* 2018), and negatively with confidence in the ability to achieve tasks (self-efficacy), because it dampens followers’ motivation to work hard on tasks (Owens *et al.,* 2015) and they are more likely to depend on the leader for external validation and approval (locus of control; Nevicka *et al.,* 2018; Thoroughgood, et al., 2012). In addition, followers report a higher level of abusive supervision when the leaders are narcissistic and this affects their emotional state (neuroticism; Braun *et al.,* 2018; Nevicka *et al.,* 2018a). Based on the theoretical arguments provided above, I expect leader narcissism to be negatively related to individual CSE and hypothesise as follows:

H1a: Leader narcissism (follower rated; t2) is negatively related to individual CSE (t2).

H1b: Leader narcissism (leader rated; t2) is negatively related to individual CSE (t2).

**Individual core self-evaluation and individual burnout and engagement**

The idea that individual CSE will affect individual burnout and work engagement is theoretically supported by identity theory (Stryker, 1968). According to the theory, individuals evaluate their self-worth through reflections on the experiences that they have in connection to the roles they occupy and their relationship with other people, for example, their leader (Cast & Burke, 2002; Stryker, 1968), and this influences their well-being (Nevicka *et al.,* 2018a). Past research shows that CSE is related to burnout and engagement such that individuals with high CSE are likely to experience less burnout, in terms of high emotional exhaustion, high cynicism and low professional efficiency (Li *et al.,* 2014). An individual with high CSE is unlikely to be tired from a job because of depleted emotional resources (Peng *et al.,* 2016). On the other hand, according to research, CSE is related to work engagement in such a way that individuals with high CSE are more likely to perceive their jobs positively, thereby enhancing their work engagement (Tims & Akkermans, 2017). I propose that employees’ CSE has a negative effect on their burnout and a positive effect on work engagement. That is, when employees have low CSE, they will be more easily burnt out by their jobs and have low work engagement. There is empirical support for the association between CSE and job burnout, such that CSE is negatively related to burnout (Peng *et al.,* 2016) and job satisfaction (Judge & Bono, 2001). Drawing on theory and research, CSE is a bottom-line evaluation of an individual’s ability to handle situations (Greenbaum *et al.,* 2012). That is, when employees have a low assessment of their self-worth, it leads to high burnout and low work engagement in line with identity theory (Cast & Burke, 2002; Stryker, 1968). These arguments are further supported by the conservation of resources theory that posits that individuals need to conserve their responses which are important for their well-being (Hobfoll, 2001). I expect follower burnout and work engagement to be influenced by CSE. CSE is a personal resource that an individual can draw on in the workplace to cope with the demands of the job and will thus improve work engagement and reduce their burnout. Based on the above argumentation, I hypothesise that:

H1c: Individual CSE (t2) is negatively related to individual burnout (t3).

H1d: Individual CSE (t2) is positively related to individual work engagement (t3).

**The mediating role of individual core self-evaluations**

The relationships between leader narcissism, CSE, burnout and work engagement are theoretically explained through identity theory (Burke, 1980). According to this theory, identity represents meanings and expectations linked to a role, which are verified by the experiences of individuals, leading to an increase or decrease in the perception of their value (Burke, 1980). This further leads to certain cognitions and self-views in terms of well-being (Cast & Burke, 2002). Applying this theory to my mediation argument, the sense of values that individuals gain from a positive verification of their identity in relation to a position leads to higher well-being, for example, lower burnout and higher work engagement (Luyckx *et al.,* 2010). This is because the values that individuals place on themselves in relation to their work is born out of their psychological identification with their work (Braine & Roodt, 2011) and serves as a process for improved work-related well-being (Wegge *et al.,* 2006). Past research shows that CSE is negatively related to burnout (Li *et al.,* 2014) and positively with work engagement (Yoo & Lee, 2019). I expect follower CSE to mediate the relationship between leader narcissism and individual burnout and work engagement because narcissistic leader actions might affect how followers think about themselves because of identity-related processes. That is, the change in follower self-view because of leader narcissistic behaviour will have negative effects on their well-being because of the identity-related challenges it presents, leading to higher burnout and lower work engagement. Drawing on theory and past research, I argue that leader narcissism affects followers’ cognition (CSE), which, in turn, affects their burnout and work engagement. Put differently, individual CSE is the pathway through which leader narcissism affects individual burnout and work engagement. Therefore, I hypothesise that:

H1e: The relationship between leader narcissism (t2) and individual burnout (t3) is mediated by individual CSE (t2).

H1f: The relationship between leader narcissism (t2) and individual work engagement (t3) is mediated by individual CSE (t2).

**The moderating role of followers’ narcissism**

Studies have established that trait narcissism is not exclusive to leaders, though it is argued that it is more common among leaders as it propels individuals to seek leadership positions (Braun *et al.,* 2015; de Vries, & Miller, 1985). Followers also have the narcissism trait, albeit in lesser proportions (Schyns *et al.,* 2019). However, the leader-centric focus of studies on narcissism (e.g., Humphreys *et al.,* 2010) has left a critical knowledge gap regarding the interplay of leaders and followers with varying levels of narcissism and how this affects leadership outcomes. Followers who are high on trait narcissism may not like to be assigned followership roles because they consider themselves more educated, experienced, and qualified for leadership positions, as they have an over-estimated sense of ability (Benson *et al.,* 2016; Treadway *et al.,* 2019). When these followers are not assigned a leadership position, they may be dissatisfied and enact behaviours that will not benefit an organisation as compared with those low on trait narcissism (Benson *et al.,* 2016). Furthermore, followers who are high on trait narcissism enact other-serving behaviours because they are not likely to be admired and externally validated for their role assignment (Benson *et al.,* 2016).

Drawing on theory and past research on the interaction between leaders’ and followers’ personality traits and cognitions, I expect the level of followers’ narcissism to shape the relationship between leader narcissism and individuals’ CSE. Identity theory stresses that individuals in defined positions verify their positions which leads to cognitions about their self-worth (Cast & Burke, 2002). Extending this theory to arguments on leader-follower narcissism match, I argue that followers’ narcissism will interact with leader narcissism to buffer the negative effects of leader narcissism on followers. This argument is based on the premise that some followers are determined not to play the victim in their relationship with narcissistic leaders, that is, more likely to interpret the narcissistic attitude of their leaders (Nevicka *et al.,* 2018b) and these followers are likely to be higher on trait narcissism. In addition, narcissistic followers are more likely to be interested in leadership positions (Schyns *et al.,* 2019) and reject or resist the follower identity associated with their hierarchical role. Therefore, they are ready to match the leader in a strategic display of narcissism, which increases their CSE because personality dispositions influence how individuals appraise themselves (Näswall *et al.,* 2005) in relation to the experiences linked to their roles as followers, in line with the proposition of identity theory (Cast & Burke, 2002). Past research shows that leader grandiose narcissism negatively interacted with follower vulnerable narcissism, such that followers' motivational process was suppressed (Wirtz & Rigotti, 2020). Drawing on past research, I expect follower grandiose narcissism to moderate leader grandiose narcissism such that follower narcissism will partially buffer the negative effects of leader narcissism because follower’s personality traits influence how they deal with workplace stressors (Diebig & Bormann, 2020), such as leader narcissistic behaviour towards them. Based on the argumentation above, I hypothesise that:

H2a: The relationship between leader narcissism (follower rated; t2) and individual CSE (t2) is moderated by followers’ narcissism (t2), such that follower narcissism partially buffers the negative effect of leader narcissism on individual CSE, more for followers high in narcissism as compared to those low in narcissism.

H2b: The relationship between leader narcissism (leader rated; t2) and individual CSE (t2) is moderated by followers’ narcissism (t2), such that follower narcissism partially buffers the negative effect of leader narcissism on individual CSE, more for followers high in narcissism as compared to those low in narcissism.

**The moderating role of followers’ gender**

There is reason to believe that women will be more affected than men by narcissistic leaders. Based on gender role socialisation theory (Whitley, 1983), females view and appraise themselves more through interpersonal relationships by seeking out information and opinions about themselves from other people while men get information and appraise themselves by self-perception and comparison with referent others, for example, other men. Based on reflected appraisals and a higher need for social approval, when women have negative experiences with other people, for example, a narcissistic leader, it affects their self-concept more than men because of their higher need for social approval and their sensitivity (Burton & Hoobler, 2006). Previous research has established that gender plays a moderating role in the relationship between abusive supervision and self-esteem, such that females experience lower levels of state self-esteem than males following abusive supervision (Burton & Hoobler, 2006). By extension, I argue that followers’ gender plays a determining role in the strength of association between leader narcissism and follower CSE.

The relational-interdependent self-construal (Cross *et al.,* 2000) explains that there are differences in the behaviour of women to men and how they think about themselves. That is, women are more responsive to relational cues (e.g., narcissistic behaviour by the leader) and are more likely to be affected by them than men in terms of CSE. In addition, women are more likely to develop interdependent self-construal because they are typically given to caring and they build social relationships with other people compared to men and because they value these more and build them easily (Cross *et al.,* 2003). This implies that they are likely to be more affected by narcissistic behaviour towards them because the leader represents the source of organisational identification and affirmation (Burton & Hoobler, 2006). In other words, the expression of affirmation, worth, and liking from the leader which typically increases the self-worth of women (more than men) becomes toxic (Burton & Hoobler, 2006) and this decreases the CSE of women. Based on theory and research, I expect gender to moderate the relationship between leader narcissism for women as compared to men and hypothesise as follows:

H3a: The relationship between leader narcissism (follower rated; t2) and individual CSE (t2) is moderated by followers’ gender (t1), such that the relationship will be stronger for female followers as compared to male followers.

H3b: The relationship between leader narcissism (leader rated; t2) and individual CSE (t2) is moderated by followers’ gender (t1), such that the relationship will be stronger for female followers as compared to male followers.

**The moderating role of leaders’ gender**

Role congruity theory (Eagly & Karau, 2002) explains that groups of people can be evaluated favourably or unfavourably based on societal assumptions for and against the groups, for example, men leaders and women leaders (Elsesser & Lever, 2011; Hoyt, 2010). Research has shown that leader gender plays a role in the leadership and followership process. For example, followers respond differently to the negative emotional expression of male and female leaders, such that male leaders received lower ratings of effectiveness when they expressed anger or sadness compared to female leaders (Lewis, 2000). The effect of leaders’ gender on followers’ behaviour depends largely on followers’ assumptions about leaders’ gender. For example, followers rated male leaders as more effective for communicating with them than female leaders because they had lower expectations of men in terms of their communication skills, while women were judged more harshly because they expected that it was normal for women to communicate, and they had higher expectations in this regard (Mohr & Wolfram, 2008). Gender role congruity theory (Eagly & Karau, 2002) aligns with the two attributes of the agency model of narcissism (Campbell *et al.,* 2006) as either agentic (associated more with men) or communal (associated more with women). That is, women are typically perceived to be more communal and will be evaluated more harshly than men when in a leadership position while men are perceived to be more agentic and have more potential to assume leadership roles because of their agentic qualities (e.g., assertiveness and decisiveness) are aligned with the role congruity principle (Ritter & Yoder, 2004; Schock *et al.,* 2019).

Studies have established that men are on average more narcissistic than women (e.g., Jonason *et al.,* 2017; Weiser, 2015). Extending this further, followers should expect female leaders to be less narcissistic as being narcissistic is more aligned with a male as opposed to the female gender (Grijalva *et al.,* 2015). This would be in line with follower expectations that female leaders are more disposed to communal traits such as warmth, affection, and concern for them (Hoyt *et al.,* 2009). Similarly, women may act in a similar narcissistic way to men but will be judged more harshly (as more narcissistic) than their male counterparts because their behaviour is incongruent with their gender role (female), which should, in turn, affect the CSE of followers. The self-view of the followers will be affected under a female narcissistic leader because the leader belittles them and shows little or no empathy towards them, which is inconsistent with the followers’ expectations of a female leader. The reason CSE will be affected differently on the account of leader gender is because of the assumption of followers that women are more given to warmth and caring. This incongruity with the narcissistic behaviour will in turn affect the self-view of followers, assuming they are disappointed with how they are treated by the leader, and they reflect on the narcissistic behaviour towards them which, in turn, will lead to a lowered CSE. In addition, followers will perceive the leader as a poor leader due to the role incongruity, which will make them think less of themselves and their abilities. This is based on the premise that followers’ self-identity is connected to their leader, and it is a resource that shapes their self-efficacy (Van Knippenberg *et al.,* 2004). For example, when followers expect more praise, recognition, and support when they have a female leader (in line with gender roles), not receiving these due to her high narcissism should lead to even poorer self-evaluation, increasing the gap between their expectations of their leader and the leader’s behaviour with negative consequences (e.g., Lambert *et al.,* 2012). This is because of leaders’ capacity to shape follower identity and self-worth. In other words, followers evaluate themselves in terms of psychological identification and value internalisation largely from the relational process with their leaders (Collinson, 2006). Based on the above arguments, I hypothesise the following:

H4a: The relationship between leader narcissism (follower rated; t2) and individual CSE (t2) is moderated by leader gender (t2), such that the negative relationship will be stronger when the leader is female as opposed to male.

H4b: The relationship between leader narcissism (leader rated; t2) and individual CSE (t2) is moderated by leader gender (t2), such that the negative relationship will be stronger when the leader is female as opposed to male.

### **3.4.2 Team level hypotheses**

**Leader narcissism and team core self-evaluations**

Leader narcissism has a potentially negative effect on team CSE, which is the sum of individual CSE in a team (Lin *et al.,* 2012). Team CSE stems from a shared perception of team’s worth over time from events and their collective experiences, implying that team members often have collective ties with one another in terms of working together and similar experiences under the same team leader (e.g., Sanders *et al.,* 2008; Swann *et al.,* 2014).

Social identity threat theory posits that groups face different forms of threats against their identity as a group, including perceptions of leaders as threats (Breakwell, 1986; Tajfel & Turner, 1986). According to this theory, groups are affected by factors that violate their sense of collectiveness, including their cognition about their self-worth, in terms of generalised efficacy, neuroticism, self-esteem and locus of control. This threat affects their cognition, and they are inclined to reinforce behaviours to protect their identity. The evaluation of a team’s perceptions about themselves in relation to leader narcissism is based on the premise that leaders who are high in trait narcissism will likely take actions to protect their image and disparage the team’s efforts (Snyder *et al.,* 1986), which affects the appraisal of the sum of individual team members’ worth (CSE).

Research shows that narcissistic leaders inhibit information exchanges between team members, which prevents the effectiveness of their interaction and performance (Nevicka *et al.,* 2011). Narcissistic leaders also blame other people for their failure (Mathieu *et al.,* 2014), and this potentially affects team CSE as the team may be on the receiving end of blame, meaning that everyone in the team will experience a degree of negative consequences on their CSE. Another reason why leader narcissism will affect team CSE is that a team under a narcissistic leader will form a shared perception of being undermined by their leaders’ inflated self-image, negative reaction to criticism and inability to accept responsibility for the team. Consequently, the team will discuss the leader’s behaviour and will be inclined to form a mental model of low self-worth because of their shared perception of negative collective experience from their leader (Barnett & McCormick, 2012; Burtscher & Manser, 2012). Based on the above arguments, the team will perceive that they have been devalued by their leader and this will affect their affective team’s worth. Drawing on theory and past research on the effect of leader behaviour on team cognition and functioning, I argue that leader narcissism will affect team CSE and hypothesise as follows:

H5a: Leader narcissism (team rated; t2) is negatively related to team CSE (t2).

H5b: Leader narcissism (leader rated; t2) is negatively related to team CSE (t2).

**Team CSE and team burnout and teamwork engagement**

Social identity threat theory (Breakwell, 1986) posits that groups will be affected by perceived violations from internal or external factors. According to this theory, groups react collectively when their position is threatened. This implies that team members share their experiences and interpersonal impressions with one another, and this has a potential effect on the team's psychological states, in terms of team burnout and work engagement. I propose that team CSE will be related to team burnout and work engagement. Research has linked CSE to well-being and work success at the individual level (e.g., Judge *et al.,* 2005; Judge & Hurst, 2008; Smedema, 2014). I argue that the teams where members experience low CSE are likely to have low levels of member work engagement and high levels of member burnout because the low subconscious perception of a team about their worth will lead to a feeling of helplessness in dealing with work and life challenges (Judge *et al.,* 2009). In other words, a team with low CSE will have a defeatist mentality (Judge *et al,* 2009; Neff, 2011) which will, in turn, affect their levels of burnout and work engagement. CSE is usually a product of the opinions, validations, and evaluations of others, for example, leaders of teams (Grant & Wrzesniewski, 2010; Judge & Kammeyer-Mueller, 2011). Research has shown that people with low CSE are vulnerable to low psychological well-being because of the low perception of their worth (Padilla *et al.,* 2007; Paradise & Kernis, 2002). Extending this thinking to team burnout and engagement, I argue that teams with low CSE will experience emotional depletion on their jobs in form of high burnout and low work engagement. The reason low CSE will affect team burnout and work engagement is that the team will evaluate their worth and the feeling of low worth will drain their shared emotional resources, leading to high burnout and low work engagement. Drawing on theory, past research, and the argumentation above, I hypothesise that:

H5c: Team CSE (t2) is negatively related to team burnout (t3).

H5d: Team CSE (t2) is positively related to teamwork engagement (t3).

**The mediating role of team CSE**

According to social identity threat theory (Breakwell, 1986), group members have collective ties with one another, they are aware of perceived threats or violations against their members, and how it affects their functioning, in terms of well-being. This cognition enables them to reinforce behaviours that protect their values and sense of identity as a group. Research has linked dysfunctional leadership behaviour (destructive leadership and abusive supervision) to employee well-being at the individual level (Lin *et al.,* 2013; Mathieu *et al.,* 2014; Spain *et al.,* 2016). At the team level, the relationship between leader narcissism and team burnout and engagement via team CSE is yet to be tested. I expect the associations between the variables at the individual level to replicate at the team level and posit that team CSE is a mechanism in the relationship between leader narcissism and team burnout and work engagement. In addition to individual followers, teams with narcissistic leaders will fare worse than those teams whose leaders are low on trait narcissism. This is because all team members will be exposed to the same leader behaviours in team-leader interactions, hence they will develop a shared understanding of the leader. This may become amplified through interactions between team members, who will discuss and reinforce perceptions of the leader, converging further on the cognitions around themselves and their teammate being unworthy. In addition, the reason narcissistic leaders affect team burnout negatively is that they diminish the self-worth of the people they manage, by placing blame, making selfish decisions, and belittling them (Rosenthal & Pittinsky, 2006; Volmer *et al.,* 2016). Under these conditions, the team will perceive that their worth has been debased, and this will affect their level of burnout, that is, they will be more physically, cognitively, and emotionally drained. On the other hand, they will be less engaged in their jobs, occasioned by the low perception of their worth. Based on the arguments above, I hypothesise that:

H5e: Team CSE (t2) will mediate the relationship between leader narcissism (follower rated; t2) and team burnout (t3).

H5f: Team CSE (t2) will mediate the relationship between leader narcissism (follower rated; t2) and work engagement (t3).

**The moderating role of leader gender**

Studies have established that the same behaviour of male and female leaders can be interpreted differently by team members depending on their perception of gender role congruence. For example, male leaders are on average judged to be more decisive and assertive, while female leaders are on average judged to be more helpful and benevolent (Abele & Wojciszke, 2014). This is supported by role congruity theory (Eagly & Karau, 2002; Hoyt, 2012). According to this theory, some groups are favourably assessed because they align with societal norms or expectations while other groups are unfavourably assessed because they are incompatible with societal expectations, for example, men and women in leadership positions (Elsesser & Lever, 2011; Hoyt, 2010). Research also suggests that there is a global preference for male leaders than their female counterparts (Hoyt *et al.,* 2009) and there are norms surrounding both male and female leader gender roles (Hoyt, 2010; Hoyt, 2012). I propose that leader gender will moderate the relationship between leader narcissism and team CSE in a way that team members will be more affected under a female narcissistic leader than under a male narcissistic leader. The same dynamics for the individual level (leader gender moderating leader narcissism and individual CSE) will replicate for the team level. However, for the team level, team members will discuss their leader’s behaviour and develop a strong shared mental model of their role congruity. To put it differently, over time, the team will develop a shared perception of high role congruence for a narcissistic male leader, while a narcissistic female leader will be collectively perceived as incongruent in terms of alignment with gender and leader role expectations. This will shape the team’s cognition negatively towards their female leader and positively towards their male leader because narcissistic behaviour is incongruent with the female gender role but congruent with the masculine leader role. This will potentially lead to lower CSE for teams with a narcissistic female leader, as compared to those with a narcissistic male leader. I expect the team’s CSE to be affected more negatively under this condition because of the previously held assumption of the female leader which is not consistent with narcissistic behaviour. This disappointment in the female leader behaviour will affect the sum of the team members cognition more than the behaviour of a male narcissistic leader. In other words, the team members will perceive the leader as a poor leader due the role incongruity and this will lead to a poorer evaluation of their self-worth. For example, when team members expect the female leader to frequently express praise, recognition, and support to them in line with gender roles, not receiving these from the female leader due to her high narcissism may lead to even poorer self-appraisal as compared with experiencing a lack of praise and recognition from a male narcissistic leader. Based on the above argumentation, I hypothesise that:

H6a: The relationship between leader narcissism (follower rated; t2) and team CSE (t2) will be moderated by leader gender (t2), such that the negative relationship will be accentuated (more negative) when the leader is female as compared to male.

H6b: The relationship between leader narcissism (leader rated; t2) and team CSE (t2) will be moderated by leader gender (t2), such that the negative relationship will be accentuated (more negative) when the leader is female as compared to male.

**The moderating roles of team cohesiveness, team resilience and climate for psychological safety**

In my model, team cohesiveness, team resilience, and climate for psychological safety are the team characteristics that I argue will moderate the relationship between leader narcissism, and team CSE. The rationale for the team characteristics of team cohesiveness, team resilience and climate for psychological safety playing moderating roles in the relationship between leader narcissism and team CSE, which links to team burnout and work engagement, is rather intuitive. From social identity threat theory (Breakwell, 1986; Branscombe *et al.,* 1999), individuals in a team reinforce their behaviour to protect one another when they perceive that their collectiveness is under threat. On this premise, I argue that these team characteristics can show the capacity of a team to preserve their affective needs and develop an adaptive response in the face of stressors against the team (Davis *et al.,* 2004; Walton & Cohen, 2007). Therefore, team characteristics can potentially influence the shared team cognition of their worth in the face of team stressors, such as high leader narcissism.

**Team cohesiveness**

Team cohesiveness is defined as “a dynamic process which is reflected in the tendency of a team to stick together and remain united in the pursuit of its instrumental objectives and/for the satisfaction of members' affective needs” (Carron *et al.,* 1998, p. 123). Members of a cohesive team will support each other in the face of challenges confronting them (Hambrick, 1995). Past research shows that team cohesiveness had a positive interaction effect in the relationship between group competency and group performance, such that a highly cohesive group achieved better performance (Shin & Park, 2009). Drawing on social identity threat theory and past research, I argue that in high cohesive teams, members will be protective of each other and have a shared identity. An attack on one team member may be treated as an attack on the team, triggering the team to become defensive and distance itself from the leader. In a team with low cohesiveness, the leader belittling or blaming one or a few members may be interpreted by the rest of the team to mean that these members are less competent and worthy than themselves, creating sub-groups resulting in negative interpersonal exchanges within the team that may reinforce the negative effect of the leader narcissism on team members’ sense of self-worth. Thus, a less cohesive team will not be able to galvanise support for each other in the face of challenges and hostility towards them, such as high leader narcissism. This relationship is yet to be tested in the dark side of leadership research. I expect team cohesiveness to moderate the relationship between leader narcissism and team CSE because of the tendency of team members to satisfy the affective needs of each other in the face of high leader narcissism towards them.

**Team resilience**

Team resilience is “the capacity to bounce back from failure, setbacks, conflicts, or any other threat to well-being that they may experience” (West *et al.,* 2009, p. 253). Team resilience described as behaviour of virtue (Cameron *et al.,* 2004; Sandage & Hill, 2001) is a defence against exposure to risky situations (Masten, 2001; Egeland *et al.,* 1993). Team resilience as a “dynamic process encompassing positive adaption within the context of significant adversity” (Luthar *et al.,* 2000, p. 435) can moderate the relationship between leader narcissism and team CSE. Past research shows that personal resilience moderated the relationship between stressful life events and sleep quality, such that the effect of stressful life events on sleep quality decreased as the level of resilience increased (Li *et al.,* 2019). The reason that team resilience can moderate this relationship is that under a high resilience team, leader narcissistic behaviour towards one or a few team members, for example, belittling them, will be interpreted by the team as an attack against their collective effort, causing a strong emotional reaction from the team in defiance against the leader, and bouncing back from the attack. In a team with low resilience, the leader belittling one or a few team members may be interpreted that they are dull and incompetent, creating division or a distance with other team members in their interpersonal exchanges within the team, that may reinforce the negative effect of the leader narcissism on the team members sense of worth. Thus, a low resilient team will not be able to easily bounce back from setbacks, conflicts, or threats against their collectiveness as a team, such as high leader narcissism. To the best of my knowledge, this relationship is yet to be tested in the dark side of leadership research. I expect a highly resilient team to easily recover from internal and external threats against the collectiveness of a team, such as high leader narcissism.

**Climate for psychological safety**

Climate for psychological safety is a shared belief by a team that their work environment is safe, with a sense of openness, idea sharing and interpersonal risk-taking (Bradley *et al.,* 2012). Climate for psychological safety comes with a “sense of confidence that the team will not embarrass, reject or punish someone for speaking up” (Edmondson, 1999, p. 354). Social information processing theory (Salancik & Pfeffer, 1978) posits that people are inclined to develop close relationships with each other in their social contexts, which leads to adapting shared attitudes and behaviour by studying the information from their social environments. Applying this theory to my arguments, team members use social information and interpersonal impressions to develop their shared experiences at work. From their shared experiences, they can adapt to the circumstances or react collectively. Past research shows that climate for psychological safety moderated the relationship between process innovation and company performance, such that a high level of climate for psychological safety is associated with positive relation and a low level of climate for psychological safety is associated with a negative relation (Baer & Frese, 2003). This is consistent with arguments that a climate for psychological safety leads to team learning and thriving (Edmondson, 1999). I expect a strong climate for psychological safety in a team to moderate the relationship between leader narcissism and team CSE because of the potential solidarity and shared experience that is inherent in strong psychologically safe climates, and this can influence their shared cognition about their self-worth as a team. In addition, in a team that is open to sharing of their experience, interpersonal risk-taking, and accepting of mistakes, members who are on the receiving end of negative leader behaviours will feel able to share their experience and seek support from their teammates and this would prevent them from internalising the negative feedback, grandiosity, and belittling behaviour of the leader. Conversely, in a team with a weak climate for psychological safety, team members that receive negative feedback or belittling by the leader will not be provided an opportunity for the member to share their experiences and may be ostracised by other team members, thereby creating sub-groups and negative interpersonal exchanges that may reinforce the negative effect of the leader narcissism on the team members’ sense of self-worth.

Research has established that teams develop coping strategies or defensive strategies in reaction to threats to their social identity, for example, thinking about quitting, which reduces their engagement (e.g., Branscombe *et al.,* 1999; Brown & Coupland, 2015; Breakwell, 2015; Schyns *et al.,* 2018). From a collective point of view, I argue that teams can react together, in the form of a common resistance against the source of their identity threat, and the collective reactions will depend on the strength of the team characteristics (e.g., team cohesiveness, team resilience, and climate for psychological safety). Combining these arguments and in line with social identity threat theory (Tajfel & Turner, 1986), I hypothesise the following:

H7a: The relationship between leader narcissism (follower rated; t2) and team CSE (t2) will be moderated by team cohesiveness (t2), such that the negative relationship will be weaker under high team cohesiveness than under low team cohesiveness.

H7b: The relationship between leader narcissism (leader rated; t2) and team CSE (t2) will be moderated by team cohesiveness (t2), such that the negative relationship will be weaker under high team cohesiveness than under low team cohesiveness.

H8a: The relationship between leader narcissism (follower rated; t2) and team CSE (t2) will be moderated by team resilience (t2), such that the negative relationship will be weaker under high team resilience than under low team resilience.

H8b: The relationship between leader narcissism (leader rated; t2) and team CSE (t2) will be moderated by team resilience (t2), such that the negative relationship will be weaker under high team resilience than under low team resilience.

H9a: The relationship between leader narcissism (follower rated; t2) and team CSE (t2) will be moderated by climate for psychological safety (t2), such that the negative relationship will be weaker under a strong climate for psychological safety than under a weak climate for psychological safety.

H9b: The relationship between leader narcissism (leader rated; t2) and team CSE (t2) will be moderated by climate for psychological safety (t2), such that the negative relationship will be weaker under a strong climate for psychological safety than under a weak climate for psychological safety.

**Moderated mediation**

Moderated mediation is a term for mediation models that requires the addition of a moderator (James & Brett, 1984). It attempts to explain when a given effect occurs in an indirect relationship between two or more variables (Frone, 1999; Preacher *et al.,* 2007). Furthermore, moderated mediation “occurs when the strength of an indirect effect depends on the level of some variable, in other words, when mediation relations are contingent on the level of a moderator” (Preacher *et al.,* 2007, p.193). The conditional indirect effects are usually probed for significance to examine the magnitude of the indirect effects and interactions from the analysis are plotted if the results are significant using an Excel spreadsheet (Dawson, 2015). In this thesis, I proposed CSE as a mediator in the relationship between leader narcissism (follower rated) and individual burnout and work engagement at the cross-level. For the moderated mediation model, I propose that the mediation effect is contingent on the degree of follower characteristics including follower narcissism and follower gender. At the team level, I propose team CSE as a mediator in the relationship between leader narcissism (follower rated) and team burnout and work engagement. With the moderated mediation model, I propose that the mediating effect will be contingent upon team cohesiveness, team resilience and climate for psychological safety. The moderated mediation hypothetical relationships are first presented at the individual/cross-level and then at the team level below:

**Individual/cross-level**

H10a: Follower narcissism (t2) will moderate the relationship between leader narcissism (follower rated; t2) and individual burnout (t3) via individual CSE (t2), such that follower narcissism partially buffers the negative effect of leader narcissism on individual CSE.

H10b: Follower narcissism (t2) will moderate the relationship between leader narcissism (leader rated; t2) and individual burnout (t3) via individual CSE (t2), such that follower narcissism partially buffers the negative effect of leader narcissism on individual CSE.

H10c: Follower narcissism (t2) will moderate the relationship between leader narcissism (follower rated; t2) and individual work engagement (t3) via individual CSE (t2), such that follower narcissism partially buffers the negative effect of leader narcissism on individual CSE.

H10d: Follower narcissism (t2) will moderate the relationship between leader narcissism (leader rated; t2) and individual work engagement (t3) via individual CSE (t2), such that follower narcissism partially buffers the negative effect of leader narcissism on individual CSE.

H11a: Followers’ gender (t2) will moderate the relationship between leader narcissism (follower rated; t2) and individual burnout (t3) via individual CSE (t2), such that the relationship will be stronger for female followers.

H11b: Followers’ gender (t2) will moderate the relationship between leader narcissism (follower rated; t2) and individual work engagement (t3) via individual CSE (t2), such that the relationship will be stronger for female followers.

**Team level**

H12a: Team cohesiveness (t2) will moderate the relationship between leader narcissism (follower rated; t2) and team burnout (t3) via team CSE (t2), such that the negative relationship will be weaker under high team cohesiveness than under low team cohesiveness.

H12b: Team cohesiveness (t2) will moderate the relationship between leader narcissism (leader rated; t2) and team burnout (t3) via team CSE (t2), such that the negative relationship will be weaker under high team cohesiveness than under low team cohesiveness.

H12c: Team cohesiveness (t2) will moderate the relationship between leader narcissism (follower rated; t2) and teamwork engagement (t3) via team CSE (t2), such that the negative relationship will be weaker under high team cohesiveness than under low team cohesiveness.

H12d: Team cohesiveness (t2) will moderate the relationship between leader narcissism (leader rated; t2) and teamwork engagement (t3) via team CSE (t2), such that the negative relationship will be weaker under high team cohesiveness than under low team cohesiveness.

H13a: Team resilience (t2) will moderate the relationship between leader narcissism (follower rated; t2) and team burnout (t3) via team CSE (t2), such that the negative relationship will be weaker under high team resilience than under low team resilience.

H13b: Team resilience (t2) will moderate the relationship between leader narcissism (leader rated; t2) and team burnout (t3) via team CSE (t2), such that the negative relationship will be weaker under high team resilience than under low team resilience.

H13c: Team resilience (t2) will moderate the relationship between leader narcissism (follower rated; t2) and teamwork engagement (t3) via team CSE (t2), such that the negative relationship will be weaker under high team resilience than under low team resilience.

H13d: Team resilience (t2) will moderate the relationship between leader narcissism (leader rated; t2) and teamwork engagement (t3) via team CSE (t2), such that the negative relationship will be weaker under high team resilience than under low team resilience.

H14a: Climate for psychological safety (t2) will moderate the relationship between leader narcissism (follower rated; t2) and team burnout (t3) via team CSE (t2), such that the negative relationship will be weaker under a strong climate for psychological safety than under a weak climate for psychological safety.

H14b: Climate for psychological safety (t2) will moderate the relationship between leader narcissism (leader rated; t2) and team burnout (t3) via team CSE (t2), such that the negative relationship will be weaker under a strong climate for psychological safety than under a weak climate for psychological safety.

H14c: Climate for psychological safety (t2) will moderate the relationship between leader narcissism (follower rated; t2) and teamwork engagement (t3) via team CSE (t2), such that the negative relationship will be weaker under a strong climate for psychological safety than under a weak climate for psychological safety.

H14d: Climate for psychological safety (t2) will moderate the relationship between leader narcissism (leader rated; t2) and teamwork engagement (t3) via team CSE (t2), such that the negative relationship will be weaker under a strong climate for psychological safety than under a weak climate for psychological safety.

## 3.5 Conclusion

This chapter provided an overview of the theories that underpin the hypothesised research model including identity theory, role congruity theory and social identity threat theory. I applied the theories to make arguments on the various relationships in this research and develop the hypotheses accordingly, at the individual level, cross-level, and team level. Figure 1 displays the hypothesised research model. I hypothesised that leader narcissism (follower rated and leader rated) is positively related to individual CSE. I also hypothesised that individual CSE is positively related to burnout and negatively related to work engagement at the individual level. I considered individual characterised including follower narcissism and follower gender in the relationship between leader narcissism (follower rated and leader rated) and individual CSE. I argued that follower narcissism will interact with leader narcissism to buffer the negative effects of leader narcissism on followers’ sense of self-worth, more for followers who are high on trait narcissism as compared to those who are low on trait narcissism. Similarly, drawing on gender role socialisation theory (Whitley, 1983) and research on the relational-interdependent self-construal (Cross *et al.,* 2000), I argued that follower gender plays a moderating role in the leader narcissism-individual CSE link in such a way that the relationship between leader narcissism and individual CSE will be stronger for female followers as compared to male followers because women are more responsive to relational cues and they often respond more than men when the source of their affirmation (e.g., leader) become toxic. In considering leader characteristics that can amplify or buffer the effects of leader narcissism on follower cognitions, I developed arguments from role congruity theory (Eagly & Karau, 2002) and research evidence on the moderating role of leader gender in the leader narcissism-team CSE, that leader gender will moderate the relationship between leader narcissism (follower rated) and CSE at the individual/cross and team levels, such that the relationship will be more negative when the leader is female as compared to male because narcissistic behaviour is incongruent with the female gender role but congruent with the masculine leader role. At the team level, I hypothesised that leader narcissism (follower rated and leader rated) is positively related to team CSE. Also, team CSE is positively related to burnout and negatively to teamwork engagement. Similarly, I predicted that team CSE will mediate the relationship between leader narcissism and burnout on one hand and work engagement on the other hand. The team states of team cohesiveness, team resilience and climate for psychological safety were predicted to moderate the relationship between leader narcissism (follower rated and leader rated) and team CSE more for highly cohesive, resilient, and strong psychological safe teams. Lastly, I developed various moderated mediated hypotheses including follower narcissism, follower gender at the individual level/cross-level, and the team characteristics of cohesiveness, resilience, and climate for psychological safety at the team level. The next chapter will present the methodology used in this research.

# CHAPTER 4- METHODOLOGY

# 4.1 Introduction

In this chapter, I present my overall philosophical position, research strategy, methods, and research design. Specifically, the proposed relationships in this research programme are explored through a longitudinal survey. The data collection procedures, recruitment of participants, financial reimbursement, ethical consideration, and rating sources are discussed in detail. Lastly, this chapter provides a discussion of the sample, study setting, measures, and data analysis.

# 4.2 Research philosophy and strategy

Philosophy of science helps a researcher to understand how knowledge is generated and to theorise about the nature of reality (Bell *et al.,* 2018). Several philosophical approaches exist in the quest for knowledge and undertaking research. However, the choice of methodology should be based on the philosophical position that a researcher adopts and the nature of the investigation (Holden & Lynch, 2004). Philosophy of science involves assumptions about ontology, epistemology, axiology, and methodology (Ponterotto, 2005). Two main philosophical paradigms within the philosophy of science are positivism and interpretivism. However, other approaches have developed from positivism and interpretivism, including post-positivism, post-modernism, relativism, pragmatism, and critical realism (Saunders *et al.,* 2017).

## 4.2.1 Ontology

This is the assumption of what constitutes reality, which is the theorising about what it means for something to exist (Bell *et al.,* 2018). Ontology is the branch of philosophy concerned with what is or what exists. It queries whether the phenomena we investigate can and should be understood from an objective standpoint, that is, without human interpretation (objective ontology) or whether they are influenced by external observers, that is, the meanings which human beings give to the phenomena (subjective ontology). The ontological positions a researcher takes determines how they go about researching reality (Bell *et al.,* 2018) and the lens through which one views the nature of knowledge (Burrell & Morgan, 1979).

## 4.2.2 Epistemology

This is the branch of philosophy that is concerned with knowledge and how we come to know things (Danermark *et al.,* 2005). It originated from the Greek words ‘episteme' and ‘logos' which means ‘knowledge' and ‘theory' respectively and follows from ontology (what reality is) to how we come to gain knowledge about this reality (epistemology). For example, if a researcher adopts an objective ontological position, the ideal way to gain knowledge of the phenomena under study will be by measurement of the reality while someone with a constructionist ontological position will seek to gain knowledge by means such as observation and interviewing people who take part in the event or know about the phenomena (Bell *et al.,* 2018; Goldman, 2004).

Positivism assumes an epistemological position concerned with identifying causes and their outcomes, following the same procedure as natural science (deductive method) that involves building on theory, developing hypotheses, collecting data, rejecting the (null) hypotheses and making conclusions about reality, which yields a basis for prediction and generalisation (Bell *et al.,* 2018; Creswell, 2009). Post-positivism, as an offshoot of positivism shares similar ontological and epistemological tenants (investigating phenomena without human interpretations and the measurement of reality; Scotland, 2012). However, while positivism believes in “theory verification”, post-positivism stresses “theory falsification” (Lincoln & Guba, 2000, p. 107), explained by this illustration: “Whereas a million white swans can never establish, with complete confidence, the proposition that all swans are white, one black swan can completely falsify it” (Lincoln & Guba, 2000, p. 107). In post-positivism, researchers agree that it is not possible to be fully detached from the inquiry process, but their perceptions, opinions, and biases are acknowledged as part of the human inquiry (Clark, 1998). It also seeks to establish causal relationships between variables, controlling of variables and prediction of outcomes and generalisation of findings. In addition, experimentation is used in post-positivist philosophy to minimise human interaction, and data is often generated quantitatively using standardised items, closed-ended questionnaires, random sampling, control variables, and control groups (Cohen *et al.,* 2007; Creswell & Creswell, 2017).

## 4.2.3 Methodology

This refers to the systematic way of discovering knowledge, driven by a researcher’s ontological and epistemological position (Killam, 2013). That is, the ontological, epistemological, and methodological choices of a researcher should be connected and answer the research question(s) (Guba & Lincoln, 1994). For example, positivist researchers believe that reality is measurable; hence, they are more likely to use quantitative methodology, to facilitate verification, generalisation, and replication of findings (Saunders *et al.,* 2019).

## 4.3.4 My research philosophy and strategy

In this thesis and consistent with most researchers in the leadership field (Alvesson & Einola, 2019), I adopt a post-positivist perspective, that there is a single reality and I make my observation of reality from an objective point of view (ontology). That is, I assume that human beings cannot fully be detached from the single reality in the process of interpreting data (Guba & Lincoln, 1994). Also, leadership is a collective phenomenon and people who participate together in a leadership process will have a shared experience of it (shared mental model), thus justifying multilevel research (Dionne *et al.,* 2010). My research philosophy gives me the framework to draw on theory to develop hypothetical relationships between variables and test the hypotheses, which can be generalised and replicated in further studies (Creswell & Creswell, 2017). For example, due to my post-positivist perspective, I assessed and tested the relationship between constructs of leader narcissism, CSE and well-being of individuals and teams in a representative manner through operationalized and validated scaled items (epistemology).

In line with my philosophical position, this study adopts the quantitative research methodology, reflected in the formulation of the research hypotheses and drawing on the deductive method to find answers to my research questions (Lee & Lings, 2008). The quantitative research methodology is best suited for this study because the constructs in the study are reliably measurable and well established in the literature (Edmondson & McManus, 2007). Also, the quantitative methodology is appropriate to answer the research questions given the state of the research field, that is, the field of narcissism and leadership is matured, with well-validated constructs (Brunzel, 2021). Consequently, standardised scale items are adopted to test the constructs in the study to falsify my proposed hypotheses with statistical methods and provide empirical support relating to my research questions. This approach is consistent with the hypothetico-deductive method of testing scientific theories (Coolican, 2017).

In the next section, I describe my study in detail, which is a three-wave multi-source survey involving individual, cross, and team-levels, that is, individuals nested in teams under a common leader, to test my hypothesised relationships.

# 4.3 Three-wave multi-source survey

The research design for this study is a multi-source longitudinal study. This approach enables a researcher to test causality between constructs as proposed in my model (Nielsen *et al.,* 2008; Taris & Kompier, 2014). Tarris (2000; pp.1-2) specified that longitudinal “data are collected from the same set of research units (which might differ from the sampling units/respondents) for (but not necessary at) two or more occasions, in principle allowing for intra-individual comparison across time”. Other scholars emphasise the use of three measures or observation of the same participants for a study to qualify as longitudinal (Lance & Vandenberg, 2014; Ployhart & Vandenberg, 2010). Previous studies suggested that leadership research should include large teams and data from multiple sources (e.g., Lin, & Peng, 2010; Pearce *et al.,* 2004), which are appropriate for testing multilevel leadership models (Klein & Kozlowski, 2000). This study involves data from three-time points, that is, data was collected at three different times with a six-week interval between each wave. The study captured data from individuals nested in teams, that is, data was collected from individuals and aggregated to the team level to test certain relationships. Also, data was collected from team leaders and matched with the team members, to enable the testing of team level and cross-level effects.

The data collected and included in the analysis of the thesis from team members at all three-time points are demographic information, grandiose narcissism of themselves and their leader, CSE, burnout, work engagement, team cohesiveness, team resilience, climate for psychological safety, and social desirability. For leaders, the data collected at all three-time points and used in this thesis are demographic information and grandiose narcissism for self. However, for the purpose of this thesis and based on my research model, some of the data are not analysed and discussed. This thesis is part of a larger research project on leadership, narcissism, and well-being. The other data collected and not analysed in this thesis will be explored for future publications. The data for team members are vulnerable narcissism for self, generalised self-efficacy, self-esteem, counterproductive work behaviour, psychological withdrawal, teamwork engagement, positive and negative affect, and stress. For leaders, the data are vulnerable narcissism for self, burnout, work engagement, positive and negative affect, and stress.

## 4.3.1 Data collection procedure

The data collection procedure involved pre-covid-19 strategy and covid-19 strategy. Before the outbreak of covid-19 and the resultant lockdown, I planned a paper and pencil data collection procedure, involving a face-to-face collection of data from participants. Prior to the outbreak of covid-19, I spent approximately six months designing the data collection process of this research. The complex data structure required repeated participation of many work teams along with their line managers. I expended several months of effort towards negotiating organisational access with several companies in my native Nigeria, establishing and nurturing relationships and communicating my research. Several companies and professionals were interested in participating in my research and I scheduled my travel to Lagos, Nigeria for my data collection in April 2020. This was cancelled because of the outbreak of covid-19 and resultant national lockdown.

After it slowly transpired that physical data collection using a paper-and-pencil survey was not feasible anymore because the lockdown lingered for several months, I had to make significant adaptations to my research design and data collection method. I spent approximately three months re-designing my study for online survey administration using Qualtrics, completing the ethics application amendment process, and expanding the pool of participants to make sure participants were willing and able to take part in the research. Some companies that previously agreed to take part in the research withdrew from the process due to the disruptions caused by the covid-19 outbreak to their organisations. I also spent time re-thinking how to match surveys from leaders and team members from various organisations since paper and pencil surveys and physical collection of data and the planned use of envelopes for different teams and organisations was not feasible anymore. This led me to assign team codes and ask participants to generate a personal identification number (PIN) which aided the sorting of data according to teams and the matching of team members' data across the three waves. I also spent time rethinking and organising participants' reimbursement (vouchers) since I couldn’t collect data in person anymore.

This additional work caused significant delays and compromises to my data collection in terms of sample size and data quality. For example, I relied on many team leaders and influential team members to speak with other colleagues in their team or organisation, who would be interested in participating in the research. With their consent, the email addresses of the teams were supplied to me, to send the participants' information sheet, consent form, and surveys directly to all participants. The new method used (online) for data collection was significantly slower than the face-to-face original plan. It was also labour intensive because I was not able to meet with groups of people and provide the structure and interpersonal interactions required to motivate and support their participation. I could only engage all my participants through email and some of them via WhatsApp. As a result, my data collection that was scheduled to be between April and September 2020 was carried out between August 2020 and February 2021 (seven months). However, the online method gave me the advantage of drawing from a wider pool of participants that I would not have met physically if I used paper and pencil surveys. In other words, some participants were referred to me by my initial contacts, to participate in the research and a small number of participants who were in other states of Nigeria outside Lagos were able to participate in the research because it was an online process as opposed to paper-and-pencil surveys.

## 4.3.2 Recruitment of participants

Participants were recruited in two ways. First, the researcher directly contacted personal and professional contacts in Nigeria by email and WhatsApp exchanges, to introduce the research and seek the participation of their organisations, using convenience and snowball sampling techniques (e.g., Landers & Behrend, 2015; Hale Öner, 2012). The study was introduced as leadership and teamworking in organisations, seeking for individuals nested in teams including the team leader to participate in the research by completing a set of three surveys over six months with a six-week interval between each data collection point. The justification for the time lags between waves in personality and psychological research are based on the premise that the outcomes can still be attributed to the predictor variable and no major changes in working conditions should occur, for example, change of work structure (see Taris & Kompier, 2014). Since the data was collected during the covid-19 pandemic, it was, therefore, necessary to apply a six-week interval between waves because of disruptions in the workplace (Kniffin *et al.,* 2021), for example, some of the participants lost their jobs or were transferred to a new job location/team during the data collection period. Second, the study was advertised on social media (LinkedIn and Facebook) using a flier (see appendix 1), to attract more participants for the research. The flier showed the research topic as “leadership and teamwork in organisations”, and other information, for example, that being a member or leader of a team is the eligibility to participate in the research. The flier also displayed information that individuals in various organisations in all sectors and levels of organisational hierarchy are invited to participate in the research. Both recruitment methods emphasised that participation was voluntary. The post was liked and shared by my social media friends and professional colleagues. I built new relationships and further developed existing professional contacts that led to more participation in the research. In both recruitment methods, participants engaged with me and communicated my research to other team members or leaders and those who were happy to be part of the research consented that their email addresses be sent to me. The survey links and allocated team codes were sent to them directly.

## 4.3.3 Pilot study

A pilot study is a small-scale preliminary study conducted to evaluate the feasibility of a study before rolling out the large-scale project (In, 2017). It is the pre-testing of the research instrument and an important element of a good research design that has the potential to improve the quality and likelihood of success of the main project (Van Teijlingen & Hundley, 2010). For this research, I conducted a pilot study that involved seven researchers of Nigerian origin who are part of my scholarly network and are studying for their doctoral degrees in various countries including the United Kingdom, Italy, and Nigeria. The choice of participants for the pilot study is based on the premise that they understood the context and any potential cultural interpretation of the question items. The link to the survey was sent to them, to complete the survey for both leaders and followers. They provided feedback on the clarity of the questions, and how long it took them to complete the surveys. I made some corrections to the survey based on their feedback before administering the survey to the study participants.

## 4.3.4 Main study

The questionnaire was sent to each participant through emails. I kept a record of team leaders and members from various organisations. The links to the questionnaires were sent to the participants via their emails without recourse to the leader or team members who initially contacted them about being included in the research. Two sets of questionnaires were used in the study, one for leaders and another one for team members. Participants were informed about the purpose of the study via the participant information sheet and a consent form was completed before the participants could proceed with completing the questionnaire. I provided a team code to all teams (leader and team members) to match the data. From my record book which had the names and email addresses of individuals representing different teams, I allocated team codes to various teams, for example, AA01 for team 1, AA02 for team 2, AA03 for team 3, etc. The team codes were sent to each participant via email along with the survey. The participants were asked to generate a unique coding number (the initials of their mother’s name and the second, fourth and sixth digits of their phone numbers) to help with matching the responses from the same individual at the different time points. The participants were informed that it takes approximately 20 minutes to complete each questionnaire and that they are free to withdraw from the survey if they no longer felt comfortable participating in the research. The responses to the questionnaire were automatically stored in the Qualtrics online system. I kept a record of all data received from the Qualtrics system. In my record, I wrote the team codes, PIN, demographic information, and email addresses of each participant that completed the survey. With this record, I counted and developed a frequency table of teams that had complete submissions, that is, at least the leader and two team members. At the end of the time 1 survey and the interval period, I sent the survey for time 2 to only the teams that had complete submissions based on my records. This process was repeated at the end of time 2 and for time 3 surveys. The participants’ information sheet for times 2 and 3 was reduced to capture the important information of the purpose of the study. A consent form was not provided for times 2 and 3 because the consent form for time 1 asked for permission to be sent the survey at three-time points. At the end of the data collection, the participants were debriefed and thanked for participating in the research, including those who did not complete the 2nd and 3rd waves of the data collection.

## 4.3.5 Financial reimbursement

Respondents were financially reimbursed for participating in the research. A cash gift of NGR 1,300 (the equivalent of £2.50) was offered to participants to pay for the cost of pay-as-you-go internet data. The participants were asked to send their bank account details for the cash gift to be transferred to their accounts. This procedure was approved by the University of Sheffield Finance Department since it was not possible to use pay-pal to transfer cash to individuals in Nigeria. All receipts of cash transfers were documented and verified by the Finance Department. The participants' information sheet did not contain any information about financial reimbursement. The delays in re-designing my study for online administration, seeking approval from the Finance Department of Sheffield University Management School, meant I couldn’t commit to reimbursing all participants from the beginning of the data collection. I got approval for funds disbursement from my Research Training Support Grant (RSTG) when time 2 of the data collection was ongoing. Consequently, I offered participants a cash token at time 3 of the data collection since they were already participating in the surveys without any promise of reimbursement. Regarding cultural norms, people in Nigeria are inclined to support someone who is engaging in a noble course (e.g., academic research) due to their collectivist culture (Gire & Carment, 1993). To demonstrate this, only 90 participants accepted the cash gifts.

## 4.3.6 Ethical considerations

Several ethical issues are of concern in this study regarding trust, informed consent, confidentiality, and anonymity. I was mindful of these ethical concerns associated with eliciting data in business research (Wallace & Sheldon, 2015). Participants were required to sign a consent form before participating in the study. The consent form covered ethical concerns such as anonymity, the privacy of information, confidentiality, and clarity of purpose, which increased the confidence of respondents during the data collection (Bell *et al.,* 2018). The participant information sheet contained details of ethical concerns, for example, the participants were asked to contact the researcher in the first instance if anything goes wrong, and if they feel that their complaints have not been handled, they should contact his supervisors through their email addresses. They were also assured about the confidentiality of the information about them, for example, the data collected via the survey would be stored online on a secured server and protected by passwords. Due diligence was followed in compliance with the ethical standards of the University of Sheffield in the conduct of this research. Specifically, I applied the principles of ethics of the British Psychological Society (BPS) and Economic, and Social Research Council (ESRC) such as minimising risk and harm, respect for the rights and dignity of participants, seeking valid consent, giving advice, confidentiality, avoiding deception and debriefing participants. I applied for and received ethical approval from The University of Sheffield for this research, with the reference number 032602. I followed all the ethics grounds upon which this project was approved including recruiting participants, seeking informed consent, and informing participants of their right to withdraw from the survey if they feel uncomfortable with any aspect of the process. Lastly, I complied with requirements of the Data Protection Act (DPA) 1998, including the additional regulations of General Data Protection Regulation (GDPR) 2016. In practice, I will act as the custodian of the data and no personal information of the respondents will be published.

## 4.3.7 Rating source and time frame

The measures for the three-wave multi-source survey were administered to the study participants. Specifically, leaders rated their narcissism while team members rated their leaders’ narcissism, their narcissism, CSE, team characteristics (cohesiveness, resilience, and climate for psychological safety), burnout, and work engagement. Followers’ rating of leader narcissism is consistent with previous studies on leaders’ personality traits, for example, leader narcissism (e.g., Bernerth, 2020; Brunell *et al.,* 2008; Martin *et al.,* 2016). The measures including demographic information were collected on all occasions, that is, three times. The table below shows the overview of study variables and their rating sources at the various time points of data collection.

Table 4.1: Overview of variables and rating source for the study

|  |  |  |
| --- | --- | --- |
| Timepoints | Variable | Rating sources |
| 1 | Demographic characteristics\* | Leader and team members |
| Leader narcissism\* | Leader (self-rating) |
| Leader narcissism\* | Team members (other ratings) |
| Follower narcissism | Team members |
| CSE\* | Team members |
| Team cohesiveness | Team members |
| Team resilience | Team member |
| Climate for psychological safety | Team members |
| Burnout\* | Team members |
| Work engagement\* | Team members |
| 2 | Demographic characteristics\* | Leader and team members |
| Leader narcissism\* | Leader (self-rating) |
| Leader narcissism\* | Team members (other ratings) |
| Follower narcissism\* | Team members |
| CSE\* | Team members |
| Team cohesiveness\* | Team members |
| Team resilience\* | Team members |
| Climate for psychological safety\* | Team members |
| Burnout\* | Team members |
| Work engagement\* | Team members |
| 3 | Demographic characteristics | Leader and team members |
| Leader narcissism | Leader (self-rating) |
| Leader narcissism | Team members (other ratings) |
| Follower narcissism | Team members |
| CSE | Team members |
| Team cohesiveness | Team members |
| Team resilience | Team members |
| Climate for psychological safety | Team members |
| Burnout\* | Team members |
| Work engagement\* | Team members |

\*includes data and time points that were used in the analysis.

# 4.4 Sample

The sample was drawn from multiple organisations (e.g., telecommunications, oil and gas, banking, insurance, energy, hospitality, fast-moving consumer goods, manufacturing, education, information technology, properties, and consulting). An online questionnaire (Qualtrics) was sent to the participants, who were required to complete the survey, measuring the same variables at the three-time points. The sample consisted of leaders who head a team at any level of their organisational hierarchy, as well as individuals who work in the same team and report to the leader. The targeted sample for this study consisted of 1,200 participants representing 240 teams (leaders and team members), from multiple organisations in Nigeria, who agreed in principle to participate in the research. The sample size, response rates, and matched surveys for the three waves are presented in the table below.

Table 4.2: Sample size and response

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Timepoints | Teams | Sent surveys | Returned teammates | Returned leaders | Matched leaders and members\* | Percentage matched |
| 1 | 240 | 1,200 | 463 | 162 | 127 (439) | 78.4% |
| 2 | 141 | 625 | 361 | 111 | 101 (348) | 91% |
| 3 | 105 | 472 | 313 | 101 | 96 (293) | 95% |

\*includes only teams with a leader and two or more matched members, member number provided in parentheses.

Table 4.2 above shows the detailed overview of the sample size, response rate and matched surveys for this research. 1,200 online surveys were sent to leaders and their team members. At time 1, 625 surveys (162 leaders and 463 team members) were completed and returned, while 127 teams were successfully matched to their leaders, representing 78.4 percent of the leaders’ returned surveys. At time 2, 625 surveys were sent to only the leaders and team members that completed the surveys at time 1, with a return of 472 surveys (111 leaders and 361 team members), and 101 teams successfully matched to the team leaders, representing 91 percent of the leaders’ returned surveys. At time 3, 472 questionnaires were sent to the participants who completed the surveys at time 2, with a return of 415 questionnaires (101 leader and 313 team members), and 96 successfully matched to their team leaders, representing 95 percent of the leaders’ returned surveys.

The matching process involved three steps. First, team numbers were allocated to all teams based on their team codes, for example, the team with team code of AA01 was assigned team 1, the team with team code AA02 was assigned as team 2, etc. This aided the sorting of data according to teams. Second, I manually crossed checked that the PIN of all participants was the same for all time points in the three separate SPSS datasets based on my records. This process was repeated for the leader’s data, that is, I assigned a team number to each leader, to match the team number of their team members. In other words, a team leader with team code AA01 was assigned team 1, which aligned with team 1 for team members with the code AA01. Third, the three separate datasets for the three waves 1-3 were merged to one dataset for team members using the add cases data function >> merge files >> add cases steps in SPSS. With these steps, a window was opened which allowed an active dataset to be added and combined as additional rows to the existing data file. This process was repeated for the leader’s dataset for waves 1 to 3. Finally, the merged team members dataset and the merged leader’s dataset were matched into one big dataset using the same merging of file function in SPSS.

During the screening process of data, leaders' and team members' data that had inconsistent PIN were deleted. In this process, 8 team members’ responses (time 1), 3 responses (time 2), and 4 responses (time 3) were deleted to arrive at team members; sample of 455 (time 1), 358 (time 2), and 309 (time 3) and an average team size of 4.3, with a median of 4, a minimum value of 1.0 and maximum value of 5.0 (time 1). The average team size was 4.4, with a median of 4, a minimum value of 1.0 and a maximum value of 5.0 (time 2), and an average team size of 4.3, with a median of 4, a minimum value of 1.0, and maximum value of 5.0 (time 3). Data from teams with 1 team member were removed, consistent with the definition of work teams as comprising of two or more individuals who work together to achieve a common goal with a high degree of interdependence and the team members knowing their interdependence (e.g., Fisher & Hunter, 1997; Stott & Walker, 1995), and previous team research (e.g., Braun & Nieberle, 2017; Wirtz & Rigotti, 2020). Therefore, a further 16 team members (time 1), 10 (time 2) and 16 (time 3) were removed from the dataset. Also, leaders whose team members did not complete the questionnaires were deleted, as data from both leaders and team members were sought. In this process, 35 leaders (time 1), 10 leaders (time 2) and 5 leaders (time 3) responses were removed from the dataset. After the data screening, matching of data and removing of incomplete teams (teams with only one member), the final sample was 127 leaders and 439 team members (time 1), 101 leaders and 348 team members (time 2) and 96 leaders and 293 team members (time 3). At time 1, the average team size comprised 3.5, with a median of 4. At time 2, the average team was 3.6, with a median of 4, while at time 3 the average team size was 3.4, with a median of 4.

Of the 439 team members that formed the team sample at time 1, 54.8% were male, 44.4% were female while 1.8% preferred not to say. Of the 348 team members at time 2, 56.3% were male, 41.4% were female while 2.3% preferred not to say. Of the 193 team members at time 3, 56.3% were male, 43% were female while .7% preferred not to say. Of the 127 leaders at time 1, 72.4% were male, 26.8% were female while 0.8% preferred not to say. Of the 101 leaders at time 2, 67.3% were male, 29.7% were female while 3% preferred not to say. Of the 96 leaders at time 3, 68.8% were male, 30.2% were female while 1% preferred not to say. The age of the team members at time 1 was between 17 and 66 years (M = 30.3 years, SD = 17.1), at time 2 was between 17 and 53 years (M = 30.3 years, SD = 9.8), and at time 3 was between 17 and 53 years (M = 29.7 years, SD = 10.2). The age of leaders at time 1 was between 20 and 60 years (M = 34.7 years, SD = 10.2), at time 2 was between 21 and 60 years (M = 34.7 years, SD = 10.1) and at time 3 was between 21 and 60 years (M = 34.5 years, SD = 9.7). The average age of the team members and leaders was therefore fairly consistent across the three waves with leaders' ages higher than that of their team members.

## 4.4.1 Study setting

The present study was conducted with participants mostly from Lagos, Nigeria, the most populous country in Africa, and the biggest oil producer in Africa (10th in the world)[[1]](#footnote-1), with an estimated population of 211 million people[[2]](#footnote-2). Nigeria has six geopolitical zones (south-east, south-south, south-west, north-east, north-west, and north-central)[[3]](#footnote-3). Lagos is the economic hub of Nigeria and the centre of the country’s manufacturing and financial activities, as well as a thriving entertainment industry, and a population of 21.3 million people (the largest city in Nigeria and the second-largest city in Africa)[[4]](#footnote-4).

Nigeria gained her independence on October 1, 1960, from Britain and became a republic in 1963. Nigeria experienced military rule in political leadership between 1966 to 1978, and between 1982 and 1999. Nigeria returned to democratic rule in 1999 and has been under a democratic rule to date[[5]](#footnote-5). Nigeria is classified as a developing country (emerging market), with a mixed market system, characterised by low Gross Domestic Product (GDP), political instability, lower-income, weak institutions, an underdeveloped industrial base, lower standard of living, and human development index[[6]](#footnote-6).

Nigeria has a high-power distance and collectivist culture that thrives on high interactions both in formal and informal relationships (Gire & Carment, 1993; Hofstede, 1993). In other words, Nigerians largely engage in social interactions with other people. The prevalence of the patriarchy system (male-dominated leadership, power, social status, respect, and promotion by seniority) is enshrined in Nigerian institutions (see Dogo, 2014). Culture, defined as the way of life of people and the body of values that guides people’s behaviour in society (Mintz & Price, 2013) plays an active role in the daily interactions and behaviour of employees in Nigerian organisations, including their affinity for power, dominance, social class, and lifestyle show-off, for example, the celebration of weddings, holding extravagant parties, acquisition of assets, and celebrating achievements. How people behave, in terms of their infinity for self-enhancement, power, control, and preoccupation of themselves over others (Barry *et al.,* 2007) is largely influenced by their cultural orientations (Westen, 1985). For example, individuals in collectivist cultures largely thrive on competition rather than cooperation, hierarchical leadership structure (subordination of employees to their leaders), centralised decision making, strong leaders, a low delegation of authority, and status symbols (Pasa, 2000). Also, individuals in collectivist cultures emphasise obedience, conformity to social norms, paying attention to internal processes than external processes in shaping social behaviour, and are likely to define themselves as part of a group and be self-effacing (Triandis, 2001). Consistent with the description of individuals from collectivist cultures, Nigerians are generally perceived as hardworking, enterprising (with a winning mentality and lofty expectations). They are mostly committed to pursuing success as a trophy for their family and tribes. They place a great premium on being respected and see success, power, and connections as essentials for thriving in life; they are tenacious, optimistic and strive to be educationally and professionally successful[[7]](#footnote-7).

The present study was conducted with participants who are organisational leaders and team members in various sectors of the Nigerian economy. The team members are aware of their membership in the team and report to a leader in their various organisations. The leaders on their part have interactions with the team members and supervise their teams at various organisational levels.

## 4.4.2 Measures

A section of the questionnaire covered the demographic information of participants. For the leader version of the questionnaire, this information included gender, age, managerial experience, working experience, length of service in their current organisations, frequency of interactions with team members per week, team size, and the number of team members under their supervision. For the team members’ version of the questionnaire, the demographic information included gender, age, current experience, total experience, number of people in their team, how long they have been supervised by their leader, and frequency of interactions or contact with their leader. The table below shows a summary of the scales administered to the leaders and team members. See appendix 2 for the full leader and team members surveys.

Table 4.3: Summary of scales- leader and team members

Leader

|  |  |  |
| --- | --- | --- |
| **Time 1** | **Time 2** | **Time 3** |
|  |  |  |
|  |  |  |
|  |  |  |
| Grandiose narcissism (self-rating) \* | Grandiose narcissism (self-rating) \* | Grandiose narcissism (self-rating) |
| Vulnerable narcissism (self-rating) | Vulnerable narcissism (self-rating) | Vulnerable narcissism (self-rating) |
| Demographic information\* | Demographic information\* | Demographic information |
| Positive and negative affect | Positive and negative affect | Positive and negative affect |
| Stress | Stress | Stress |
| Burnout | Burnout | Burnout |
| Work engagement | Work engagement | Work engagement |

\*includes data and time points that were used in the analysis.

Team members

|  |  |  |
| --- | --- | --- |
| **Time 1** | **Time 2** | **Time 3** |
| Team cohesiveness | Team cohesiveness\* | Team cohesiveness |
| Team resilience | Team resilience\* | Team resilience |
| Climate for psychological safety | Climate for psychological safety\* | Climate for psychological safety |
| Core self-evaluations\* | Core self-evaluations\* | Core self-evaluations |
| Self-esteem | Self-esteem | Self-esteem |
| General self-efficacy | General self-efficacy | General self-efficacy |
| Work engagement\* | Work engagement\* | Work engagement\* |
| Teamwork engagement | Teamwork engagement | Teamwork engagement |
| Burnout\* | Burnout\* | Burnout\* |
| Positive and negative affect | Positive and negative affect | Positive and negative affect |
| Stress | Stress | Stress |
| Psychological withdrawal | Psychological withdrawal | Psychological withdrawal |
| Counterproductive work behaviour | Counterproductive work behaviour | Counterproductive work behaviour |
| Grandiose narcissism (self-rating) \* | Grandiose narcissism (self-rating) \* | Grandiose narcissism (self-rating) |
| Grandiose narcissism (other rating) \* | Grandiose narcissism (other rating) \* | Grandiose narcissism (other rating) |
| Vulnerable narcissism (self-rating) | Vulnerable narcissism (self-rating) | Vulnerable narcissism (self-rating) |
| Demographic information\* | Demographic information\* | Demographic information |

\*includes data and time points that were used in the analysis.

Table 4.3 above shows the detailed summary of scales administered to the leaders and team members over the three-time points of data collection. For this thesis, the measures described below are for only the variables used in the final analysis. That is, the measured describes are informed by the research model. As previously mentioned, this thesis is part of a larger research project on leadership, narcissism, and well-being. The other data (e.g., the ones not asterisked) are not analysed in this thesis because they are outside the scope of this thesis. They will be explored for future publications.

The scales described below are follower-rated. All measures except the narcissism scale have a five-point Likert response scale ranging from strongly agree to strongly disagree measuring the study constructs.

*Narcissism* was measured using the 16-item short version of the Narcissistic Personality Inventory (NPI; Ames *et al.,* 2006) scale, which is a widely used and validated scale (e.g., Miller *et al.,* 2014; Twenge *et al.,* 2008) for measuring trait narcissism in a diverse population (e.g., Jakobwitz & Egan, 2006; Miller & Campbell, 2008). A seven-point Likert scale was used as it has been discussed to increase reliability (Schmid *et al.,* 2021). Some of the items in the scale are “people always seem to recognise my authority”, “I know I am good because everybody keeps telling me so”, and “I am apt to show-off if I get the chance”. The reliability scores for leaders as rated by their team members are time 1 (α = .86), time 2 (α = .91), time 3 (α = .92). Team members self-rating reliability scores are for time 1 (α = .86), time 2 (α = .90), and time 3 (α = .90). Higher scores represent higher levels of grandiose narcissism. At all three time points, leader narcissism as rated by the team members was higher than team members' self-rated narcissism. Examples of follower rated leader narcissism are “people seem to recognise my leader’s authority” and “my leader is apt to show-off if he/she gets the chance”. The means and standard deviations for leader narcissism as rated by their team members are for time 1 *(M = 4.79, SD = 0.96)*, time 2 *(M = 5.24, SD = 1.07)*, time 3 *(M = 5.47, SD = 1.05)*. The means and standard deviations for leader self-rated narcissism are for time 1 *(M = 4.65, SD = 0.99)*, time 2 *(M = 4.83, SD = 0.95)*, time 3 *(M = 5.14, SD = 0.99)*. Team members self-rating means, and standard deviations are for time 1 *(M = 4.51, SD = 0.91)*, time 2 *(M = 4.88, SD = 1.04)*, time 3 *(M = 5.12, SD = 1.01)*.

*CSE* was measured using Judge *et al.*’s (2003) 12-item scale. The scale has four dimensions are self-esteem, generalised self-efficacy, locus of control and neuroticism containing statements like “I am confident I get the success I deserve in life”, “I am filled with doubts about my competence” (r), “I determine what will happen in my life” and “there are times when things look so bleak and hopeless to me (r)”, respectively. The reliability scores for individual team members are time 1 (α = .74), time 2 (α = .77), time 3 (α = .77). The means and standard deviations are for time 1 *(M = 3.74, SD = 0.49)*, time *2 (M = 3.67, SD = 0.61)*, time 3 *(M = 3.88, SD = 0.57).*

*Burnout* was measured using the 14-item Oldenburg Burnout Inventory (OLBI; Demerouti, 1999) which measures both pleasant and unpleasant states (Demerouti *et al.,* 2010). The scale has two dimensions which are exhaustion and disengagement. Examples of statements in the scale are “I always find new and interesting aspects of my work”, and “It happens more and more often that I talk about my work in a negative way” (r) for exhaustion. “I can tolerate the pressure of work very well” and “sometimes, I feel weakened by my work task” for disengagement. The reliability scores for individual burnout are time 1 (α = .77), time 2 (α = .72), and time 3 (α = .73). The reliability scores for individual team members are time 1 (α = .74), time 2 (α = .77), time 3 (α = .77). The means and standard deviations are for time 1 *(M = 3.98, SD = 0.46)*, time 2 *(M = 3.87, SD = 0.49)*, time 3 *(M = 3.89, SD = 0.46)*.

*Work engagement* was measured using Utrecht 9-item work engagement scale by Schaufeli and Bakker (2006). The scale has three dimensions, which are vigour, dedication, and absorption. Examples of statements in the scale are “at my work, I feel bursting with energy”, “when I get up in the morning, I feel like going to work”, and “I get carried away when I am working”, respectively. The reliability scores for individual work engagement are time 1 (α = .86), time 2 (α = .88), and time 3 (α = .84). The means and standard deviations are for time 1 *(M = 3.82, SD = 0.76)*, time 2 *(M = 3.96, SD = 0.76)*, time 3 *(M = 4.07, SD = 0.62)*.

*Team cohesiveness* was measured using Dion’s (2000) 9-item scale comprising statements like “people in my work group trust each other”, “people treat each other with respect” and “people cooperate with each other”. The reliability scores for team cohesiveness are time 1 (α = .89), time 2 (α = .89), and time 3 (α = .91). The means and standard deviations are for time 1 *(M = 4.23, SD = 0.69)*, time 2 *(M = 4.20, SD = 0.66)*, time *3 (M = 4.17, SD = 0.69)*.

*Team resilience* was measured using Stephens *et al.*’s (2013) 3-item team resilience scale. Examples of items of the scale include “this team knows how to cope with challenges” and “we know who to handle difficult situations when we face them”. The reliability scores for team resilience are time 1 (α = .83), time 2 (α = .74), and time 3 (α = .74). The means and standard deviations are for time 1 *(M = 4.30, SD = 0.75)*, time 2 *(M = 4.25, SD = 0.68)*, time *3 (M = 4.12, SD = 0.76)*.

*Climate for psychological safety* was measured using Edmondson’s (1999) 7-item scale to capture the environment of psychological support that team members have for each other. Examples of statements in the scale are “if you make a mistake in this team, it is often held against you” (r), “members of this team are able to bring up problems and tough issues” and “no one on this team would deliberately act in a way to undermine my efforts”. The reliability scores for climate for psychological safety are time 1 (α = .61), time 2 (α = .61), and time 3 (α = .62). The means and standard deviations are for time 1 *(M = 4.25, SD = 0.53)*, time 2 *(M = 3.63, SD = 0.72)*, time 3 *(M = 3.95, SD = 0.61)*.

*Control variables* used in this research included leader gender (male =1, female =2, other = 3, prefer not to say = 4), follower gender (male =1, female = 2, other = 3, prefer not to say = 4), frequency of interactions and social desirability of team members. Frequency of interactions (values between 1 and 5) ranging from less than once a week, about once a week, couple of times a week, daily and most of the day, with time 1 (*M = 4.95, S.D = 1.14),* time 2 (*M = 4.89, S.D = 1.11)* and time 3 (*M = 4.80, S.D = 1.07).* Social desirability was measured using the Marlow‐Crowne 10-items short version forced-choice response (1 = yes, 2 = no) with time 1 (*M = 1.61, S.D = 1.66*), time 2 (*M = 1.59, S.D = 1.50*), time 3 (*M = 1.57, S.D = 1.31*). Examples of social desirability items are “I am always willing to admit it when I make a mistake” and I have never said deliberately said something that hurt someone’s feelings”. These variables have been used as control variables in previous narcissism and multilevel research (e.g., Braun & Nieberle, 2017; Wirtz & Rigotti, 2020). In addition, to adequately utilise the longitudinal data, outcome variables from time 1 were used as controls, for example, burnout time 1, work engagement time 1 and CSE time 1, as recommended (Podsakoff *et al.,* 2003; Wang *et al.,* 2017).

## 4.4.3 Confirmatory factor analysis

I conducted a confirmatory factor analysis (CFA) to test the model fit and whether the variables were empirically distinct. CFA is a multivariate statistical procedure and a type of structural equation modelling (SEM) that deals with measurement models. It is used to test whether a relationship between the measures of observed variables and their underlining constructs exists (Brown & Moore, 2012), using a Chi-square test (Schreiber *et al.,* 2006). Some of the indices that are used to assess how well the measurement model fits the data include the Tucker-Lewis Index (TLI), the Confirmatory Fit Index (CFI), the Root-Mean-Square Error of Approximation (RMSEA), and Standard Root-Mean-Square Residual (SRMR). Values above .90 for CFI and TLI, below .60 for RMSEA, χ2/df less than 3, and below .80 for SRMR indicate a good fit (Hu & Bentler, 1999). However, having three of the indices is sufficient for the model fit (Hair *et al.,* 2010). From the measurement model, the composite reliability, discriminant validity, and convergent validity of the data can be obtained. Composite reliability is a measure of internal consistency in scale items which is based on the factor loading in CFA (Netemeyer *et al.,* 2003). Discriminant validity is the degree to which a test or measure diverges from another measure, that is, the extent to which two conceptually similar concepts are distinct (Hu & Liden, 2015), while convergent validity is the degree to which two measures of constructs that theoretically should be related are indeed related, that is, similar constructs should be highly correlated (Carlson & Herdman, 2012). The recommended thresholds for the measurement models are, above .70 for composite reliability, above .50 for discriminant validity and 0.7 for convergent validity (Carlson & Herdman, 2012; Fornell & Larker, 1981).

In my CFAs, I compared the fit of the four-factor measurement model (at the individual level) with other alternative models. In the four-factor model, I included leader follower-rated leader narcissism (time 1), CSE (time 2), burnout (time 3) and work engagement (time 3). The CFA showed that the hypothesised four-factor model ((χ2(489) = 1366.28, χ2/df = 2.79, *p* < .01, CFI = .81, TLI = .79, RMSEA = .05) fit the data better than a three-factor which comprised of leader narcissism, CSE, burnout and work engagement (χ2(492) = 1943.98, χ2/df = 3.95, *p* < .01, CFI = .69, TLI = .65, RMSEA = .07) two-factor which comprise of leader narcissism and CSE (χ2(494) = 2419.74, χ2/df = 4.90 *p* < .01, CFI = .59, TLI = .54, RMSEA = .09) or one-factor solution which was leader narcissism (χ2(495) = 3301.55, χ2/df = 6.67, *p* < .01, CFI = .41, TLI = .33, RMSEA = .10). I also computed a CFA and compared the fit of the four-factor measurement model (at the individual level) with other alternative models. In this four-factor model, which had a better fit, I included leader follower-rated leader narcissism (time 2), CSE (time 2), burnout (time 3) and work engagement (time 3). The CFA showed that the hypothesised four-factor model ((χ2(146) = 416.02, χ2/df = 2.85, *p* < .01, CFI = .91, TLI = .88, RMSEA = .05) fit the data better than a three-factor which comprised of leader narcissism, CSE, burnout and work engagement (χ2(149) = 840.65, χ2/df = 5.64, *p* < .01, CFI = .76, TLI = .70, RMSEA = .08) two-factor which comprise of leader narcissism and CSE (χ2(151) = 1075.19, χ2/df = 7.12 *p* < .01, CFI = .68, TLI = .60, RMSEA = .09) or one-factor solution which was leader narcissism (χ2(152) = 1767.69, χ2/df = 11.63, *p* < .01, CFI = .44, TLI = .31, RMSEA = .13). The composite reliability was .91 for leader narcissism, .87 for work engagement, .83 for burnout and .75 for CSE, while discriminant validity, and convergent validity were .62 and .79 respectively for leader narcissism, .53 and .73 respectively for work engagement, .55 and .74 respectively for burnout, and .50 and .71 respectively for CSE. The measurement models exceed the recommended thresholds (Carlson & Herdman, 2012; Fornell & Larker, 1981). Therefore, there are no validity concerns in the data. The table below shows the factor loadings and average variance extracted (AVE; Cheung & Wang, 2017). I used the CFA with leader narcissism (t2) because it has a better fit than the CFA with leader narcissism (t1).

Table 4.4: Study variables, indicators, standardized loadings, and average variance extracted.

|  |  |  |
| --- | --- | --- |
| Study variables | Standardized loading | Variance extracted (AVE) |
| Leader narcissism |  | .62 |
| My leader likes to be the centre of attention. | .84 |  |
| My leader thinks he/she is a special person. | .70 |  |
| My leader likes having authority over people. | .85 |  |
| My leader finds it easy to manipulate. | .75 |  |
| My leader insists upon getting the respect that is due to him/her. | .76 |  |
| My leader really likes to be the centre of attention. | .83 |  |
| Work engagement |  | .53 |
| At my work, I feel bursting with energy. | .69 |  |
| At my job, I feel strong and vigorous. | .74 |  |
| I am enthusiastic about my job. | .79 |  |
| My job inspires me. | .76 |  |
| When I get up in the morning, I feel like going to work. | .75 |  |
| I feel happy when I am working intensely. | .64 |  |
| Burnout |  | .55 |
| During my work, I often feel emotionally drained. | .76 |  |
| Overtime, one can become disconnected from this type of work. | .78 |  |
| Sometimes, I feel sickened by my work tasks. | .75 |  |
| After my work, I usually feel worn out and weary. | .68 |  |
| CSE |  | .50 |
| Sometimes, I do not feel in control of my work. (r) | .67 |  |
| I am filled with doubts about my confidence. (r) | .78 |  |
| I do not feel in control of my success in my career. (r) | .68 |  |

In addition, I conducted another set of CFAs at the team level and compared the fit of a four-factor model with other alternative models. In the four-factor model, I included follower rated leader narcissism (time 2), team cohesiveness (time 2), team resilience (time 2) and climate for psychological safety (time 2). The CFA showed that the hypothesised four factor model ((χ2(164) = 431.42, χ2/df = 2.63, *p* < .01, CFI = .92, TLI = .90, RMSEA = .05) fit the data better than a three factor model which comprised of leader narcissism, team cohesiveness and team resilience ((χ2(167) = 498.83, χ2/df = 2.99, *p* < .01, CFI = .90, TLI = .87, RMSEA = .05) two-factor which comprised leader narcissism and team cohesiveness (χ2(169) = 707.77, χ2/df = 4.19, *p* < .01, CFI = .84, TLI = .80, RMSEA = .07) or one-factor solution which was leader narcissism (χ2(27) = 194.30, χ2/df = 7.20, *p* < .01, CFI = .91, TLI = .86, RMSEA = .09). The composite reliability was .92 for leader narcissism, .83 for team cohesiveness, .75 for team resilience and .74 for climate for psychological safety. The discriminant validity (AVE) was .55, .50, .50, and .49 for leader narcissism, team cohesiveness, team resilience and climate for psychological safety, respectively. Lastly, the convergent validity was .74, .71, .71 and .70 for leader narcissism, team cohesiveness, team resilience, and climate for psychological safety, respectively. The results confirmed the validity of the data. The table below shows the factor loading and AVE.

Table 4.5: Study variables, indicators, standardized loadings, and average variance extracted.

|  |  |  |
| --- | --- | --- |
| Study variables | Standardized loading | Variance extracted (AVE) |
| Leader narcissism |  | .55 |
| My leader knows that he/she a good person because everybody keeps telling him/her so. | .84 |  |
| My leader likes to be the centre of attention. | .70 |  |
| My leader thinks he/she is a special person. | .83 |  |
| My leader likes having authority over people. | .76 |  |
| My leader finds it easy to manipulate. | .76 |  |
| My leader insists upon getting the respect that is due to him/her. | .84 |  |
| My leader is apt to show off if he/she get the chance. | .84 |  |
| My leader really likes to be the centre of attention. | .48 |  |
| My leader can make anybody believe anything he/she want them to. | .54 |  |
| Team cohesiveness |  | .53 |
| There is a friendly atmosphere amongst people in my team. | .70 |  |
| People in my work group trust each other. | .73 |  |
| People are warm and friendly. | .76 |  |
| People treat each other with respect. | .73 |  |
| Team resilience |  | .50 |
| This team knows how to cope with challenges. | .71 |  |
| This team is able to cope with difficult periods of time. | .77 |  |
| We know how to handle difficult situations when we face them. | .63 |  |
| Climate for psychological safety |  | .49 |
| If you make a mistake on this team, it is often held against you. (r) | .63 |  |
| People in this team are sometimes rejecting of others for being different. (r) | .79 |  |
| It is difficult to ask other members of this team for help. (r) | .66 |  |

## 4.4.4 Data analysis

Data from the three-wave multi-source survey was analysed using correlation analysis, hierarchical regression analysis, mediation, moderation, and multilevel analysis. The analyses were conducted using IBM Statistical Package for Social Sciences (SPSS) Version 26.0 (IBM Corporation, 2019) which includes the PROCESS macro (Hayes, 2018) and AMOS Version 26.0, depending on which one was appropriate to test the hypotheses. SPSS is a statistical programme that allows researchers to manage and analyse both simple and complex social science data and conduct, for example, reliability, regression, correlation and multilevel (mixed models) analyses. The plug-in (PROCESS) allows researchers to analyse a variety of statistical models such as moderation and mediation analyses (Hayes, 2018).

The linear regression analyses were used to test the direct relationship between the predictor variable and the outcome variables at the individual and team levels of analyses. The mediation analyses tested the indirect relationship between the predictor and the outcome variables at the individual and team levels via the mediators. To examine the significance of the indirect effects, bootstrapping with 5,000 iterations was utilised, providing 95% confidence intervals. Bootstrapping is one of the most popular methods of testing mediation and moderation models based on resampling with the replacement done many times, e.g., 5,000 times. From each of the resampling, the indirect effects are computed (Preacher & Hayes, 2008). The moderation analyses tested whether a variable (e.g., team resilience) affects the direction and/or strength between the predictor and outcome variables (Hayes, 2018). The interactions from the moderation analyses were plotted using an Excel spreadsheet (Dawson, 2015). The multilevel analyses tested for complex patterns of variability in the data in terms of the nested nature of the data (individuals nested in teams), using the mixed effect models in SPSS (Snijders & Bosker, 2011).

## 4.4.5 Group level analysis

The participants in this research are individuals nested in teams who have a common team leader. I proposed both team and cross-level hypotheses, therefore, the analyses are conducted at both team and cross levels, for example, leader narcissism influences individual CSE and team CSE. In this study, team membership is defined as a team consisting of two or more members having a common leader (Stott & Walker, 1995), and the data screening was done to allow only complete teams (two or more members matched to their leader) to be included in the data analysis. This approach helped to avoid group membership ambiguity which is a potential problem in multilevel research (Hitt *et al.,* 2007).

In this research, two levels of analysis are established, the individual and group levels (Chen *et al.,* 2005), with cross-level interactions (e.g., leader narcissism interacting with followers’ narcissism) predicted. The leaders’ characteristics are team-level variables because the leader heads other followers nested in the same team (e.g., Barrow, 1977). However, to establish that it is appropriate to aggregate individual-level variables to the team level, Chan (1998) proposes several composition models, which explain the situations in which data from a lower level (e.g., individual burnout) are used to establish a higher-level construct (e.g., team burnout). They include the additive model, direct consensus model, referent shift model, dispersion model and process model. The additive model simply involves the aggregation (mean) of lower-level scores to make up the higher-level constructs, without regard to the variance amongst the units. The direct consensus model uses the within-group agreement of the lower-level units to justify aggregation to the higher level, that is, the shared assignment of the meaning of the constructs amongst group members at the individual level. In this instance, high agreement amongst group members signifies consensus and justifies aggregation to the team level (James *et al.,* 1984). The referent shift model is like the direct consensus model except that the lower-level attributes are conceptually different from the lower level, but aggregation follows the same within-group consensus as with the direct consensus model. In the dispersion model, the focus is on within-group variance or agreement to specify the functional relationship in the variables. Lastly, the process model is concerned with the mechanism of conceptualising from a lower level to a higher level, for example, a variable that is not static but subject to emergence or change over time (Chan, 1998).

For this research, the approach is to combine individual-level constructs (e.g., individual burnout and work engagement) to produce group-level constructs (team burnout and teamwork engagement) in line with the consensus model. Therefore, the traditional approach of additive and consensus models is applied to theoretically justify aggregation of constructs to the team level. The data for this study are evaluated in terms of within-group agreement and between-group agreement, to justify the aggregation of individual-level constructs to the team level statistically.

The within-group agreement suggests that individual members in a group hold shared perceptions and is usually assessed using the rwg(j) index (James *et al.,* 1984). Higher values suggest higher within-group agreement with a suggested cut-off of 0.7 (James *et al.,* 1984), while LeBreton and Senter (2008) gives a range of cut-off, 0.00-0.30 (lack of agreement), 0.31-0.50 (weak agreement), 0.51-0.70 (moderate agreement), 0.71-0.91 (strong agreement) and 0.91-1.00 (very strong agreement). The within-group agreement for this research was computed in four steps using syntax in SPSS (see appendix 3 for syntax). First, the standard deviation was aggregated by teams. Second, calculate means of variances. Third, compute r.w.g. for each variable. Four, set negative values = 0 if r.w.g. of the variable is greater than 0, and maximum values = 2 if the r.w.g. of the variable is more than 2. For example, if (r.w.gCSE < 0) r.w.gCSE= 0, execute, and if (r.w.gCSE > 2) r.w.gCSE = 2, execute.

The between-group differentiation is evaluated using the interclass correlation coefficients (ICC; Bliese, 2000). The ICC1 refers to the proportion of variance that is attributed to group membership, while the ICC2 assesses the reliability of the higher level (i.e., team) mean differences in a variable (Bliese, 1998; Newman & Sin, 2020). Values above 0 are considered as desirable for ICC1 and a suggested value of 0.2 for ICC2 (Bliese, 2000) while LeBreton and Senter (2008) recommended a range of thresholds for ICC2, < 0.01 (small effect), < 0.10 (medium effect) and < 0.25 (large effect). The ICC1 and ICC2 were computed using two steps. First, using one way ANOVA in SPSS to compute the mean square between estimates (MSB) and mean square within estimates (MSW). Second, the results of MSB, MSW and degrees of freedom (d.f) were copied into an excel workbook to produce the ICC1 (Bartko, 1976) and ICC2, (McGraw & Wong, 1996) using the following formular.



where MSB = mean square between estimates, MSW = mean square within estimates, k = average group size.

The rwg(j) index, ICC1 and ICC2 values for the study constructs for times 1-3 of the research are reported in tables below.

Table 4.6: rwg(j), ICC1, and ICC2 for group-level aggregation: Time 1-3

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | ICC1 | | | |  |
| Variables | rwg(j) | ICC1 | F | df | p | ICC2 |
| Team cohesiveness (T1)  Team cohesiveness (T2)  Team cohesiveness (T3) | 0.69  0.75  0.77 | 0.09  0.18  0.08 | 1.34  1.80  1.29 | 438  347  292 | .023  0.00  0.07 | 0.25  0.44  0.22 |
| Team resilience (T1)  Team resilience (T2)  Team resilience (T3) | 0.80  0.81  0.77 | 0.23  0.09  0.15 | 2.03  1.35  1.60 | 438  347  292 | .000  .035  .003 | 0.51  0.26  0.38 |
| Climate for psychological safety (T1)  Climate for psychological safety (T2)  Climate for psychological safety (T3) | 0.71  0.54  0.62 | 0.14  0.15  0.13 | 1.59  1.66  1.49 | 438  347  292 | .001  .001  .011 | 0.37  0.40  0.33 |
| CSE (T1)  CSE (T2)  CSE (T3) | 0.51  0.60  0.66 | 0.21  0.34  0.23 | 1.92  2.83  2.02 | 438  347  292 | .000  .000  .000 | 0.48  0.65  0.51 |
| Burnout (T1)  Burnout (T2)  Burnout (T3) | 0.66  0.66  0.66 | 0.07  0.16  0.30 | 1.27  1.69  2.41 | 438  347  292 | .049  .001  .000 | 0.21  0.41  0.59 |
| Work engagement (T1)  Work engagement (T2)  Work engagement (T3) | 0.62  0.65  0.75 | 0.15  0.22  0.31 | 1.60  2.01  2.64 | 438  347  292 | .001  .000  .000 | 0.38  0.50  0.62 |
| Leader narcissism (follower rated; T1)  Leader narcissism (follower rated; T2)  Leader narcissism (follower rated; T3) | 0.73  0.73  0.81 | 0.11  0.17  0.31 | 1.44  1.74  3.16 | 438  347  292 | .006  .000  .000 | 0.31  0.42  0.68 |

The tables above show the r.w.g.(j), ICC1, and ICC2 for group-level aggregation. The variables are part of the team-level model based on the consensus model of aggregation as earlier mentioned. Specifically, they are CSE, aggregated to team CSE, burnout aggregated to team burnout and teamwork engagement, aggregated to teamwork engagement, team cohesiveness, team resilience, climate for psychological safety and follower rated leader narcissism. From the table above, the ICC1 showed desirable or between medium to large effect values (Bliese, 2000; LeBreton & Senter, 2008). Also, the ICC2 all showed values above 0.20, indicating acceptable effects (Bliese, 2000). Similarly, the rwg(j), values ranged between 0.51 and 0.81, indicating moderate agreement to strong agreement (LeBreton & Senter, 2008). Therefore, it is evident that the variables meet the least criteria in the test for between-group differentiation (ICC1, and ICC2) and within-group agreement (rwg(j)), thereby justifying aggregation of data to the team level and use in further analysis.

# 4.5 Summary

In summary, this chapter discusses the research philosophy and strategy adopted for the study, and the methods used, including the research design, sample, data collection procedures, instrumentation, and financial reimbursement. The characteristics of the study population, data screening, data analysis procedure for the individual level and aggregation of data to the team level were reviewed. Data analysis tools, ethical considerations, and the study setting that gives context to the study participants were also discussed. The results of the test of the measurement model are presented in the next chapter.

# CHAPTER 5- RESULTS

# 5.1 Introduction

In this chapter, I present the results from the data analysis of this research. Specifically, I showcase the results from the test of individual level, multi-level, and cross-level hypotheses. The results are also discussed with regard to the hypothesised relationships in this research programme.

# 5.2 Results

The results from the data analysis are presented below. In testing the hypothesised relationships, I used various time points to test the model and control variables. The predictor variable, leader narcissism was analysed at times 1 and 2. However, I reported only the analysis at time 2 because it has a better model fit than leader narcissism at time 1. The mediator and moderator variables were used at time 2 while the outcome variables were employed at time 3 as shown in the Figure 5.1 below.

Team level

Individual level

Figure 5.1. A multilevel model of the effects of leader narcissism on follower and team outcomes (with time points used in the analysis)

The figure above is the research model showing the variables and time points in which data was used for the analyses. In presenting the results, the means, standard deviations, correlations, and internal consistencies (Cronbach’s alpha) between the measures are reported for the individual level and team level in Table 5.1 and 5.2 respectively. Thereafter, the results are showcased at the individual, team, and cross-levels. The interpretations of the results are also presented following the results.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 5.1: Mean, S.D. and correlations (individual level)** | | | | |  | | | |
| **Variables** | **M** | **S.D** | | **1** | | | | **2** | | | **3** | | **4** | | **5** | | **6** | | **7** | | **8** | | **9** | | **10** | | | **11** | | **12** | | **13** | | **14** |
| 1. Follower gender -t1 | 1.50 | .60 | |  | | | |  | | |  | |  | |  | |  | |  | |  | |  | |  | | |  | |  | |  | |  |
| 2. Freq. of interactions -t1 | 4.95 | 1.14 | | -.06 | | | |  | | |  | |  | |  | |  | |  | |  | |  | |  | | |  | |  | |  | |  |
| 3. Social desirability -t1 | 1.61 | 1.66 | | -.01 | | | | .08 | | |  | |  | |  | |  | |  | |  | |  | |  | | |  | |  | |  | |  |
| 4. Leader narcissism -t2 | 5.24 | 1.08 | | -.06 | | | | -.00 | | | -.12\* | | (.91) | |  | |  | |  | |  | |  | |  | | |  | |  | |  | |  |
| 5. Follower narcissism -t2 | 4.89 | 1.04 | | -.02 | | | | -.06 | | | .06 | | .72\*\* | | (.90) | |  | |  | |  | |  | |  | | |  | |  | |  | |  |
| 6. CSE -t1 | 3.65 | .61 | | .07 | | | | .02 | | | .16\*\* | | -.15\* | | -.12 | | (.74) | |  | |  | |  | |  | | |  | |  | |  | |  |
| 7. Burnout -t1 | 3.85 | .46 | | -.05 | | | | -.07 | | | .08 | | -.09 | | -.10 | | .25\*\* | | (.77) | |  | |  | |  | | |  | |  | |  | |  |
| 8. Work engagement -t1 | 3.82 | .76 | | -.04 | | | | .06 | | | -.08 | | -.00 | | -.08 | | .40\*\* | | .36\*\* | | (.86) | |  | |  | | |  | |  | |  | |  |
| 9.CSE -t2 | 3.66 | .61 | | .09 | | | | .01 | | | .15\* | | -.06 | | .09 | | .18\*\* | | .10 | | .21\*\* | | (.77) | |  | | |  | |  | |  | |  |
| 10. Burnout -t2 | 3.87 | .49 | | .09 | | | | .03 | | | .03 | | -.40\*\* | | .11\* | | -.02 | | .08 | | .11 | | .22\*\* | | (.72) | | |  | |  | |  | |  |
| 11. Work engagement -t2 | 3.96 | .76 | | .06 | | | | .07 | | | -.02 | | .37\*\* | | .41\*\* | | -.04 | | .05 | | .38\*\* | | .37\*\* | | .44\*\* | | | (.88) | |  | |  | |  |
| 12.CSE-t3 | 3.89 | .56 | | .09 | | | | .13 | | | -.03 | | .09 | | .37\*\* | | .10 | | -.07 | | .20\*\* | | .33\*\* | | .06 | | | .27\*\* | | (.77) | |  | |  |
| 13 Burnout -t3 | 3.91 | .46 | | .01 | | | | -.04 | | | -.01 | | -.26\*\* | | .19\*\* | | -.01 | | .05 | | .05 | | .06 | | .26\*\* | | | .12 | | .30\*\* | | (.73) | |  |
| 14. Work engagement - t3 | 4.08 | .62 | | .09 | | | | .02 | | | -.04 | | .17\*\* | | .15\* | | .09 | | -.06 | | .28\*\* | | .32\*\* | | .06 | | | .37\*\* | | .55\*\* | | .38\*\* | | (.84) |
| Time 1-N=439 (team members)  Time 2-N=348 (team members)  Time 3-N=293 (team members) | | | | |  | | | |
| \**p* < .05. \*\**p* < .01. | | |  | | |  |  | | |  | |  | |  | |  | |  | |  | |  | |  | |  |  | |  | |  | |

Note: Internal consistencies (Cronbach’s alpha) in parenthesis. Gender: 1 = male, 2 = female.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 5.2: Mean, S.D. and correlations (team level)** | | | | |  | | | |
| **Variables** | **M** | **S.D** | | **1** | | | | **2** | | | **3** | | **4** | | **5** | | **6** | | **7** | | **8** | | **9** | | **10** | | | **11** | | **12** | | **13** | | **14** |
| 1. Leader gender -t1 | 1.29 | .51 | |  | | | |  | | |  | |  | |  | |  | |  | |  | |  | |  | | |  | |  | |  | |  |
| 2.Freq. of interactions -t1 | 4.69 | .99 | | -.04 | | | |  | | |  | |  | |  | |  | |  | |  | |  | |  | | |  | |  | |  | |  |
| 3. Social desirability -t1 | 1.61 | .17 | | -.53 | | | | .51 | | |  | |  | |  | |  | |  | |  | |  | |  | | |  | |  | |  | |  |
| 4. Leader narcissism -t2 | 5.24 | 1.08 | | -.19 | | | | .19 | | | .12 | | (.91) | |  | |  | |  | |  | |  | |  | | |  | |  | |  | |  |
| 5. Leader narcissism -t2 | 4.83 | .95 | | -.15 | | | | -.08 | | | -.04 | | -.21 | | (.86) | |  | |  | |  | |  | |  | | |  | |  | |  | |  |
| 6.Team CSE. -t1 | 3.64 | .40 | | .32 | | | | .08 | | | -.09 | | -.12\* | | .13 | |  | |  | |  | |  | |  | | |  | |  | |  | |  |
| 7. Team burnout -t1 | 3.85 | .26 | | .18 | | | | -.12 | | | .01 | | -.17\*\* | | .41 | | .40\*\* | |  | |  | |  | |  | | |  | |  | |  | |  |
| 8. Teamwork engage -t1 | 3.82 | .47 | | -.24 | | | | .19 | | | -.02 | | .01 | | .64 | | .42\*\* | | .49\*\* | |  | |  | |  | | |  | |  | |  | |  |
| 9.Team CSE -t2 | 3.66 | .44 | | -.21 | | | | .19 | | | -.10 | | .01 | | .13 | | .17\*\* | | .14\* | | .16\*\* | |  | |  | | |  | |  | |  | |  |
| 10. Team cohesiveness -t2 | 4.20 | .67 | | -.07 | | | | -.01 | | | -.11 | | .14\* | | -.16 | | .09 | | .06 | | -.14\* | | .31\*\* | |  | | |  | |  | |  | |  |
| 11. Team resilience -t2 | 4.25 | .69 | | -.18 | | | | .01 | | | -.13\* | | .00 | | .02 | | .14\* | | .13\* | | .09 | | .24\*\* | | .64\*\* | | |  | |  | |  | |  |
| 12. Climate for p. safet -t2 | 3.63 | .72 | | -.48 | | | | .16 | | | -.56 | | -.08 | | .45 | | .08 | | .08 | | .11 | | .34\*\* | | .56\*\* | | | .45\*\* | |  | |  | |  |
| 13 Team burnout -t3 | 3.91 | .33 | | -.08 | | | | -.98\*\* | | | -.09 | | .22\*\* | | .43 | | .03 | | -.04 | | -.02 | | .16\*\* | | .09 | | | .00 | | .01 | |  | |  |
| 14. Teamwork engage. - t3 | 4.08 | .45 | | -.79 | | | | -.63 | | | -.02 | | .21\*\* | | .85\* | | .09 | | -.07 | | .28\*\* | | .33\* | | .14\* | | | .05 | | .13\* | | .60\*\* | | 1 |
| Time 1-N=439 (team members), 127 (leader)  Time 2-N=348 (team members), 101 (leader)  Time 3-N=293 (team members), 96 (leader) | | | | |  | | | |
| \**p* < .05. \*\**p* < .01. | | |  | | |  |  | | |  | |  | |  | |  | |  | |  | |  | |  | |  |  | |  | |  | |

Note: Item 4 -Leader narcissism was rated by followers, item 5- leader narcissism was self-rated; frequency of interactions and social desirability was rated by leader. Internal consistencies (Cronbach’s alpha) in parenthesis. Gender: 1 = male, 2 = female. Team variables are aggregated.

## 5.2.1 Individual level and cross-level

As previously noted, the research model proposed individual and cross levels hypotheses depicted in the research model (see Figure 5.1). This section showcases the results from the test of hypotheses for hypotheses 1a, 1b, 1c, from the regression analysis, 1d and 1e from the mediation analysis, and hypotheses 2, 3, and 4 results from the regressions of multilevel moderations. Furthermore, results from the moderated mediation analysis testing hypotheses 13a, 13b, 14a, and 14b are also displayed.

**Table 5.3: Hierarchical linear regression results for the test of the direct effect of leader narcissism (follower rated; t2) on individual CSE (t2) (H1a)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Model | Variables | B | SE | p |
| 1 | Constant | 3.01 | .23 | .000 |
| CSE(t1) | .18 | .06 | .003 |
| 2 | Constant | 3.47 | .28 | .000 |
| CSE (t1) | .19 | .06 | .002 |
| Leader NPI (t2; follower rated) | -.09 | .03 | .008 |

Note. F = 8.13, sig = .000, R square = .05, R square change = .01

**Table 5.4: Hierarchical linear regression results for the test of the direct effect of leader narcissism (leader rated; t2) on individual CSE (t2) (H1b)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Model | Variables | B | SE | p |
| 1 | Constant | 2.87 | 1.44 | .103 |
| CSE(t1) | .25 | .37 | .529 |
| 2 | Constant | 3.79 | 1.52 | .067 |
| CSE (t1) | .40 | .36 | .331 |
| Leader NPI (t2; leader rated) | -.32 | .25 | .260 |

Note. F = 1.12, sig = .411, R square = .36, R square change = .26

**Table 5.5: Hierarchical linear regression results for the test of the direct effect of individual CSE (t2) on burnout (t3) (H1c)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Model | Variables | B | SE | p |
| 1 | Constant | 3.57 | .25 | .000 |
| Burnout(t1) | .08 | .06 | .213 |
| 2 | Constant | 2.96 | .29 | .000 |
| Burnout(t1) | .06 | .06 | .373 |
| CSE(t2) | .19 | .05 | .000 |

Note. F = 8.89, sig = .000, R square = .06, R square change = .00

**Table 5.6: Hierarchical linear regression results for the test of the direct effect of individual CSE (t2) on work engagement (t3) (H1d)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Model | Variables | B | SE | p |
| 1 | Constant | 2.89 | .19 | .000 |
| Work engagement(t2) | .30 | .05 | .000 |
| 2 | Constant | 2.4 | .24 | .000 |
| Work engagement(t2) | .23 | .05 | .000 |
| CSE(t2) | .20 | .07 | .003 |

Note. F = 25.39, sig = .000, R square = .17, R square change = .00

The findings to test hypotheses 1a, 1b, 1c and 1d (individual level) are displayed in Tables 5.3, 5.4, 5.5 and 5.6. To test H1a, the outcome variable, individual CSE (t2) was regressed on leader narcissism (follower rated) while controlling for individual CSE (t1). The result was significant (b = -.09, SE = .03, p < .001). To test H1b, the outcome variable, individual CSE (t2) was regressed on leader narcissism (leader rated) while controlling for individual CSE (t1). The result was not significant (b = -.32, SE = .25, p = .260). To test H1c, the outcome variable, individual burnout (t3) was regressed on individual CSE (t2) while controlling for individual burnout (t1). The result was significant (b = .19, SE = .05, p < .001). Also, to test hypothesis 1d, individual work engagement (t3) was regressed on individual CSE (t2) while controlling for individual work engagement (t2). The result was significant (b = .20, SE =.07, p < .05). Thus, H1a, 1c and H1d received empirical support.

**Table 5.7: Bootstrap results for the indirect effect of leader narcissism (follower rated) on burnout and work engagement via CSE - H1e and 1f**

|  |  |  |  |
| --- | --- | --- | --- |
| Pair | Effect | Boot SE | Boot Boot  Lower 95% CI / Upper CI 95% CI |
| LN → CSE →B | .00 | .00 | -.01 / .00 |
| LN → CSE →WE | -.01 | .01 | -.02 / .00 |

The findings to test H1e and 1f are displayed in Table 5.7. The indirect effect of leader narcissism on individual burnout via individual CSE was tested with follower-rated leader narcissism (t2), burnout (t3) and CSE (t2) while controlling for burnout (t2). The results showed that the model was insignificant. The 95% confidence interval for the indirect effect of leader narcissism on individual burnout, through individual CSE (b*=* .00; SE = .00, p < .001), crossed zero; C.I [-.01 to .00]. As such, there is no evidence of a significant indirect effect, that is, individual CSE did not mediate the relationship between leader narcissism and individual burnout. Therefore, based on the bootstrapping results, H1e is not supported.

The indirect effect of leader narcissism on individual work engagement via individual CSE (t3) was tested with follower-rated narcissism (t2), work engagement (t3) while controlling for work engagement (t2). The result was insignificant. The 95% confidence interval for the indirect effect of leader narcissism on individual work engagement, through individual CSE (b = -.01, SE = .01, p < .001), crossed zero; C.I [-.02 to .00]. As such, there is no evidence of a significant effect, that is, individual CSE did not mediate the relationship between leader narcissism and individual work engagement. Therefore, based on the bootstrapping results, H1f is not supported.

**Table 5.8: Results of multilevel modelling predicting individual CSE (t2) – 1a, 1b, 2a, 2b, 3a, 3b, 4a & 4b.**

|  |  |  |  |
| --- | --- | --- | --- |
| Outcomes | Null model | Main effect | Cross-level moderation |
|  | CSE | CSE | CSE |
|  | γ(SE) | γ(SE) | γ(SE) |
| **Level 1** |  |  |  |
| Intercept | .34(.08) \*\*\* |  |  |
| Follower gender (t1) |  | -.02(.05) |  |
| Frequency of interactions (follower; t1) |  | .04(.04) |  |
| Follower narcissism (t2) |  | .03(.05) |  |
| **Level 2** |  |  |  |
| Leader gender (t2) |  | .26(.47) |  |
| Leader narcissism (follower rated, t2) |  | .04(.04) |  |
| Leader narcissism (leader rated, t2) |  | .07(.31) |  |
| **Cross level interaction** |  |  |  |
| Leader narcissism (follower rated) x follower narcissism |  |  | .01(.05) |
| Leader narcissism (leader rated) x follower narcissism |  |  | .07(.22) |
| Leader narcissism (follower rated) x follower gender |  |  | -.02(.05) |
| Leader narcissism (leader rated) x follower gender |  |  | .12(.39) |
| Leader narcissism (follower rated) x leader gender |  |  | .52(.49) |
| Leader narcissism (leader rated) x leader gender |  |  | .14(.30) |
| Additional information |  |  |  |
| ICC | .34 |  |  |
| -2 log likelihood | 943.93 |  |  |

Note. Level 1: Follower n = 439 (t1), 348 (t2), 293 (t3); Level 2: leader n = 127 (t1), 101 (t2), 96 (t3); Standard errors are in parentheses; \**p* < .05. \*\**p* < .01. \*\*\**p* < .001.

The findings to test hypotheses 1a, 1b, 2a, 2b, 3a, 3b, 4a, and 4b are displayed in Table 5.8. To test the multilevel effects on individual CSE, the null model, main effects and cross-level interactions were regressed on individual CSE (t2). The result of the unconditional null model for individual CSE (ICC = .34), which implies that team membership accounted for 34% of variance in individual CSE. The unconditional null model also showed significant between group variance (τ00 = .67, SE = .06, p < .001) and significant within group variance (σ2 = .34, SE = .08, p <.05) for individual CSE.

For the control variables, followers’ gender and frequency of interactions, the results show that followers’ gender (γ10 = -.02, SE = .05, p = .738) and frequency of interaction (γ10 = .04, SE = .04, p =.318) were not significant predictors of individual CSE. The main effects showed that follower narcissism (γ10 = .03, SE = .05, p = .628) was not a significant predictor of individual CSE. The results revealed that leader gender (γ10 = .26, SE = .47, p = .600) was not a significant predictor of individual CSE. Similarly, leader narcissism (follower rated) was not significantly related to individual CSE with (γ10 = .04, SE = .04, p = .308) Also, leader narcissism (leader rated) was not significantly related to individual CSE with (γ10 = .04, SE = .04, p = .308). Hence, H1a and 1b did not received empirical support from the data.

For the cross-level interactions, the results show that the cross-level moderation of leader narcissism (follower rated) and follower narcissism (γ10 = .01, SE = .05, p = .884) was not significant. Similarly, the interaction between leader narcissism (leader rated) and follower narcissism (γ10 = .07, SE = .22, p = .760) was not significant. Hence, H2a and H2b did not received empirical support from the data. Also, the interaction between leader narcissism (follower rated) and follower gender (γ10 = -.02, SE = .05, p = .702) was not significant. Similarly, the interaction between leader narcissism (leader rated) and follower gender (γ10 = -.12, SE = .39, p = .762) was not significant. Hence, H3a and H3b did not received empirical support from the data. Lastly, the interaction between leader narcissism (follower rated) and leader gender (γ10 = .52, SE = .49, p = .323) was not significant. Similarly, the interaction between leader narcissism (leader rated) and leader gender (γ10 = .14, SE = .30, p = .642) was not significant. Hence, H4a and H4b did not received empirical support from the data.

**Table 5.9: Hierarchical linear regression results for the test of follower narcissism as a moderator of the relationship between leader narcissism (follower rated) and individual burnout via individual CSE (H10a)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 3.59 | .11 | .000 |
| Follower gender | .01 | .07 | .937 |
| Leader narcissism | .05 | .06 | .395 |
| Follower narcissism | .07 | .06 | .230 |
| Leader narcissism\*follower narcissism | .05 | .03 | .088 |

Conditional effects of the focal predictor at the values of the moderator

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Effect | Boot SE | p | Boot LL 95% CI | Boot UL 95% CI |
| -1 SD | .00 | .06 | .980 | -.11 | .11 |
| Mean | .05 | .06 | .395 | -.07 | .16 |
| +1SD | .09 | .07 | .173 | -.04 | .24 |

Note. Unstandardized regression coefficients are reported. Bootstrap sample size =5,000. LL = lower limit, CI = confidence interval, UL = upper limit. Gender: 1 = male, 2 = female.

Index of moderated moderation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Effect | Boot SE | p | Boot LL 95% CI | Boot UL 95% CI |
| .01 | .03 | .001 | -.04 | .01 |

To test the moderated mediation effect of follower narcissism in the relationship between leader narcissism (follower rated) and individual burnout via individual CSE (H10a), individual burnout (t3) was regressed on leader narcissism (t2), with follower narcissism (t2) as the moderator, while controlling for follower gender (t2). The findings showed (Table 5.9) that the interaction of leader narcissism and follower narcissism on individual CSE was not significantly associated with individual burnout (b = .05, SE = .03, p = .088). The simple slope test shows that this test was not significant for low follower narcissism (-1SD; b = .00, SE = .06, 95% CI [-.11; .11]) and high follower narcissism (-1SD; b = .09, SE = .07, 95% CI [-.04; .24]). The index of the moderated mediation was not significant (index: 0.01, 95% CI [-.00; .05]. Thus, H10a was not supported.

**Table 5.10: Hierarchical linear regression results for the test of follower narcissism as a moderator of the relationship between leader narcissism (leader rated) and individual burnout via individual CSE (H10b)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 91.25 | 5.66 | .039 |
| Follower gender | -46.33 | 3.01 | .041 |
| Leader narcissism | -4.71 | .32 | .044 |
| Follower narcissism | -18.41 | 1.30 | .045 |
| Leader narcissism\*follower narcissism | -17.43 | 1.08 | .039 |

Conditional effects of the focal predictor at the values of the moderator

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Effect | Boot SE | p | Boot LL 95% CI | Boot UL 95% CI |
| -1 SD | .56 | .12 | .13 | -.03 | 1.15 |
| Mean | -4.71 | .32 | .044 | -6.33 | -3.09 |
| +1SD | -12.30 | .78 | .04 | -16.21 | -8.39 |

Note. Unstandardized regression coefficients are reported. Bootstrap sample size =5,000. LL = lower limit, CI = confidence interval, UL = upper limit. Gender: 1 = male, 2 = female.

To test the moderated mediation effect of follower narcissism in the relationship between leader narcissism (leader rated) and individual burnout via individual CSE (H10b), individual burnout (t3) was regressed on leader narcissism (t2), with follower narcissism (t2) as the moderator, while controlling for follower gender (t2). The findings showed (Table 5.10) that the interaction of leader narcissism and follower narcissism on individual CSE was significantly associated with individual burnout (b = -17.43, SE = 1.08, p < .05). The simple slope test shows that this test was not significant for low follower narcissism (-1SD; b = .56, SE = .12, 95% CI [-.03; 1.15]) but significant for high follower narcissism (-1SD; b = -12.30, SE = .78, 95% CI [-16.21; -8.39]). Thus, H10b was supported.

**Table 5.11: Hierarchical linear regression results for the test of follower narcissism as a moderator of the relationship between leader narcissism (follower rated) and individual work engagement via individual CSE (H10c)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 3.59 | .11 | .000 |
| Follower gender | .01 | .07 | .937 |
| Leader narcissism | .05 | .06 | .395 |
| Follower narcissism | .07 | .06 | .230 |
| Leader narcissism\*follower narcissism | .05 | .03 | .088 |

Conditional effects of the focal predictor at the values of the moderator

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Effect | Boot SE | p | Boot LL 95% CI | Boot UL 95% CI |
| -1 SD | .00 | .06 | .980 | -.11 | .11 |
| Mean | .05 | .06 | .395 | -.07 | .16 |
| +1SD | .10 | .07 | .173 | -.04 | .24 |

Note. Unstandardized regression coefficients are reported. Bootstrap sample size =5,000. LL = lower limit, CI = confidence interval, UL = upper limit. Gender: 1 = male, 2 = female.

Index of moderated moderation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Effect | Boot SE | p | Boot LL 95% CI | Boot UL 95% CI |
| .01 | .01 | .012 | -.00 | .05 |

To test the moderated mediation effect of follower narcissism in the relationship between leader narcissism (follower rated) and individual work engagement via individual CSE (H10c), individual work engagement (t3) was regressed on leader narcissism (t2), with follower narcissism (t2) as the moderator, while controlling for follower gender (t2). The findings showed (Table 5.11) that the interaction of leader narcissism and follower narcissism on individual work engagement was not significantly associated with individual work engagement (b = .05, SE = .03, p = .088). The simple slope test shows that this test was not significant for low follower narcissism (-1SD; b = .00, SE = .06, 95% CI [-.11; .11]) and high follower narcissism (-1SD; b = .09, SE = .07, 95% CI [-.04; .24]). The index of the moderated mediation was not significant (index: 0.01, 95% CI [-.00; .05]. Thus, hypothesis 10c was not supported.

**Table 5.12: Hierarchical linear regression results for the test of follower narcissism as a moderator of the relationship between leader narcissism (leader rated) and individual work engagement via individual CSE (H10d)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 91.25 | 5.66 | .039 |
| Follower gender | -46.33 | 3.01 | .041 |
| Leader narcissism | -4.71 | .32 | .044 |
| Follower narcissism | -18.41 | 1.30 | .045 |
| Leader narcissism\*follower narcissism | -17.43 | 1.08 | .039 |

Conditional effects of the focal predictor at the values of the moderator

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Effect | Boot SE | p | Boot LL 95% CI | Boot UL 95% CI |
| -1 SD | .56 | .12 | .133 | -.03 | 1.15 |
| Mean | -4.71 | .32 | .04 | -6.33 | -3.09 |
| +1SD | -12.30 | .78 | .04 | -16.21 | -8.39 |

Note. Unstandardized regression coefficients are reported. Bootstrap sample size =5,000. LL = lower limit, CI = confidence interval, UL = upper limit. Gender: 1 = male, 2 = female.

To test the moderated mediation effect of follower narcissism in the relationship between leader narcissism (leader rated) and individual burnout via individual CSE (H10b), individual work engagement (t3) was regressed on leader narcissism (t2), with follower narcissism (t2) as the moderator, while controlling for follower gender (t2). The findings showed (Table 5.12) that the interaction of leader narcissism and follower narcissism on individual CSE was significantly associated with individual work engagement (b = -17.43, SE = 1.08, p < .05). The simple slope test shows that this test was not significant for low follower narcissism (-1SD; b = .56, SE = .12, 95% CI [-.03; 1.15]) but significant for high follower narcissism (-1SD; b = -12.30, SE = .78, 95% CI [-16.21; -8.39]). Thus, H10d was supported.

**Table 5.13: Hierarchical linear regression results for the test of follower gender as a moderator of the relationship between leader narcissism (follower rated) and individual burnout via individual CSE (H11a)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 4.05 | .18 | .000 |
| Frequency of interactions | -.08 | .04 | .017 |
| Leader narcissism | .06 | .04 | .112 |
| Follower gender | -.01 | .07 | .837 |
| Leader narcissism\*follower gender | .01 | .06 | .936 |

Index of moderated moderation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Effect | Boot SE | p | Boot LL 95% CI | Boot UL 95% CI |
| .00 | .00 | .004 | -.00 | .01 |

To test the moderated mediation effect of follower gender in the relationship between leader narcissism (follower rated) and individual burnout via individual CSE (H11a), individual burnout (t3) was regressed on leader narcissism (t2), with follower gender (t2) as the moderator, while controlling for frequency of interactions (t2). The findings showed (Table 5.13) that the interaction of leader narcissism and follower gender on individual burnout was not significantly associated with individual CSE (b = .01, SE = .06, p = .936). The index of the moderated mediation was not significant (index: 0.00, 95% CI [-.00; .01]. Thus, H11a was not supported.

**Table 5.14: Hierarchical linear regression results for the test of follower gender as a moderator of the relationship between leader narcissism (follower rated) and individual work engagement via individual CSE (H11b)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 4.05 | .17 | .000 |
| Frequency of interactions | -.08 | .04 | .017 |
| Leader narcissism | .058 | .04 | .112 |
| Follower gender | -.01 | .07 | .837 |
| Leader narcissism\*follower gender | .01 | .06 | .936 |

Index of moderated moderation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Effect | Boot SE | p | Boot LL 95% CI | Boot UL 95% CI |
| .00 | .00 | .022 | -.05 | .04 |

To test the moderated mediation effect of follower gender in the relationship between leader narcissism (follower rated) and individual work engagement via individual CSE (H11b), individual work engagement (t3) was regressed on leader narcissism (t2), with follower gender (t2) as the moderator, while controlling for frequency of interactions (t2). The result (Table 5.14) showed that the interaction of leader narcissism and follower gender on individual work engagement was not significantly related to individual work engagement (b = .01, SE = .06, p = .936). The index of the moderated mediation was not significant (index: 0.00, 95% CI [-.05; .04]. Thus, the H11b was not supported by the data.

## 5.2.2 Team level

As previously noted, the research model proposed team levels hypotheses depicted in Figure 5.1. This section showcases the results from the test of hypotheses for hypotheses 5a, 5b, 5c, 5d from the regression analysis, 5e and 5f from the mediation analysis, and hypotheses 6a, 6b, 7a, 7b, 8a, 8b, 9a, and 9b results from the moderation analysis. Furthermore, the results from moderated mediation analysis testing hypotheses 12a, 12b, 12c, 12d, 13a, 13b, 13ac, 141, 14b, 14c and 14d are also displayed.

**Table 5.15: Hierarchical linear regression results for the test of the direct effect of leader narcissism (follower rated) on team CSEs (H5a)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Model | Variables | B | SE | p |
| 1 | Constant | 3.06 | .21 | .000 |
| Team CSE(t2) | .16 | .06 | .005 |
| 2 | Constant | 3.31 | .24 | .000 |
| Team CSE (t2) | .17 | .06 | .003 |
| Leader NPI (t2; follower rated) | -.05 | .02 | .030 |

Note. F = 6.49, sig = .002, R square = .05, R square change = .03

**Table 5.16: Hierarchical linear regression results for the test of the direct effect of leader narcissism (leader rated) on team CSE (H5b)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Model | Variables | B | SE | p |
| 1 | Constant | .83 | 1.77 | .661 |
| Team CSE(t2) | .71 | .44 | .171 |
| 2 | Constant | .70 | 1.7 | .704 |
| Team CSE (t2) | 1.09 | .54 | .111 |
| Leader NPI (t2; leader rated) | -.30 | .26 | .303 |

Note. F = 2.08, sig = .241, R square = .51, R square change = .30

**Table 5.17: Hierarchical linear regression results for the test of the direct effect of team CSE and team burnout (H5c)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Model | Variables | B | SE | p |
| 1 | Constant | 4.05 | .32 | .000 |
| Team burnout(t1) | -.04 | .08 | .638 |
| 2 | Constant | 3.67 | .35 | .000 |
| Team burnout(t1) | -.07 | .08 | .386 |
| Team CSE(t2) | .14 | .05 | .007 |

Note. F = 3.82, sig = .023, R square = .03, R square change = .01

**Table 5.18: Hierarchical linear regression results for the test of the direct effect of team CSE and teamwork engagement (H5d)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Model | Variables | B | SE | p |
| 1 | Constant | 3.02 | .23 | .000 |
| Teamwork engagement(t1) | .27 | .06 | .000 |
| 2 | Constant | 2.09 | .30 | .000 |
| Teamwork engagement(t1) | .24 | .06 | .000 |
| Team CSE(t3) | .30 | .07 | .000 |

Note. F = 21.38, sig = .000, R square = .17, R square change = .00

The findings to test hypotheses 5a, 5b, 5c and 5d (team level) are displayed in tables 5.15-5.18. To test H5a, team CSE (t1) was regressed on follower-rated leader narcissism (t2) while controlling for team CSEs (t2). The result was significant (b = -.05, SE = .02, p < .05). Therefore, H5a received empirical support. To test H5b, team CSE (t1) was regressed on leader rated leader narcissism (t2) while controlling for team CSEs (t2). The result was significant (b = -.30, SE = .26, p = .303). Therefore, H5b did not received empirical support. To test the direct relationship between team CSE and team burnout (H5c), team burnout (t3) was regressed on team CSE (t2) while controlling for team burnout (t1), the result was significant (b = .14, SE = .05, p < .05), thereby confirming the hypothesis. Similarly, to test to test the direct effect of team CSE on teamwork engagement (H5c), teamwork engagement (t3) was regressed on team CSE (t2) while controlling for teamwork engagement (t1), the result was significant (b = .30, SE = .07, p < .001), lending support for H5d.

**Table 5.19: Bootstrap results for the indirect effect of leader narcissism (follower rated) on team burnout and teamwork engagement via team CSE - H5e and 5f.**

|  |  |  |  |
| --- | --- | --- | --- |
| Pair | Effect | Boot SE | Boot Boot  Lower 95% CI / Upper CI 95% CI |
| LNPI → TCSE →TB | -.00 | .00 | -.01 / .00 |
| LNPI→TCSE→TWE | -.01 | .00 | -.01 / .00 |

The findings to test hypotheses 5e and 5f are displayed in Table 5.19. The indirect effect of leader narcissism on team burnout via team CSE was tested with follower-rated leader narcissism (t2), team burnout (t3) and team CSE (t2) while controlling for team burnout (t2) and follower gender (t2). The results showed that the model was insignificant. The 95% confidence interval for the indirect effect of leader narcissism on team burnout, through team CSE (b*=* -.00; SE = .00, p < .001), crossed zero; C.I [-.01 to .00]. As such, there is no evidence of a significant effect, that is, team CSE did not mediate the relationship between leader narcissism and team burnout. Therefore, H5e was not supported.

The indirect effect of leader narcissism on teamwork engagement via team CSE (t3) was tested with follower-rated narcissism (t2), teamwork engagement (t3) while controlling for teamwork engagement (t2) and follower gender (t2). The result was not significant. The 95% confidence interval for the indirect effect of leader narcissism on teamwork engagement, through team CSE (b = -.01, SE = .00, p < .001), crossed zero; C.I [-.01 to .00]. As such, there is no evidence of a significant effect, that is, team CSE did not mediate the relationship between leader narcissism and teamwork engagement. Therefore, H5f was not supported.

**Table 5.20: Hierarchical linear regression results for the test of leader gender as a moderator of the relationship between leader narcissism (follower rated) and team CSE (H6a)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 4.31 | 1.37 | .035 |
| Leader narcissism | -.00 | .45 | .993 |
| Leader gender | .026 | .58 | .966 |
| Follower gender | -.19 | .76 | .812 |
| Leader narcissism\*leader gender | .03 | 1.14 | .980 |

Note. Unstandardized regression coefficients are reported. Bootstrap sample size =5,000. LL = lower limit, CI = confidence interval, UL = upper limit. Gender: 1 = male, 2 = female.

To test the moderating effects of leader gender in the relationship between leader narcissism and team CSE (H6a), team CSE was regressed on follower rated leader narcissism (t2), with leader gender (t2) as the moderator, while controlling for follower gender (t2). The findings showed (Table 5.20) that the interaction of leader narcissism and leader gender was not significantly associated with team CSE (b = .03, SE = 1.14, p = .980). Thus, hypothesis 6a was not supported by the data.

**Table 5.21: Hierarchical linear regression results for the test of leader gender as a moderator of the relationship between leader narcissism (leader rated) and team CSE (H6b)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 4.22 | 1.38 | .037 |
| Leader narcissism | .011 | .67 | .988 |
| Leader gender | -.00 | .76 | .999 |
| Follower gender | -.14 | .79 | .870 |
| Leader narcissism\*leader gender | .11 | 3.29 | .975 |

Note. Unstandardized regression coefficients are reported. Bootstrap sample size =5,000. LL = lower limit, CI = confidence interval, UL = upper limit. Gender: 1 = male, 2 = female.

To test the moderating effects of leader gender in the relationship between leader narcissism and team CSE (H6b), team CSE was regressed on leader rated leader narcissism (t2), with leader gender (t2) as the moderator, while controlling for follower gender (t2). The findings showed (Table 5.21) that the interaction of leader narcissism and leader gender was not significantly associated with team CSE (b = .11, SE = 3.29, p = .975). Thus, hypothesis 6b was not supported by the data.

**Table 5.22: Hierarchical linear regression results for the test of team cohesiveness as a moderator of the relationship between leader narcissism (follower rated) and team CSE (H7a)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 3.63 | .06 | .000 |
| Follower gender | .02 | .04 | .606 |
| Leader narcissism | -.01 | .02 | .548 |
| Team cohesiveness | .25 | .04 | .000 |
| Leader narcissism\*team cohesiveness | .07 | .03 | .004 |

Conditional effects of the focal predictor at the values of the moderator

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Effect | Boot SE | p | Boot LL 95% CI | Boot UL 95% CI |
| -1 SD | -.06 | .03 | .024 | -.11 | -.01 |
| Mean | -.01 | .02 | .548 | -.05 | .03 |
| +1SD | .04 | .03 | .193 | -.02 | .09 |

Note. Unstandardized regression coefficients are reported. Bootstrap sample size =5,000. LL = lower limit, CI = confidence interval, UL = upper limit. Gender: 1 = male, 2 = female.

To test the moderating effect of team cohesiveness in the relationship between leader narcissism (follower rated) and team CSE (H7a), team CSE was regressed on leader narcissism (t2), team cohesiveness (t2), while controlling for follower gender (t2). The findings showed (Table 5.22) that the interaction of leader narcissism and team cohesiveness was significantly positively associated with team CSE. That is, team cohesiveness moderated the relationship between leader narcissism and team CSE (b = .07, SE = .03, p < .05). An inspection of the simple slopes (Figure 5.2) showed that with low levels of team cohesiveness (1 SD below the mean), the relationship was significant and negatively related to team CSE (b = -.06, SE = .03, p < .05) but not significant at high levels of team cohesiveness (1 SD above the mean) (b = .04, SE = .03, p = .193). In other words, for teams with high cohesiveness, team CSE is higher when their leader is high on narcissism, thus, lending support for H7a.

Figure 5.2: Interaction of leader narcissism and team cohesiveness on team CSE.

**Table 5.23: Hierarchical linear regression results for the test of team cohesiveness as a moderator of the relationship between leader narcissism (leader rated) and team CSE (H7b)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 3.52 | .91 | .018 |
| Follower gender | .27 | .51 | .622 |
| Leader narcissism | .13 | .19 | .541 |
| Team cohesiveness | .09 | .32 | .784 |
| Leader narcissism\*team cohesiveness | .35 | .26 | .241 |

Note. Unstandardized regression coefficients are reported. Bootstrap sample size =5,000. LL = lower limit, CI = confidence interval, UL = upper limit. Gender: 1 = male, 2 = female.

To test the moderating effect of team cohesiveness in the relationship between leader narcissism (leader rated) and team CSE (H7b), team CSE was regressed on leader narcissism (t2), team cohesiveness (t2), while controlling for follower gender (t2). The findings showed (Table 5.23) that the interaction of leader narcissism and team cohesiveness was not significantly positively associated with team CSE. That is, team cohesiveness did not moderate the relationship between leader narcissism and team CSE (b = .35, SE = .26, p = .241). Thus, H7b was not supported.

**Table 5.24: Hierarchical linear regression results for the test of team resilience as a moderator of the relationship between leader narcissism (follower rated) and team CSE (H8a)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 3.61 | .07 | .000 |
| Follower gender | .02 | .04 | .684 |
| Leader narcissism | -.01 | .03 | .664 |
| Team resilience | .16 | .04 | .000 |
| Leader narcissism\*team resilience | .11 | .04 | .012 |

Conditional effects of the focal predictor at the values of the moderator

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Effect | Boot SE | p | Boot LL 95% CI | Boot UL 95% CI |
| -1 SD | -.08 | .04 | .052 | -.17 | .00 |
| Mean | -.02 | .03 | .664 | -.07 | .04 |
| +1SD | .06 | .04 | .092 | -.01 | .13 |

Note. Unstandardized regression coefficients are reported. Bootstrap sample size =5,000. LL = lower limit, CI = confidence interval, UL = upper limit. Gender: 1 = male, 2 = female.

To test the moderating effects of team resilience in the relationship between leader narcissism (follower rated) and team CSE (H8a), team CSE was regressed on leader narcissism (t1), with team resilience (t2) as the moderator, while controlling for follower gender (t2). The findings revealed (Table 5.24) that the interaction of leader narcissism and team resilience was significant positively to team CSE (b = .11, SE = .04, p < .05). The conditional effect of the focal predictor illustrated that with low team resilience (1 SD below the mean), the relationship was not significant (b = -.08, SE = .04, p = .052) and not significant at high levels of team resilience (1 SD above the mean) (b = .06, SE = .04, p = .092). Thus, team resilience is unrelated to team CSE.

**Table 5.25: Hierarchical linear regression results for the test of team resilience as a moderator of the relationship between leader narcissism (leader rated) and team CSE (H8b)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 4.14 | .78 | .013 |
| Follower gender | -.08 | .41 | .854 |
| Leader narcissism | .06 | .25 | .828 |
| Team resilience | .46 | .21 | .117 |
| Leader narcissism\*team resilience | -.35 | .35 | .388 |

Note. Unstandardized regression coefficients are reported. Bootstrap sample size =5,000. LL = lower limit, CI = confidence interval, UL = upper limit. Gender: 1 = male, 2 = female.

To test the moderating effects of team resilience in the relationship between leader narcissism (leader rated) and team CSE (H8a), team CSE was regressed on leader narcissism (t1), with team resilience (t2) as the moderator, while controlling for follower gender (t2). The findings revealed (Table 5.25) that the interaction of leader narcissism (leader rated) and team resilience was not significant to team CSE (b = -.35, SE = .35, p = .388). Therefore, H8b was not supported.

**Table 5.26: Hierarchical linear regression results for the test of climate for psychological safety as a moderator of the relationship between leader narcissism (follower rated) and team CSE (H9a)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 3.67 | .06 | .000 |
| Follower gender | -.00 | .04 | .979 |
| Leader narcissism | .01 | .02 | .649 |
| Climate for psychological safety | .22 | .03 | .000 |
| Leader narcissism\*climate for psychological safety | .08 | .03 | .007 |

Conditional effects of the focal predictor at the values of the moderator

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Effect | Boot SE | p | Boot LL 95% CI | Boot UL 95% CI |
| -1 SD | -.04 | .03 | .144 | -.10 | .02 |
| Mean | .01 | .02 | .649 | -.03 | .05 |
| +1SD | .06 | .03 | .019 | .01 | .12 |

Note. Unstandardized regression coefficients are reported. Bootstrap sample size =5,000. LL = lower limit, CI = confidence interval, UL = upper limit. Gender: 1 = male, 2 = female.

To test the moderating effect of climate for psychological safety in the relationship between leader narcissism (follower rated) and team CSE (H9a), team CSE was regressed on leader narcissism (t2), and climate for psychological safety (t2), while controlling for follower gender (t2). The findings showed (Table 5.26) that the interaction of leader narcissism and climate for psychological safety was significantly positively related to team CSE. That is, as expected, climate for psychological safety moderated the relationship between leader narcissism and team CSE (b = .08, SE = .03, p < .05). Hence, H9a received empirical support. The interactive plot displayed (Figure 5.3) and the simple slop test showed that with low climate of psychological safety (1 SD below the mean), the relationship was not significant (b = -.04, SE = .03, p = .144) but significant and positive at high levels of climate for psychological safety (1 SD above the mean) (b = .06, SE = .03, p < .05). In other words, for teams with high psychological safety, team CSE is higher when their leader is high on narcissism, thus, lending support for H9a.

Figure 5.3: Interaction of leader narcissism and climate for psychological safety on team CSE.

**Table 5.27: Hierarchical linear regression results for the test of climate for psychological safety as a moderator of the relationship between leader narcissism (leader rated) and team CSE (H9b)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 3.87 | .93 | .014 |
| Follower gender | .07 | .49 | .888 |
| Leader narcissism | -.13 | .29 | .683 |
| Climate for psychological safety | .62 | .43 | .225 |
| Leader narcissism\*climate for psychological safety | -.12 | .44 | .799 |

Note. Unstandardized regression coefficients are reported. Bootstrap sample size =5,000. LL = lower limit, CI = confidence interval, UL = upper limit. Gender: 1 = male, 2 = female.

To test the moderating effect of climate for psychological safety in the relationship between leader narcissism (leader rated) and team CSE (H9b), team CSE was regressed on leader narcissism (t2), and climate for psychological safety (t2), while controlling for follower gender (t2). The findings showed (Table 5.27) that the interaction of leader narcissism and climate for psychological safety was not significantly positively related to team CSE. That is, climate for psychological safety did not moderate the relationship between leader narcissism and team CSE (b = -.12, SE = .44, p = .799). Hence, H9b did not receive empirical support.

**Table 5.28: Hierarchical linear regression results for the test of team cohesiveness as a moderator of the relationship between leader narcissism (follower rated) and team burnout via team CSE (H12a)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 3.64 | .07 | .000 |
| Follower gender | -.01 | .06 | .831 |
| Leader narcissism | .04 | .06 | .564 |
| Team cohesiveness | .38 | .06 | .000 |
| Leader narcissism\*team cohesiveness | .15 | .05 | .002 |

Conditional effects of the focal predictor at the values of the moderator

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Effect | Boot SE | p | Boot LL 95% CI | Boot UL 95% CI |
| -1 SD | -.12 | .07 | .123 | -.26 | .03 |
| Mean | .03 | .06 | .604 | -.09 | .15 |
| +1SD | .18 | .08 | .024 | .02 | .33 |

Note. Unstandardized regression coefficients are reported. Bootstrap sample size =5,000. LL = lower limit, CI = confidence interval, UL = upper limit. Gender: 1 = male, 2 = female.

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|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Effect | Boot SE | p | Boot LL 95% CI | Boot UL 95% CI |
| .03 | .01 | .001 | .01 | .06 |

To test the moderated mediation effect of team cohesiveness in the relationship between leader narcissism (follower rated) and team burnout via team CSE (H12a), team burnout (t3) was regressed on leader narcissism (t2), with team cohesiveness (t2) as the moderator, while controlling for follower gender (t2). The findings showed (Table 5.28) that the interaction of leader narcissism and team cohesiveness was significantly positively associated with team CSE. That is, team cohesiveness moderated the relationship between leader narcissism and team CSEs (b = .15, SE = .05, p < .01). An inspection of the simple slopes (Figure 5.4) showed that with low levels of team cohesiveness (1 SD below the mean), the relationship was not significant (b = -.12, SE = .07, p = .123) but it was significant and positive with high levels of team cohesiveness (1 SD above the mean) (b = .18, SE = .08, p < .05). The index of the moderated mediation was significant (index: 0.03, 95% CI [.01; .06]. In other words, for teams with high team cohesiveness, team CSE is higher when their leader is high on narcissism, thus, lending support for H12a.

Figure 5.4: Interaction of leader narcissism and team cohesiveness on team CSE.

**Table 5.29: Hierarchical linear regression results for the test of team cohesiveness as a moderator of the relationship between leader narcissism (leader rated) and team burnout via team CSE (H12b)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 2.25 | .79 | .215 |
| Follower gender | .98 | .41 | .252 |
| Leader narcissism | .02 | .12 | .949 |
| Team cohesiveness | .52 | .19 | .234 |
| Leader narcissism\*team cohesiveness | .60 | .22 | .223 |

Note. Unstandardized regression coefficients are reported. Bootstrap sample size =5,000. LL = lower limit, CI = confidence interval, UL = upper limit. Gender: 1 = male, 2 = female.

To test the moderated mediation effect of team cohesiveness in the relationship between leader narcissism (leader rated) and team burnout via team CSE (H12b), team burnout (t3) was regressed on leader narcissism (t2), with team cohesiveness (t2) as the moderator, while controlling for follower gender (t2). The findings showed (Table 5.29) that the interaction of leader narcissism and team cohesiveness was not significantly associated with team CSE. That is, team cohesiveness did not moderate the relationship between leader narcissism and team CSEs (b = .60, SE = .22, p = .223). Thus, H12b was not supported.

**Table 5.30: Hierarchical linear regression results for the test of team cohesiveness as a moderator of the relationship between leader narcissism (follower rated) and teamwork engagement via team CSE (H12c)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 3.64 | .07 | .000 |
| Follower gender | -.01 | .06 | .831 |
| Leader narcissism | .04 | .06 | .564 |
| Team cohesiveness | .38 | .06 | .000 |
| Leader narcissism\*team cohesiveness | .15 | .05 | .002 |

Conditional effects of the focal predictor at the values of the moderator

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Effect | Boot SE | p | Boot LL 95% CI | Boot UL 95% CI |
| -1 SD | -.12 | .07 | .123 | -.26 | .03 |
| Mean | .03 | .06 | .604 | -.09 | .15 |
| +1SD | .18 | .08 | .024 | .02 | .33 |

Note. Unstandardized regression coefficients are reported. Bootstrap sample size =5,000. LL = lower limit, CI = confidence interval, UL = upper limit. Gender: 1 = male, 2 = female.

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|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Effect | Boot SE | p | Boot LL 95% CI | Boot UL 95% CI |
| .03 | .01 | .001 | .01 | .06 |

To test the moderated mediation effect of team cohesiveness in the relationship between leader narcissism (follower rated) and teamwork engagement via team CSE (H12c), teamwork engagement (t3) was regressed on leader narcissism (t2), with team cohesiveness (t2) as the moderator, while controlling for follower gender (t2). The findings showed (Table 5.30) that the interaction of leader narcissism and team cohesiveness was significantly positive to teamwork engagement. That is, team cohesiveness moderated the relationship between leader narcissism and teamwork engagement (b = .15, SE = .05, p < .01). The interaction plot showed that with low levels of team cohesiveness (1 SD below the mean), the relationship was not significant (b = -.12, SE = .07, p = .123) but it was significant and positive with high levels of team cohesiveness (1 SD above the mean) (b = .18, SE = .08, p < .05). The index of the moderated mediation was significant (index: 0.01, 95% CI [.01; .06]. In other words, for teams with high team cohesiveness, team CSE is higher when their leader is high on narcissism, thus, lending support for H12c.

**Table 5.31: Hierarchical linear regression results for the test of team cohesiveness as a moderator of the relationship between leader narcissism (leader rated) and teamwork engagement via team CSE (H12d)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 2.25 | .79 | .215 |
| Follower gender | .98 | .41 | .252 |
| Leader narcissism | .01 | .12 | .949 |
| Team cohesiveness | .51 | .20 | .234 |
| Leader narcissism\*team cohesiveness | .60 | .22 | .223 |

Note. Unstandardized regression coefficients are reported. Bootstrap sample size =5,000. LL = lower limit, CI = confidence interval, UL = upper limit. Gender: 1 = male, 2 = female.

To test the moderated mediation effect of team cohesiveness in the relationship between leader narcissism (leader rated) and teamwork engagement via team CSE (H12d), teamwork engagement (t3) was regressed on leader narcissism (t2), with team cohesiveness (t2) as the moderator, while controlling for follower gender (t2). The findings showed (Table 5.31) that the interaction of leader narcissism and team cohesiveness was not significantly related to teamwork engagement. That is, team cohesiveness did not moderate the relationship between leader narcissism and teamwork engagement (b = .60, SE = .22, p = .223). Thus, H12d was not supported.

**Table 5.32: Hierarchical linear regression results for the test of team resilience as a moderator of the relationship between leader narcissism (follower rated) and team burnout via team CSE (H13a)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 3.61 | .07 | .000 |
| Follower gender | -.006 | .05 | .901 |
| Leader narcissism | -.01 | .03 | .708 |
| Team resilience | .14 | .04 | .001 |
| Leader narcissism\*team resilience | .12 | .05 | .014 |

Conditional effects of the focal predictor at the values of the moderator

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Effect | Boot SE | p | Boot LL 95% CI | Boot UL 95% CI |
| -1 SD | -.09 | .05 | .060 | -.19 | .00 |
| Mean | -.01 | .03 | .708 | -.08 | .05 |
| +1SD | .07 | .04 | .093 | -.01 | .15 |

Note. Unstandardized regression coefficients are reported. Bootstrap sample size =5,000. LL = lower limit, CI = confidence interval, UL = upper limit. Gender: 1 = male, 2 = female.

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|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Effect | Boot SE | p | Boot LL 95% CI | Boot UL 95% CI |
| .02 | .01 | .070 | .00 | .03 |

To test the moderated mediation effects of team resilience in the relationship between leader narcissism (follower rated) and team burnout via team CSE (H13a), team burnout (t3) was regressed on leader narcissism (t1), with team resilience (t2) as the moderator, while controlling for follower gender (t2). The findings revealed (Table 5.32) that the interaction of leader narcissism and team resilience was significantly positively related to team burnout. In other words, as expected, team resilience moderated the relationship between leader narcissism and team burnout (b = .12, SE = .05, p < .05). The conditional effect of the focal predictor illustrated that with levels of team resilience (1 SD below the mean), the relationship was not significant (b = -.09, SE = .05, p = .060) and not significant with high levels of team resilience (1 SD above the mean) (b = .07, SE = .04, p = .093). However, the index of the moderated mediation was significant (index: 0.01, 95% CI [.01; .03]. Thus, team resilience is unrelated to team CSE and H13a was not supported.

**Table 5.33: Hierarchical linear regression results for the test of team resilience as a moderator of the relationship between leader narcissism (leader rated) and team burnout via team CSE (H13b)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 3.38 | 2.45 | .340 |
| Follower gender | .40 | 1.24 | .803 |
| Leader narcissism | .07 | .39 | .890 |
| Team resilience | .08 | .92 | .944 |
| Leader narcissism\*team resilience | .43 | 1.24 | .803 |

Note. Unstandardized regression coefficients are reported. Bootstrap sample size =5,000. LL = lower limit, CI = confidence interval, UL = upper limit. Gender: 1 = male, 2 = female.

To test the moderated mediation effects of team resilience in the relationship between leader narcissism (leader rated) and team burnout via team CSE (H13b), team burnout (t3) was regressed on leader narcissism (t1), with team resilience (t2) as the moderator, while controlling for follower gender (t2). The findings revealed (Table 5.33) that the interaction of leader narcissism and team resilience was not significantly related to team burnout. In other words, team resilience did not moderate the relationship between leader narcissism (leader rated) and team burnout (b = .43, SE = 1.24, p = .803). Therefore, H13b was not supported.

**Table 5.34: Hierarchical linear regression results for the test of team resilience as a moderator of the relationship between leader narcissism (follower rated) and teamwork engagement via team CSE (H13c)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 3.61 | .07 | .000 |
| Follower gender | -.01 | .05 | .901 |
| Leader narcissism | -.01 | .03 | .708 |
| Team resilience | .14 | .04 | .001 |
| Leader narcissism\*team resilience | .12 | .05 | .014 |

Conditional effects of the focal predictor at the values of the moderator

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Effect | Boot SE | p | Boot LL 95% CI | Boot UL 95% CI |
| -1 SD | -.09 | .05 | .060 | -.19 | .00 |
| Mean | -.01 | .03 | .708 | -.08 | .05 |
| +1SD | .07 | .04 | .093 | -.01 | .15 |

Note. Unstandardized regression coefficients are reported. Bootstrap sample size =5,000. LL = lower limit, CI = confidence interval, UL = upper limit. Gender: 1 = male, 2 = female.

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|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Effect | Boot SE | p | Boot LL 95% CI | Boot UL 95% CI |
| .04 | .01 | .017 | .01 | .08 |

To test the moderated mediation effects of team resilience in the relationship between leader narcissism (follower rated) and teamwork engagement via team CSE (H13c), teamwork engagement (t3) was regressed on leader narcissism (t1), with team resilience (t2) as the moderator, while controlling for follower gender (t2). The findings revealed (Table 5.34) that the interaction of leader narcissism and team resilience was significantly positively related to teamwork engagement. In other words, as expected, team resilience moderated the relationship between leader narcissism and teamwork engagement (b = .12, SE = .05, p < .05). The conditional effect of the focal point illustrated that with low levels of team resilience (1 SD below the mean), the relationship was not significant (b = -.09, SE = .05, p = .060) and not significant with high levels of team resilience (1 SD above the mean) (b = .07, SE = .04, p = .093). However, the index of the moderated mediation was significant (index: 0.01, 95% CI [.01; .08]. Therefore, team resilience is unrelated to team CSE and H13b was not supported.

**Table 5.35: Hierarchical linear regression results for the test of team resilience as a moderator of the relationship between leader narcissism (leader rated) and teamwork engagement via team CSE (H13d)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 3.38 | 2.45 | .400 |
| Follower gender | .340 | 1.24 | .803 |
| Leader narcissism | .068 | .39 | .890 |
| Team resilience | .081 | .92 | .944 |
| Leader narcissism\*team resilience | .43 | 1.24 | .803 |

Note. Unstandardized regression coefficients are reported. Bootstrap sample size =5,000. LL = lower limit, CI = confidence interval, UL = upper limit. Gender: 1 = male, 2 = female.

To test the moderated mediation effects of team resilience in the relationship between leader narcissism (leader rated) and teamwork engagement via team CSE (H13d), teamwork engagement (t3) was regressed on leader narcissism (t1), with team resilience (t2) as the moderator, while controlling for follower gender (t2). The findings revealed (Table 5.35) that the interaction of leader narcissism (leader rated) and team resilience was not significantly related to teamwork engagement (b = .43, SE = 1.24, p = .803). Therefore, H13d was not supported.

**Table 5.36: Hierarchical linear regression results for the test of climate for psychological safety as a moderator of the relationship between leader narcissism (follower rated) and team burnout via team CSE (H14a)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 3.67 | .06 | .586 |
| Follower gender | -.04 | .06 | .518 |
| Leader narcissism | .09 | .06 | .109 |
| Climate for psychological safety | .38 | .06 | .000 |
| Leader narcissism\*climate for psychological safety | .16 | .06 | .006 |

Conditional effects of the focal predictor at the values of the moderator

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Effect | Boot SE | p | Boot LL 95% CI | Boot UL 95% CI |
| -1 SD | -.07 | .09 | .407 | -.25 | .10 |
| Mean | .09 | .06 | .119 | -.02 | .21 |
| +1SD | .26 | .08 | .002 | .09 | .42 |

Note. Unstandardized regression coefficients are reported. Bootstrap sample size =5,000. LL = lower limit, CI = confidence interval, UL = upper limit. Gender: 1 = male, 2 = female.

Index of moderated moderation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Effect | Boot SE | p | Boot LL 95% CI | Boot UL 95% CI |
| .02 | .01 | .001 | .00 | .05 |

To test the moderating effect of climate for psychological safety in the relationship between leader narcissism (follower rated) and team CSE (H14a), team burnout (t3) was regressed on leader narcissism (t2), with climate for psychological safety (t2) as the moderator, while controlling for follower gender (t2). The findings showed (Table 5.36) that the interaction of leader narcissism and climate for psychological safety was significantly positive to team burnout. That is, as expected, climate for psychological safety moderated the relationship between leader narcissism and team burnout (b = .09, SE = .03, p < .05). Hence, H14a received empirical support. The interactive plot displayed (Figure 5.5) and the simple slop test showed that with low climate for psychological safety (1 SD below the mean), the relationship was not significant (b = -.03, SE = .04, p = .407) but significantly positive at high levels of climate for psychological safety (1 SD above the mean) (b = .11, SE = .03, p < .05). The index of the moderated mediation was significant (index: 0.01, 95% CI [.00; .02]. In other words, for teams with high psychological safety, team CSE is higher when their leader is high on narcissism, thus, lending support for H14a.

Figure 5.5: Interaction of leader narcissism and climate for psychological safety on team CSE.

**Table 5.37: Hierarchical linear regression results for the test of climate for psychological safety as a moderator of the relationship between leader narcissism (leader rated) and team burnout via team CSE (H14b)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 3.44 | 2.30 | .456 |
| Follower gender | .25 | 1.43 | .891 |
| Leader narcissism | -.58 | .97 | .659 |
| Climate for psychological safety | 1.26 | .90 | .394 |
| Leader narcissism\*climate for psychological safety | -.12 | .44 | .799 |

Note. Unstandardized regression coefficients are reported. Bootstrap sample size =5,000. LL = lower limit, CI = confidence interval, UL = upper limit. Gender: 1 = male, 2 = female.

To test the moderating effect of climate for psychological safety in the relationship between leader narcissism (leader rated) and team CSE (H14b), team burnout (t3) was regressed on leader narcissism (t2), with climate for psychological safety (t2) as the moderator, while controlling for follower gender (t2). The findings showed (Table 5.37) that the interaction of leader narcissism and climate for psychological safety was not significantly to team burnout (b = -.12, SE = .44, p = .799). Hence, H14b did not receive empirical support.

**Table 5.38: Hierarchical linear regression results for the test of climate for psychological safety as a moderator of the relationship between leader narcissism (follower rated) and teamwork engagement via team CSE (H14c)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 3.67 | .06 | .586 |
| Follower gender | -.04 | .06 | .518 |
| Leader narcissism | .09 | .06 | .109 |
| Climate for psychological safety | .38 | .06 | .000 |
| Leader narcissism\*climate for psychological safety | .16 | .06 | .006 |

Conditional effects of the focal predictor at the values of the moderator

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Effect | Boot SE | p | Boot LL 95% CI | Boot UL 95% CI |
| -1 SD | -.07 | .09 | .407 | -.25 | .10 |
| Mean | .09 | .06 | .119 | -.02 | .21 |
| +1SD | .26 | .08 | .002 | .09 | .42 |

Note. Unstandardized regression coefficients are reported. Bootstrap sample size =5,000. LL = lower limit, CI = confidence interval, UL = upper limit. Gender: 1 = male, 2 = female.

Index of moderated moderation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Effect | Boot SE | p | Boot LL 95% CI | Boot UL 95% CI |
| .02 | .01 | .001 | .00 | .05 |

To test the moderating effect of climate for psychological safety in the relationship between leader narcissism (follower rated) and team CSE (H14c), teamwork engagement (t3) was regressed on leader narcissism (t2), with climate for psychological safety (t2) as the moderator, while controlling for follower gender (t2). The findings showed (Table 5.38) that the interaction of leader narcissism and climate for psychological safety was significantly positive to teamwork engagement. That is, as expected, climate for psychological safety moderated the relationship between leader narcissism and teamwork engagement (b = .09, SE = .03, p < .05). Hence, H14c received empirical support. The simple slop test showed that with low levels of climate for psychological safety (1 SD below the mean), the relationship was not significant (b = -.03, SE = .04, p = .407) but significantly positive at high levels of climate for psychological safety (1 SD above the mean) (b = .11, SE = .03, p < .05). The index of the moderated mediation was significant (index: 0.03, 95% CI [.01; .05]. In other words, for teams with high psychological safety, team CSE is higher when their leader is high on narcissism, thus, lending support for H14c.

**Table 5.39: Hierarchical linear regression results for the test of climate for psychological safety as a moderator of the relationship between leader narcissism (leader rated) and teamwork engagement via team CSE (H14d)**

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | B | SE | p |
| Constant | 3.44 | 2.30 | .456 |
| Follower gender | .25 | 1.43 | .891 |
| Leader narcissism | -.58 | .97 | .659 |
| Climate for psychological safety | 1.26 | .90 | .394 |
| Leader narcissism\*climate for psychological safety | -.12 | .44 | .799 |

Note. Unstandardized regression coefficients are reported. Bootstrap sample size =5,000. LL = lower limit, CI = confidence interval, UL = upper limit. Gender: 1 = male, 2 = female.

To test the moderating effect of climate for psychological safety in the relationship between leader narcissism (leader rated) and team CSE (H14d), teamwork engagement (t3) was regressed on leader narcissism (t2), with climate for psychological safety (t2) as the moderator, while controlling for follower gender (t2). The findings showed (Table 5.39) that the interaction of leader narcissism and climate for psychological safety was not significantly related to teamwork engagement (b = -.12, SE = .44, p = .799). Hence, H14d did not receive empirical support.

# 5.3 Supplementary analysis

I ran a supplementary analysis on the mediation between leader narcissism, the sub-dimensions of CSE (self-esteem, generalised self-efficacy, neuroticism, and locus of control), and outcome variables (burnout and work engagement) at the individual and team levels. Initially, the mediating hypotheses were H1e, and 1f at the individual level and H5e and 5f at the team level. At the individual level, CSE did not mediate the relationship between leader narcissism and burnout as well as the relationship between leader narcissism and work engagement. Also, at the team level, team CSE did not mediate the leader narcissism and team burnout link as well as the leader narcissism-teamwork engagement link. This section showcases the description of the measures, correlation matric of self-esteem, generalised self-efficacy, neuroticism, and locus of control at the individual and team levels. The results of the mediation analysis are also reported.

*Self-esteem* has 3 items containing statements that “I am confident I get the success I deserve”, “overall, I am satisfied with myself” and “when I try, I generally succeed”. The reliability scores for individual team members are time 1 (α = .59), time 2 (α = .58), time 3 (α = .58). The means and standard deviations are for time 1 *(M = 3.95, SD = 0.82)*, time *2 (M = 3.95, SD = 0.75)*, time 3 *(M = 4.07, SD = 0.67).*

*Generalised self-efficacy* has 3 items containing statements that “I am filled with doubts about my competence” (r), “I am capable of coping with most of my problems”, and “I complete tasks successfully”. The reliability scores for individual team members are time 1 (α = .47), time 2 (α = .28), time 3 (α = .40). The means and standard deviations are for time 1 *(M = 4.25, SD = 0.72)*, time *2 (M = 4.36, SD = 0.57)*, time 3 *(M = 4.30, SD = 0.57).*

*Neuroticism* has 3 items containing statements that “sometimes I feel depressed” (r), “there are times when things look pretty bleak and hopeless to me” (r), and “sometimes when I fail, I feel worthless” (r). The reliability scores for individual team members are time 1 (α = .44), time 2 (α = .43), time 3 (α = .46). The means and standard deviations are for time 1 *(M = 3.50, SD = 0.88)*, time *2 (M = 3.56, SD = 0.85)*, time 3 *(M = 3.49, SD = 0.98).*

*Locus of control* has 3 items containing statements that “I determine what will happen in my life”, sometimes I do not feel in control of my work” (r) and “I do not feel in control of my success in my career” (r). The reliability scores for individual team members are time 1 (α = .58), time 2 (α = .73), time 3 (α = .68). The means and standard deviations are for time 1 *(M = 2.88, SD = 0.98)*, time *2 (M = 2.89, SD = 1.10)*, time 3 *(M = 3.49, SD = 0.98).*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 5.40: Mean, S.D. and correlations (individual level)** | | | | |  | | | |
| **Variables** | **M** | **S.D** | | **1** | | | | **2** | | | **3** | | **4** | | **5** | | **6** | | **7** | | **8** | | **9** | | **10** | | | **11** | | **12** | | **13** | | **14** |
| 1. Social desirability -t1 | 1.61 | .17 | |  | | | |  | | |  | |  | |  | |  | |  | |  | |  | |  | | |  | |  | |  | |  |
| 2. Leader narcissism -t2 | 5.24 | 1.08 | | .12\* | | | | (.91) | | |  | |  | |  | |  | |  | |  | |  | |  | | |  | |  | |  | |  |
| 3. Self-esteem -t1 | 3.95 | .82 | | -.14\*\* | | | | -.13\*\* | | | (.59) | |  | |  | |  | |  | |  | |  | |  | | |  | |  | |  | |  |
| 4. Gen. self-efficacy -t1 | 4.25 | .72 | | -.04 | | | | -.09 | | | .48\*\* | | (.47) | |  | |  | |  | |  | |  | |  | | |  | |  | |  | |  |
| 5. Locus of control -t1 | 3.50 | .88 | | -.10\* | | | | -.09 | | | .51\*\* | | .31\*\* | | (.44) | |  | |  | |  | |  | |  | | |  | |  | |  | |  |
| 6. Neuroticism -t1 | 2.88 | .98 | | -.15\*\* | | | | -.12\*\* | | | .31\*\* | | .09 | | .44\*\* | | (.58) | |  | |  | |  | |  | | |  | |  | |  | |  |
| 7. Self-esteem -t2 | 3.95 | .75 | | -.17\*\* | | | | -.00 | | | .19\*\* | | -.14\* | | -.09 | | .18\*\* | | (.58) | |  | |  | |  | | |  | |  | |  | |  |
| 8. Gen. self-efficacy -t2 | 4.36 | .57 | | .01 | | | | .16\*\* | | | .05 | | .21\*\* | | .07 | | .00 | | .36\*\* | | (.28) | |  | |  | | |  | |  | |  | |  |
| 9. Locus of control -t2 | 3.46 | .85 | | .09 | | | | .02 | | | .06 | | -.15\* | | .11 | | .15\* | | .53\*\* | | .30\*\* | | (.43) | |  | | |  | |  | |  | |  |
| 10. Neuroticism -t2 | 2.89 | 1.10 | | -.14\* | | | | .03 | | | .07 | | .07 | | -.03 | | .13\* | | .44\*\* | | .03 | | .57\*\* | | (.73) | | |  | |  | |  | |  |
| 11.Self-esteem -t3 | 4.07 | .67 | | -.07 | | | | .13\* | | | .07 | | -.03 | | -.00 | | -.01 | | .26\*\* | | .25\*\* | | .17\*\* | | .04 | | | (.58) | |  | |  | |  |
| 12. Gen. self-efficacy-t3 | 4.30 | .57 | | -.02 | | | | .08 | | | .00 | | .05 | | -.02 | | .08 | | .18\*\* | | .24\*\* | | .13\* | | .05 | | | .48\*\* | | (.40) | |  | |  |
| 13. Locus of control -t3 | 3.72 | .79 | | -.02 | | | | .08 | | | .05 | | -.07 | | .14\* | | .05 | | .19\* | | .24\*\* | | .32\*\* | | .13\* | | | .54\*\* | | .36\*\* | | (.46) | |  |
| 14. Neuroticism - t3 | 3.49 | .98 | | .01 | | | | -.01 | | | .09 | | -.01 | | .11 | | .22\*\* | | .15\* | | .11 | | .25\*\* | | .27\*\* | | | .28\*\* | | .21\*\* | | .55\*\* | | (.68) |
| Time 1-N=439 (team members)  Time 2-N=348 (team members)  Time 3-N=293 (team members) | | | | |  | | | |
| \**p* < .05. \*\**p* < .01. | | |  | | |  |  | | |  | |  | |  | |  | |  | |  | |  | |  | |  |  | |  | |  | |

Note: Internal consistencies (Cronbach’s alpha) in parentheses.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table 5.41: Mean, S.D. and correlations (team level)** | | | | |  | | | |
| **Variables** | **M** | **S.D** | | **1** | | | | **2** | | | **3** | | **4** | | **5** | | **6** | | **7** | | **8** | | **9** | | **10** | | | **11** | | **12** | | **13** | | **14** |
| 1. Social desirability -t1 | 1.61 | .17 | |  | | | |  | | |  | |  | |  | |  | |  | |  | |  | |  | | |  | |  | |  | |  |
| 2. Leader narcissism -t2 | 5.24 | 1.08 | | .12\* | | | | (.91) | | |  | |  | |  | |  | |  | |  | |  | |  | | |  | |  | |  | |  |
| 3. Team self-esteem -t1 | 3.95 | .52 | | -.09 | | | | -.05 | | |  | |  | |  | |  | |  | |  | |  | |  | | |  | |  | |  | |  |
| 4. Team self-efficacy -t1 | 4.25 | .45 | | -.01 | | | | -.11 | | | .56\*\* | |  | |  | |  | |  | |  | |  | |  | | |  | |  | |  | |  |
| 5. Team locus of control-t1 | 3.50 | .54 | | -.08 | | | | -.15\* | | | .61\*\* | | .41\*\* | |  | |  | |  | |  | |  | |  | | |  | |  | |  | |  |
| 6. Team neuroticism -t1 | 2.88 | .59 | | -.08 | | | | -.08 | | | .41\*\* | | .17\*\* | | .54\*\* | |  | |  | |  | |  | |  | | |  | |  | |  | |  |
| 7. Team self-esteem -t2 | 3.95 | .46 | | -.17\*\* | | | | -.06 | | | .26\*\* | | .23\*\* | | -.07 | | .19\*\* | |  | |  | |  | |  | | |  | |  | |  | |  |
| 8. Team self-efficacy -t2 | 4.36 | .35 | | -.03 | | | | .02 | | | .15\* | | .26\*\* | | .14\*\* | | .05 | | .46\*\* | |  | |  | |  | | |  | |  | |  | |  |
| 9. Team locus of control-t2 | 3.46 | .58 | | -.06 | | | | .01 | | | .12\* | | .21\*\* | | .07 | | .12\* | | .67\*\* | | .28\*\* | |  | |  | | |  | |  | |  | |  |
| 10. Team neuroticism -t2 | 2.89 | .80 | | -.07 | | | | .05 | | | .06 | | .08 | | -.11 | | .12 | | .57\*\* | | .02 | | .72\*\* | |  | | |  | |  | |  | |  |
| 11. Team self-esteem -t3 | 4.07 | .42 | | -.21\*\* | | | | .16\*\* | | | .12 | | .04 | | .01 | | .03 | | .29\*\* | | .17\*\* | | .16\*\* | | .07 | | |  | |  | |  | |  |
| 12. Team self-efficacy-t3 | 4.30 | .36 | | -.11 | | | | .03 | | | .09 | | .10 | | .12 | | .19\*\* | | .25\*\* | | .25\*\* | | .23\* | | .23\*\* | | | .54\*\* | |  | |  | |  |
| 13. Team l. of controlt3 | 3.72 | .48 | | -.08 | | | | .15\* | | | -.03 | | -.03 | | .07 | | .08 | | .22\*\* | | .14\* | | .40\*\* | | .27\*\* | | | .59\*\* | | .45\*\* | |  | |  |
| 14. Team neuroticism - t3 | 3.49 | .68 | | .02 | | | | .07 | | | .12 | | -.04 | | .10 | | .28\*\* | | .24\* | | .09 | | .33\*\* | | .34\*\* | | | .31\*\* | | .31\*\* | | .65\*\* | |  |
| Time 1-N=439 (team members)  Time 2-N=348 (team members)  Time 3-N=293 (team members) | | | | |  | | | |
| \**p* < .05. \*\**p* < .01. | | |  | | |  |  | | |  | |  | |  | |  | |  | |  | |  | |  | |  |  | |  | |  | |

Note: Internal consistencies (Cronbach’s alpha) in parentheses.

**Table 5.42: Bootstrap results for the indirect effect of leader narcissism on burnout via CSE sub-dimensions**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Pair | Effect | | Boot SE | Boot Boot  Lower 95% CI / Upper CI 95% CI |
| LNPI → SE →B | .00 | | .00 | -.01 / .02 |
| LNPI → SEF →B | .01 | | .01 | .00 / .02 |
| LNPI → LOC →B | .00 | | .00 | -.00 / .01 |
| LNPI → NEU →B | | .00 | .00 | -.00 / .01 |

The indirect effect of leader narcissism on burnout via the sub-dimensions of CSE (self-esteem, self-efficacy, locus of control and neuroticism), shows that self-esteem did not mediate the leader narcissism-individual burnout link (b*=* .00; SE = .002, p < .001), as zero is included in the 95% C.I [-.01; 02]. However, self-efficacy mediated the relationship between leader narcissism and individual burnout (b*=* .01; SE = .01, p < .001), as zero is not included in the 95% C.I [.00; .02]. Furthermore, locus of control did not mediate the leader narcissism-individual burnout link (b*=* .00; SE = .00, p < .001), as zero is included in the 95% C.I [-.00; .01]. Lastly, neuroticism did not mediate the relationship between leader narcissism and individual burnout (b*=* .00; SE = .00, p < .001), as zero is included in the 95% C.I [-.00; .01].

**Table 5.43: Bootstrap results for the indirect effect of leader narcissism on work engagement via CSE sub-dimensions**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Pair | Effect | | Boot SE | Boot Boot  Lower 95% CI / Upper CI 95% CI |
| LNPI → SE →WE | -.01 | | .01 | -.03 / -.00 |
| LNPI → SEF →WE | .03 | | .02 | .00 / .06 |
| LNPI → LOC →WE | -.01 | | .01 | -.02 / .00 |
| LNPI → NEU →WE | | -.00 | .01 | -.01 / .00 |

The indirect effect of leader narcissism on work engagement via the sub-dimensions of CSE (self-esteem, self-efficacy, locus of control and neuroticism), shows that self-esteem mediated the leader narcissism-individual work engagement link (b*=* -.01; SE = .01, p < .001), as zero is not included in the 95% C.I [-.03; -.00]. Also, self-efficacy mediated the relationship between leader narcissism and individual burnout (b*=* .03; SE = .02, p < .001), as zero is not included in the 95% C.I [.00; .06]. Furthermore, locus of control did not mediate the leader narcissism-individual burnout link (b*=* -.01; SE = .01, p < .001), as zero is included in the 95% C.I [-.01; .01]. Lastly, neuroticism did not mediate the relationship between leader narcissism and individual burnout (b*=* -.00; SE = .01, p < .001), as zero is included in the 95% C.I [-.01; .00].

**Table 5.44: Bootstrap results for the indirect effect of leader narcissism on team burnout via team CSE and sub-dimensions**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Pair | Effect | | Boot SE | Boot Boot  Lower 95% CI / Upper CI 95% CI |
| LNPI → TSE →TB | -.00 | | .00 | -.01 / .00 |
| LNPI → TSEF →TB | -.00 | | .00 | -.01 / .01 |
| LNPI → TLOC →TB | -.00 | | .00 | -.01 / .01 |
| LNPI → TNEU →TB | | .00 | .00 | -.00 / .01 |

The indirect effect of leader narcissism and team burnout via the sub-dimensions of team CSE (team self-esteem, team self-efficacy, team locus of control and team neuroticism), shows that team self-esteem did not mediate the leader narcissism-team burnout link (b*=* -.00; SE = .00, p < .001), as zero is included in the 95% C.I [-.01; .00]. Also, self-efficacy did not mediate the relationship between leader narcissism and team burnout (b*=* -.00; SE = .00, p < .001), as zero is included in the 95% C.I [-.01; .01]. Similarly, locus of control did not mediate the leader narcissism-team burnout link (b*=* -.00; SE = .00, p < .001), as zero is included in the 95% C.I [-.01; .01]. Lastly, neuroticism did not mediate the relationship between leader narcissism and team burnout (b*=* .00; SE = .00, p < .001), as zero is included in the 95% C.I [-.00; .01].

**Table 5.45: Bootstrap results for the indirect effect of leader narcissism on teamwork engagement via team CSE sub-dimensions**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Pair | Effect | | Boot SE | Boot Boot  Lower 95% CI / Upper CI 95% CI |
| LNPI → TSE →TWE | -.01 | | .01 | -.03 / -.00 |
| LNPI→ TSEF→TWE | -.01 | | .01 | -.03 / .00 |
| LNPI→TLOC→TWE | .00 | | .01 | -.01 / .01 |
| LNPI →TNEU →TWE | | .01 | .00 | -.00 / .02 |

The indirect effect of leader narcissism on teamwork engagement via the sub-dimensions of team CSE (team self-esteem, team self-efficacy, team locus of control and team neuroticism), shows that team self-esteem mediated the leader narcissism-teamwork engagement link (b*=* -.0126; SE = .0063, p < .001), as zero is not included in the 95% C.I [-.03; -.00]. Conversely, self-efficacy did not mediate the relationship between leader narcissism and teamwork engagement (b*=* -.01; SE = .01, p < .001), as zero is included in the 95% C.I [-.03; .00]. Furthermore, locus of control did not mediate the leader narcissism-teamwork engagement link (b*=* .00; SE = .01, p < .001), as zero is included in the 95% C.I [-.01; .01]. Lastly, neuroticism did not mediate the relationship between leader narcissism and teamwork engagement (b*=* .01; SE = .00, p < .001), as zero is included in the 95% C.I [-.00; .02].

Figure 5.6. A multilevel model of the effects of leader narcissism on follower and team outcomes (with an indication of the results)

H5a &b

H4a &b

H6a &b

H7a&b, 8a&b, 9a&b

H5c &d

H1c &d

H3a &b

H2a &b

H1a &b

Team level

Individual level

*Notes. H10-H14 represented moderated mediation hypotheses*

*Green lettering indicates that the hypothesis was supported, red that it was not supported and blue that the findings provide mixed support for the hypotheses.*

The figure above is a repeat of the research model showing the study constructs and an overview of the hypotheses that were significant and those that were not significant. Findings show that follower-rated leader narcissism significantly related to individual CSE (H1a) while leader-rated leader narcissism did not (H1b). The relationships of individual CSE to individual burnout and work engagement were both significant (H1c&d). Follower narcissism did not moderate the relationship between leader narcissism and individual CSE for both follower-rated and leader-rated leader narcissism (H2a&b). Similarly, follower gender did not moderate the relationship between leader narcissism and individual CSE both for follower-rated and leader-rated leader narcissism (H3a&b). Leader gender did not moderate the relationship between leader narcissism and individual CSE both for follower-rated and leader rated leader narcissism (H4a&b).

At the team level, follower-rated leader narcissism was significantly related to team CSE (H5a) while leader-rated leader narcissism was not significantly related to team CSE (H5b). Moreover, team CSE was significantly related to both teamwork burnout and teamwork engagement (H5c&d). Additionally, leader gender did not moderate the relationship between leader narcissism and team CSE both for follower rated and leader rated leader narcissism (H6a&b). Furthermore, the moderating roles of team cohesiveness, team resilience, and climate for psychological safety had mixed results. For the moderating role of team cohesiveness (H7&7b), the relationship was significant for follower-rated leader narcissism and not for leader-rated leader narcissism. For the moderating role of team resilience, the relationship was not significant for both follower-rated and leader-rated leader narcissism (H8a&8b) while the moderating role of climate for psychological safety (H9a&9b) in the link between leader narcissism and team CSE was significant when followers rated their leader narcissism and not for leader self-rated narcissism.

For the moderated mediation relationships at the cross level, follower narcissism did not moderate the relationships between leader narcissism and individual burnout and work engagement via individual CSE when for follower-rated leader narcissism (H10a&c) but did for leader-rated narcissism (H10b&d). In addition, leader gender did not moderate the relationships between follower-rated leader narcissism and individual burnout and work engagement via individual CSE (H11a&b). At the team level, team cohesiveness moderated the relationships between leader narcissism and team burnout as well as teamwork engagement via team CSE only for follower-rated leader narcissism (H12a&c) but not for leader-rated narcissism (H12b&d). Conversely, team resilience did not moderate the relationships between follower-rated and leader-rated leader narcissism and team burnout and work engagement via team CSE (H13a-d). Finally, climate for psychological safety moderated the relationships between leader narcissism and team burnout as well as teamwork engagement via team CSE for follower-rated leader narcissism (H14a&c) but not for leader-rated narcissism (H14b&d). Next, is a summary table of the hypothetical relationships and decisions.

**Table 5.46: Summary of hypotheses testing**

|  |  |
| --- | --- |
| **Hypothetical Relationships** | **Decision** |
| H1a: Leader narcissism (follower rated) is negatively related to individual CSE. | Supported. |
| H1b: Leader narcissism (leader rated) is negatively related to individual CSE. | Not supported. |
| H1c: Individual CSE is negatively related to individual burnout. | Supported. |
| H1d: Individual CSE is positively related to work engagement. | Supported. |
| H1e: The relationship between leader narcissism and individual burnout will be mediated by individual CSE. | Not supported. |
| H1f: The relationship between leader narcissism and individual work engagement will be mediated by individual CSE. | Not supported. |
| H2a: The relationship between leader narcissism (follower rated) and individual CSE will be moderated by followers’ narcissism, such that follower narcissism partially buffers the negative effect of leader narcissism on individual CSE. | Not supported. |
| H2b: The relationship between leader narcissism (leader rated) and individual CSE is moderated by followers’ narcissism, such that follower narcissism partially buffers the negative effect of leader narcissism on individual CSE, more for followers high in narcissism as compared to those low in narcissism. | Not supported. |
| H3a: The relationship between leader narcissism (follower rated) and individual CSE will be moderated by followers’ gender, such that the relationship will be stronger for female followers. | Not supported. |
| H3b: The relationship between leader narcissism (leader rated) and individual CSE is moderated by followers’ gender, such that the relationship will be stronger for female followers as compared to male followers. | Not supported. |
| H4a: The relationship between leader narcissism (follower rated) and individual CSE will be moderated by leader gender, such that the negative relationship will be stronger (more negative) when the leader is female. | Not supported. |
| H4b: The relationship between leader narcissism (leader rated) and individual CSE is moderated by leader gender, such that the negative relationship will be stronger when the leader is female as opposed to male. | Not supported. |
| H5a: Leader narcissism (follower rated) is negatively related to team CSE. | Supported. |
| H5b: Leader narcissism (leader rated) is negatively related to team CSE. | Not supported. |
| H5c: Team CSE is negatively related to team burnout. | Supported. |
| H5d: Team CSE is positively related to teamwork engagement. | Supported. |
| H5e: Team CSE will mediate the relationship between leader narcissism (follower rated) and team burnout. | Not supported. |
| H5f: Team CSE will mediate the relationship between leader narcissism (follower rated) and work engagement. | Not supported. |
| H6a: The relationship between leader narcissism (follower rated) and team CSE will be moderated by leader gender, such that the negative relationship will be accentuated (more negative) when the leader is female as compared to male. | Not supported. |
| H6b: The relationship between leader narcissism (leader rated) and team CSE will be moderated by leader gender, such that the negative relationship will be accentuated (more negative) when the leader is female as compared to male. | Not supported. |
| H7a: The relationship between leader narcissism (follower rated) and team CSE will be moderated by team cohesiveness, such that the negative relationship will be weaker under high team cohesiveness than under low team cohesiveness. | Supported. |
| H7b: The relationship between leader narcissism (leader rated) and team CSE will be moderated by team cohesiveness, such that the negative relationship will be weaker under high team cohesiveness than under low team cohesiveness. | Not supported. |
| H8a: The relationship between leader narcissism (follower rated) and team CSE will be moderated by team resilience, such that the negative relationship will be weaker under high team resilience than under low team resilience. | Not supported. |
| H8b: The relationship between leader narcissism (leader rated) and team CSE will be moderated by team resilience, such that the negative relationship will be weaker under high team resilience than under low team resilience. | Not supported. |
| H9a: The relationship between leader narcissism (follower rated) and team CSE will be moderated by climate for psychological safety, such that the negative relationship will be weaker under a strong climate for psychological safety than under a weak climate for psychological safety. | Supported. |
| H9b: The relationship between leader narcissism (leader rated) and team CSE will be moderated by climate for psychological safety, such that the negative relationship will be weaker under a strong climate for psychological safety than under a weak climate for psychological safety. | Not supported. |
| H10a: Follower narcissism will moderate the relationship between leader narcissism (follower rated) and individual burnout via individual CSE, such that follower narcissism partially buffers the negative effect of leader narcissism on individual CSE. | Not supported. |
| H10b: Follower narcissism will moderate the relationship between leader narcissism (leader rated) and individual burnout via individual CSE, such that follower narcissism partially buffers the negative effect of leader narcissism on individual CSE. | Supported. |
| H10c: Follower narcissism will moderate the relationship between leader narcissism (follower rated) and individual work engagement via individual CSE, such that follower narcissism partially buffers the negative effect of leader narcissism on individual CSE. | Not supported. |
| H10d: Follower narcissism will moderate the relationship between leader narcissism (leader rated) and individual work engagement via individual CSE, such that follower narcissism partially buffers the negative effect of leader narcissism on individual CSE. | Supported. |
| H11a: Followers’ gender will moderate the relationship between leader narcissism (follower rated) and individual burnout via individual CSE, such that the relationship will be stronger for female followers. | Not supported. |
| H11b: Followers’ gender will moderate the relationship between leader narcissism (follower rated) and individual work engagement via individual CSE, such that the relationship will be stronger for female followers. | Not supported. |
| H12a: Team cohesiveness will moderate the relationship between leader narcissism (follower rated) and team burnout via team CSE, such that the negative relationship will be weaker under high team cohesiveness than under low team cohesiveness. | Supported. |
| H12b: Team cohesiveness will moderate the relationship between leader narcissism (leader rated) and team burnout via team CSE, such that the negative relationship will be weaker under high team cohesiveness than under low team cohesiveness. | Not supported. |
| H12c: Team cohesiveness will moderate the relationship between leader narcissism (follower rated) and teamwork engagement via team CSE, such that the negative relationship will be weaker under high team cohesiveness than under low team cohesiveness. | Supported. |
| H12d: Team cohesiveness will moderate the relationship between leader narcissism (leader rated) and teamwork engagement via team CSE, such that the negative relationship will be weaker under high team cohesiveness than under low team cohesiveness. | Not supported. |
| H13a: Team resilience will moderate the relationship between leader narcissism (follower rated) and team burnout via team CSE, such that the negative relationship will be weaker under high team resilience than under low team resilience. | Not supported. |
| H13b: Team resilience will moderate the relationship between leader narcissism (leader rated) and team burnout via team CSE, such that the negative relationship will be weaker under high team resilience than under low team resilience. | Not supported. |
| H13c: Team resilience will moderate the relationship between leader narcissism (follower rated) and teamwork engagement via team CSE, such that the negative relationship will be weaker under high team resilience than under low team resilience. | Not supported. |
| H13d: Team resilience will moderate the relationship between leader narcissism (leader rated) and teamwork engagement via team CSE, such that the negative relationship will be weaker under high team resilience than under low team resilience. | Not supported. |
| H14a: Climate for psychological safety will moderate the relationship between leader narcissism (follower rated) and team burnout via team CSE, such that the negative relationship will be weaker under a strong climate for psychological safety than under a weak climate for psychological safety. | Supported. |
| H14b: Climate for psychological safety will moderate the relationship between leader narcissism (leader rated) and team burnout via team CSE, such that the negative relationship will be weaker under a strong climate for psychological safety than under a weak climate for psychological safety. | Not supported. |
| H14c: Climate for psychological safety will moderate the relationship between leader narcissism (follower rated) and teamwork engagement via team CSE, such that the negative relationship will be weaker under a strong climate for psychological safety than under a weak climate for psychological safety. | Supported. |
| H14d: Climate for psychological safety will moderate the relationship between leader narcissism (leader rated) and teamwork engagement via team CSE, such that the negative relationship will be weaker under a strong climate for psychological safety than under a weak climate for psychological safety. | Not supported. |

# 5.4 Summary

This chapter presented the results of the data analysis. The correlation matrix between the study constructs was first displayed. Thereafter the hypothetical relationships were tested at the individual, cross and team levels using analytical methods including hierarchical regression, mediation, moderation, moderated mediation, and multilevel analyses. The next chapter will present the discussion of findings and the conclusion of the thesis.

# CHAPTER SIX- DISCUSSION AND CONCLUSION

# 6.1 Introduction

Researchers have become more interested in narcissism in order to achieve a better understanding of negative behaviours in the workplace (Grijalva *et al.,* 2015). This has led to an increase in research on negative forms of leadership, such as leader narcissism, especially in the work psychology and management literatures. The main objective of this thesis was to examine the effects of leader narcissism on employee and team burnout and work engagement. This thesis also aimed to understand which leader, follower and team characteristics shape the relationship between leader narcissism and well-being and what processes explain these links. To achieve these objectives, this research drew on identity theory (Stryker, 1968), social identity threat theory (Breakwell, 1986) and role congruity theory (Eagly & Karau, 2002). Specifically, at the individual level, I proposed that follower CSE mediate the relationship between leader narcissism and individual burnout and work engagement. Also, leader gender, follower gender and follower narcissism moderate the leader narcissism-CSE link. At the team level, I proposed that team CSE mediates the relationships between leader narcissism and team burnout and teamwork engagement. Lastly, I proposed that leader gender and the team characteristics of cohesiveness, resilience and climate for psychological safety moderate the leader narcissism-team CSE link.

To test the proposed relationships, data was collected from organisational leaders and followers nested in teams from multiple Nigerian organisations at three points in time. This present chapter summarises the findings of the research and discusses them in the context of existing research. This is followed by a discussion of the theoretical contributions and implications for management practice. It also highlights the limitations and strengths of the thesis and recommendations for future studies. This chapter ends with a concluding note.

# 6.2 Summary of key findings

The findings of the research fully supported 16 out of 44 hypotheses. Since the model involved both individual and team constructs, the individual ratings of CSE, burnout, work engagement were aggregated to the team level to arrive at team CSE, team burnout and teamwork engagement. The summary of key findings of this research is presented below for the individual and cross-level followed by the team level.

## 6.2.1. Individual level and cross-level

The findings obtained from the hierarchical regression analysis showed that follower-rated leader narcissism was negatively related to individual CSE, while leader-rated narcissism was not a significant predictor of individual CSE, confirming the hypothesis only partially. Furthermore, individual CSE was significantly positively related to individual burnout and individual work engagement.

Furthermore, CSE did not mediate the relationships between follower-rated leader narcissism and burnout or work engagement. In the moderation analysis, follower narcissism did not moderate the relationship between both follower-rated and leader-rated leader narcissism and individual CSE. Also, when tested using a moderated mediation model, follower narcissism did not moderate the relationship between follower-rated leader narcissism and individual burnout or work engagement via CSE. This was not the case in the indirect relationship between leader-rated leader narcissism and individual burnout or work engagement via CSE, as follower narcissism moderated the relationship, thus, the hypothesis was partially confirmed. Relatedly, followers’ gender did not moderate the relationship between both follower-rated and leader-rated leader narcissism and individual CSE. Also, when tested using a moderated mediation model, follower gender did not moderate the relationship between follower-rated leader narcissism and individual burnout or work engagement via CSE. Lastly, leader gender did not moderate the relationship between both follower-rated and leader-rated leader narcissism and individual CSE. Taken together, leader narcissism was negatively related to individual CSE only when followers rated their leader narcissism while individual CSE was significantly related to individual burnout and work engagement. CSE did not mediate the leader narcissism-individual burnout or work engagement link and there was no support for the moderating role of follower gender and leader gender in the leader narcissism-individual CSE links when both followers and leader were the rating sources of leader narcissism. In the moderated mediation model, the relationship between leader narcissism and individual burnout or work engagement via CSE was only significant when leaders rated their narcissism and not when followers rated their leader narcissism.

## 6.2.2. Team level

The findings obtained at the team level of the analysis showed that follower-rated leader narcissism was significantly negatively related to team CSE, while leader-rated narcissism was not a significant predictor of CSE confirming the hypothesis only partially. Similarly, team CSE was significantly positively related to both team burnout and work engagement. However, team CSE did not mediate the indirect relationship between follower-rated leader narcissism and team burnout as well as the indirect relationship between follower-rated leader narcissism and teamwork engagement.

Furthermore, results from the moderation analysis showed that leader gender did not moderate the relationship between both follower-rated and leader-rated leader narcissism and team CSE. However, team cohesiveness moderated the relationship between leader narcissism and team CSE such that team CSE was higher when their leader was high on narcissism only for follower-rated leader narcissism, which was not the case for leader-rated leader narcissism. Conversely, team resilience did not moderate the relationship between both follower-rated and leader-rated leader narcissism and team CSE. Additionally, climate for psychological safety moderated the relationship between leader narcissism and team CSE such that team CSE was higher when their leader was high on narcissism only for follower-rated narcissism but not for leader-rated narcissism. Taken together, while leader gender did not moderate the relationship between leader narcissism and team CSE for both follower-rated and leader-rated narcissism, the three-team characteristics of cohesiveness, resilience, and climate for psychological safety had mixed results, such that team cohesiveness and climate for psychological safety were significant for the leader narcissism-team CSE link when followers rated their leader’s narcissism and not when leaders rated their narcissism. However, team resilience did not moderate the leader narcissism-team CSE both for the follower and leader-rated narcissism.

Testing the team level model using moderated mediation analysis showed that team cohesiveness moderated the relationship between leader narcissism and team burnout as well as teamwork engagement via team CSE only for follower-rated leader narcissism but not for leader-rated narcissism. Conversely, team resilience did not moderate the relationship between follower-rated and leader-rated leader narcissism and team burnout and work engagement via team CSE. Additionally, climate for psychological safety moderated the relationship between leader narcissism and team burnout as well as teamwork engagement via team CSE for follower-rated leader narcissism but not for leader-rated narcissism. Taken together, team cohesiveness and climate for psychological safety moderated the link between leader narcissism and team burnout and work engagement via team CSE only when followers rated their leader narcissism and not when leaders rated their narcissism, while team resilience did not moderate the leader narcissism-team CSE both for follower-rated and leader-rated narcissism. Next is the discussion of findings in the context of existing research.

# 6.3 Discussion

The discussion of findings of this research is presented below for the individual and cross-level followed by the team level. This section also presents a discussion of unexpected findings, reflections on how congruence/perceptual distance in relation to the self-and other-rated leader narcissism variables could expand the current approach, reflections on the role of gender in the dataset. Finally, the discussion captures how the pandemic might have influences both the relationships between the constructs and how respondents might have viewed the constructs.

## 6.3.1. Individual level and cross-level

The findings from the hierarchical linear regressions based on a sample of matched leader and team members sample of respondents from multiple organisations in Nigeria at three points in time showed that leader narcissism positively influenced individual CSE when followers rated their leader narcissism and not when leaders rated their narcissism. Additionally, CSE influenced individual burnout and work engagement. These findings are consistent with previous research that showed that leader narcissism was negatively related to employee job satisfaction and positively with emotional exhaustion (Bernerth, 2000). The findings also align with previous research evidence that leader narcissism leads to lower performance-based self-esteem, and job engagement when followers rated their leader’s narcissism and not when leaders rated their narcissism (Fehn, & Schütz, 2021). In other words, the cognition, self-worth, resource management, and well-being of individuals are negatively affected by leader narcissism from followers’ lens (Ellen *et al.,* 2019).

Furthermore, the findings of this study showed that CSE did not mediate the relationship between leader narcissism and individual burnout or work engagement. Therefore, the mediating result of this study is inconsistent with previous studies that showed CSE to mediate the relationship between proactive personality and career search success (Zhu *et al.,* 2021). Although not directly related to this study, CSE is argued to be a cognitive and self-adjusting variable that mediates the link between personality and career outcomes (Zhu & Chang, 2021).

Regarding the moderating role of follower narcissism in the relationship between leader narcissism and individual CSE, the findings showed that the relationship was not significant when followers rated their leader narcissism and when leaders rated their narcissism. This finding is consistent with previous research on leader-follower interaction such that followers' and leaders’ vulnerable narcissism was not significant (Wirtz & Rigotti, 2020). Similarly, findings from the moderated mediation revealed that follower narcissism did not moderate the relationship between follower-rated leader narcissism and burnout or work engagement via CSE but did when leaders rated their narcissism. This implies that followers’ narcissism partially buffers the negative effect of leader narcissism on follower CSE. This is consistent with previous research that other factors such as co-worker support can buffer the negative effects of leader narcissism on followers’ well-being (Fehn & Schütz, 2021). However, followers might be unaware of the role of their trait narcissism to engage with their leader as a buffer of leader narcissism towards them.

Additionally, the findings of this research showed that follower gender did not moderate the negative effects of leader narcissism on individual CSE such that the relationship will be stronger for female followers as compared to male followers, both when followers rated their leader narcissism and when leaders rated their narcissism. This finding aligns with previous research on corporate psychopathy that females are not more affected being under a psychopathic leader (Boddy, 2014). This highlights that the effect of leader narcissism on employee cognition and well-being applies equally to both male and female employees. Although females are likely to cry out for help from friends and colleagues as a coping strategy in the face of negative experiences at work (Zhang & Bednall, 2016).

Lastly, the findings of this research showed that leader gender did not moderate the negative effects of leader narcissism on individual CSE such that the negative relationship will be stronger when the leader is female. This finding showed no support for leader gender as a moderator in the leader narcissism-CSE link, implying that it makes no difference if a narcissistic leader is male or female. This is consistent with previous research that leader gender had no moderating effect in the relationship between leader narcissism and fundraising success of firms (Gruda *et al.,* 2021). Taken together, the findings of this research confirm that the effect of leader narcissism on individual self-worth is not buffered by follower or leader gender.

## 6.3.2. Team level

At the team level, the findings showed that leader narcissism was positively related to team CSE when followers rated their leader narcissism and not when leaders rated their narcissism. Team CSE was also significantly related to team burnout and work engagement. These findings are consistent with previous research that abusive supervision was positively related to employees’ psychological distress in work teams (Li *et al.,* 2016). Taken together, the findings highlight the deleterious effects of leader narcissism on team self-worth and well-being.

Besides, the findings of this study showed that team CSE did not mediate the relationship between leader narcissism and team burnout or work engagement. One possible explanation is that the mediating effect of team CSE is contingent upon the moderating role of some team characteristics. For example, in the moderated mediation model at the team level, team CSE mediated the link between follower-rated leader narcissism and team CSE when team cohesiveness and climate for psychological safety were tested as moderators. This implies that the mediating effect of team CSE in the relationship between leader narcissism and team burnout or work engagement is contingent on the team characteristics of team cohesiveness and climate for psychological safety. The finding from the mediation results is inconsistent with previous research that shows that team efficacy mediated the relationship between transactional leadership and team innovativeness (Liu *et al.,* 2011). Although not directly related to this research, team efficacy as a sub-dimension of team CSE serves as an explanatory pathway in the relationship between leadership style and team outcomes (Liu *et al.,* 2011; Nielsen *et al.,* 2009).

Furthermore, the findings of this research revealed that leader gender did not moderate the relationship between leader narcissism and team CSE both for follower-rated and leader-rated leader narcissism. This implies that it makes no difference if a narcissistic leader is male or female in relation to team cognition and self-worth. This finding is not consistent with previous research that showed that leader gender moderated the relationship between abusive supervision and emotional exhaustion of employees in work teams, such that the abusive supervision is more strongly related to increased emotional exhaustion when the leader was male (Stempel & Rigotti, 2018). An important factor in the role of leader gender is the percentage of males or females in the sample. For example, in the study by Stempel and Rigotti (2018), the majority of the respondent were females. However, in this research, the average ratio of male and female respondents across the three-time points was 55:45, which showed a good balance in terms of respondents’ gender.

In addition, the findings from the moderating role of the team characteristics of cohesiveness, resilience and climate for psychological safety showed mixed results. For team cohesiveness, this research showed that team cohesiveness moderated the relationship between leader narcissism and team CSE, more for teams high in cohesiveness as opposed to those low in cohesiveness, for follower-rated leader narcissism and not for leader-rated narcissism. The result also indicates that the relationship between leader narcissism and team CSE was negative for teams with low levels of team resilience and positive for teams with high levels of team resilience only for follower-rated leader narcissism and not for leader-rated leader narcissism. This suggests that leader narcissism is appraised as a positive attribute by team members in highly resilient teams. This finding maintained the same outcome in the moderated mediation result such that team cohesiveness moderated the relationship between leader narcissism and team burnout or work engagement via team CSE, more for teams high in cohesiveness as opposed to those low in cohesiveness, only when followers rated their leader narcissism and not when leaders rated their narcissism. The findings of this research showed that under high team cohesiveness, leader narcissism was high and under low team cohesiveness, leader narcissism was low, implying that a highly cohesive team may be a threat to narcissistic leaders who engage in self-protective strategies (Horton & Sedikides, 2009), and have challenges in developing team interactions and maintaining a long-term relationship with their followers (Grijalva *et al.,* 2020; Rosenthal & Pittinsky, 2006). Thus, a low cohesive team may suffer more adverse effects from narcissistic leaders due to their inability to galvanise support for each other in the face of challenges facing them such as leader narcissism. This aligns with previous research that a highly cohesive group achieved better performance than a low cohesive team (Shin & Park, 2009). Thus, a highly cohesive team is beneficial to teams in building support for their members and protecting their oneness, in line with social identity threat theory (Breakwell, 1986).

Furthermore, the results showed that team resilience did not moderate the leader narcissism-team CSE link both for follower-rated and leader-rated narcissism. This finding was the same in the moderated mediation result, implying that the relationship between leader narcissism and team CSE was not significant for teams high or low on resilience. Nevertheless, the importance of team resilience as a team characteristic cannot be ignored as research evidence showed that resilience moderated the relationship between stressful life events and sleep quality, such that the effect of stressful life events on sleep quality decreased as the level of resilience increased (Li *et al.,* 2019). Though research on team resilience is lacking in the context of leader narcissism, team resilience may be beneficial for team members in developing their sense of shared identity and positive adaptation against setbacks and adversity (Luthar *et al.,* 2000) in line with the propositions of social identity threat theory (Breakwell, 1986).

Finally, the result of this research showed that climate for psychological safety moderated the relationship between leader narcissism and team CSE more for high climate for psychological safety teams as opposed to those low on climate for psychological safety, only when followers rated their leader narcissism and not when leaders rated their narcissism. In other words, for teams who have a high climate for psychological safety, team CSE was higher when their leader was high on narcissism and under low climate for psychological safety, team CSE was low when their leader was low on narcissism, for follower-rated leader narcissism and not for leader-rated leader narcissism. The result also indicates that the relationship between leader narcissism and team CSE was negative for teams with low levels of climate for psychological safety and positive for teams with high levels of climate for psychological safety only for follower-rated leader narcissism and not for leader-rated leader narcissism. This suggests that leader narcissism is appraised as a positive attribute by team members in a climate of high psychological safety. This finding maintained the same outcome in the moderated mediation result of climate for psychological safety in the relationship between leader narcissism and team burnout or work engagement via team CSE. This finding is inconsistent with my initial arguments that under a high climate for psychological safety, the self-worth of team members will be influenced because of the shared solidarity and belief that the team is safe and open to sharing without fear of negative consequences to the members' self-image (Bradley *et al.,* 2012; Men *et al.,* 2020). In this research, the findings showed that leader narcissism was higher in a high climate of psychological safety and team CSE was low. However, the findings align with previous research that showed that under a high climate of psychological safety, task conflict and team performance were positively associated (Bradley *et al.,* 2012). This implies that a high climate for psychological safety is beneficial to teams even in conflicts to learn more and thrive despite their leader high narcissism. Taken together, the findings of the characteristics highlight the benefits of team characteristics as a buffer against leader narcissism. Next is a discussion of the unexpected findings of this research.

## 6.3.3. Unexpected findings

This section is a discussion of the unexpected findings of the research. The unexpected findings showed that leader gender did not moderate the relationship between leader narcissism and individual CSE as well as the link between leader narcissism and team CSE both for follower-rated and leader-rated leader narcissism. Also, contrary to my prediction, follower gender did not moderate the relationship between leader narcissism and individual CSE for both follower-rated and leader rated narcissism. Lastly, team resilience did not moderate the relationship between leader narcissism and team CSE for follower-rated leader narcissism, which are unexpected findings.

First, leader gender was insignificant as a moderator in the relationship between leader narcissism and individual CSE link on one hand, and the leader narcissism-team CSE link on the other hand. A theoretical explanation for this unexpected result is that in the context of this research, individuals and teams did not react to their leader gender in such a way that leader gender buffers the effect of leader narcissism on their individual and team self-worth. This research hypothesised that the relationship between leader narcissism and individual CSE is moderated by leader gender, such that the negative relationship will be stronger when the leader is female as opposed to male, drawing on role congruity theory (Eagly & Karau, 2002). This hypothesis was also replicated at the team level, arguing that leader gender will moderate the negative relationship between leader and team CSE, such that the relationship will be stronger when the leader is female as opposed to male. This argument was made on the basis that followers’ and team behaviour will depend on their assumptions about their leader, such that they expect the female leaders to be less narcissistic than their male counterparts based on the communal qualities (e.g., warmth, affectionate, and helpful) associated with females (Hoyt *et al.,* 2009). Consequently, when the female leaders are not aligned with the societal expectation of communal qualities (Eagly & Karau, 2002) and display narcissistic behaviours, they will be judged more harshly by the followers and teams, and this will affect the individual and team CSE.

This unexpected finding showed the role congruity theory not to hold in this instance and within the context of this research. A possible explanation of this result is that followers and teams may not always hold the role congruity assumption that female leaders will be less narcissistic than their male counterparts, based role congruity theory (Eagly & Karau, 2002). In addition, in the context of a high-power distance culture, which is a culture that gives high respect to a person in authority (Hofstede, 1993), leader gender makes no difference in how followers react to their leader based on gender roles. High power distance “refers to the extent that a society accepts the fact that power in institutions and organisations is distributed unequally” (Hofstede, 1980, p. 45). Thus, in high power distance cultures, people generally believe that leaders should have a high degree of power over subordinates (Yang *et al.,* 2017) irrespective of the leader gender. This implies that my application of role congruity theory to argue that female leaders will be less narcissistic and that they will be judged more harshly when they display narcissistic behaviours is not supported in this research considering the power distant context of the research.

Second, follower gender did not moderate the relationship between leader narcissism and individual CSE, which was hypothesised to be stronger for female followers as compared to male followers. The theoretical rationale for this hypothesis is based on the gender role socialisation theory (Whiltely, 1983), that explains that females are more likely to view and appraise themselves from the opinions of other people compared to men. Also, women see their leaders as a source of affirmation and the liking from their male leaders is likely to increase their self-worth (Burton & Hoobler, 2006). This is not supported in this research. A theoretical explanation for this is that in a patriarchal society such as Nigeria, with male dominated leadership (Dogo, 2014), the effect of narcissistic leaders is equally negative for men’s and women’s sense of self-worth. This could be because it is a patriarchal high power distance society, where the leader is viewed as a parent-figure by both men and women and their behaviour is equally influential for both genders. Also, as women’s social roles do not traditionally include the role of breadwinner but do include other salient family and home-based roles (Chant, 2014), their sense of worth is likely to be more strongly influenced by leader figures in non-work domains (Joseph, 1994; Nyambedha *et al.,* 2003). Therefore, it is understandable that followers’ gender did not moderate the relationship between leader narcissism and individual CSE such that the relationship will be stronger for female followers than their male counterparts as hypothesised in this research.

Last, team resilience did not moderate the relationship between leader narcissism and team CSE for both follower-rated and leader-rated leader narcissism. Team cohesiveness, team resilience and climate for psychological safety were the team characteristics predicted to moderate the leader narcissism-team CSE link for both follower-rated and leader rated leader narcissism. While team cohesiveness and climate for psychological safety moderated the relationship between leader narcissism and team CSE when followers rated their leader narcissism, team resilience did not follow the expected results as the other two team characteristics did. In the results, the interaction between follower rated leader narcissism and team resilience showed (*b* = .11, *SE* = .04, *p* < .05) a significant relationship. However, on examining the conditional effect of the focal prediction, the effect of leader narcissism becomes non-significant when team resilient was entered. In other words, team resilience was so strongly related to team CSE that it makes the effect of leader narcissism non-significant. Consequently, the hypothesis that relationship that leader narcissism and team CSE will be moderated by team resilience, such that the negative relationship will be weaker under high team resilience than under low team resilience could not be confirmed.

## 6.3.4. Congruence and perceptual distance in relation to the self-and-other-rated leader narcissism

Perceptions are vital in shaping the experiences of individuals and how they interpret the world around them (Gibson *et al.,* 2009). From social perception theory (Bem, 1972), the experiences that individuals or groups have are based on some social stimuli which makes them recall some experiences or impressions better than others. In other instances, the intricacies of social stimuli limit the processing capabilities of individuals regarding their experience with other people, for example, their leaders (Benlian, 2014; John & Robbins, 1994), such that they might not interpret some experiences in a way that it significantly affects their well-being or other outcomes. Perceptual distance describes the gaps or differences that occur between individuals or members of a team and their leaders such that the same experience is interpreted differently by them based on their personality, values, skills, and previous experiences (Tafvelin *et al.,* 2017). It also means the extent to which there are disparity in the perception of the same phenomenon (Gibson *et al.,* 2009), for example, leader self-rated narcissism and follower perception of leader narcissism. Higher perceptual distance or incongruence implies that there is a larger distance in the perception of the same stimulus, while low perception distance or congruence means that there is little or no difference in the perception of the stimulus (Gibson *et al.,* 2009; Yang & Li, 2018).

In this research, both follower-rated and leader-self-rated narcissism was explored with different results, in terms of mean values, and correlation coefficient between follower-rated and leader-rated leader narcissism. For follower-rated leader narcissism, the mean values are 4.79 at time 1, 5.24 at time 2, and 5.47 at time 3, while for leader self-rated narcissism, the values were 4.65 at time 1, 4.83 at time 2, and 5.14 at time 3. This implies that follower-rated leader narcissism was higher on average than leader self-rated observation, thus, indicating perception distance. Similarly, the correlation coefficient between follower-rated and leader-rated leader narcissism showed (*r* = -.20, *p* = .57) that there was low correlation between both ratings, implying that there is disagreement. Taken together, there is perception distance of leader narcissism in this research and what matter most for follower outcomes is not actual, but perceived leader narcissism.

A theoretical explanation for perception distance in relation to the-self-and-other-rated leader narcissism is that the lens in which leader narcissism is viewed by leaders and followers are different. For narcissistic leaders, they are more likely to have a more tempered assessment of their narcissism trait which may not be the reality. This is based on arguments that narcissistic leaders see themselves as smart, and they are good at self-promotion rather than admitting to their narcissistic traits (Carlson & Desjardins, 2015; O'Reilly & Pfeffer, 2021). Similarly, research indicates that leaders self-report of their positive leadership behaviour of transformational leadership are inflated (Judge & Piccolo, 2004). Therefore, leaders may lack sufficient self-awareness to report their narcissism trait or simply demonstrate attribution bias (Taylor, 2010), and tick rating scores that do not represent their actual trait (Yang & Li, 2018; Judge & Piccolo, 2004). On the part of followers or teams, they are more likely to rate their leader’s trait based on their perceptions or experiences with the leader, previous leaders as a prototype of their current leader (Wang *et al.,* 2021), and how they perceive the work environment and their expectations of the leader’s role (Yang & Li, 2018). Taken together, it is safe to conclude that perception distance exists in this research. This thesis did not examine perception distance in relation to the self-and other-rated leader narcissism because the scope of this research does not extend to perception distance. However, it will be beneficial to expand the current approach by considering perception distance and its effect on employee and team outcomes (if any) because of the potential impact that perception (in)congruence has on individual and team outcomes and the need to develop awareness of this to organisational leaders and team members (Benlian, 2014).

## 6.3.5. The role of gender in the dataset

In this research, gender was predicted to moderate the relationship between leader narcissism and individual CSE as well as the relationship between leader narcissism and team CSE. Here, I reflect on the role of gender composition in my sample in terms of how it could have influenced the results, and how gender match or mismatch between leaders and followers may have affected the predicted relationships.

First, the gender composition in the dataset shows that from the 439 team members that formed the team sample at time 1, 54.8% were male, 44.4% were female. Of the 348 team members at time 2, 56.3% were male while 41.4% were female. Of the 193 team members at time 3, 56.3 were male while 43% were female. This implies that males were more than females in the overall gender composition. Second, of the 127 leaders at time 1, 72.4% were male while 26.8% were female. Of the 101 leaders at time 2, 67.3% were male while 29.7% were female. Of the 96 leaders at time 3, 68.8% were male while 30.2% were female. This implies that male leaders were more than female leaders, that is, most followers had a male leader and men are more likely to be in leadership positions, considering that there is under-representation of women in leadership positions in Nigeria (Anibaba & Akaighe, 2020). Though women are gaining ascendancy to leadership positions all over the world (Sczesny *et al.,* 2004), there is still a gap between male and female leaders and this gap may be more in African countries considering that it is a male-dominated environment with regards to leadership (Anibaba & Akaighe, 2020; Emeka *et al.,* 2011).

For the team members gender composition and how it could have influenced the results, research indicates that males are on the average more narcissistic than females (Grijalva *et al.,* 2015; Jonason *et al.,* 2017). In a workplace with more males than females, the expectations, or perceptions of male followers/team members about their leader is likely to differ from that of their female counterparts. A theoretical explanation for this is similarity attraction theory (Berscheid & Walster, 1969) which states that individuals have the tendency to be attracted to people who look like them rather than those who are not like them (Berscheid & Walster, 1969; Mannix & Neale, 2005). The basis for the attraction includes similarity in age, gender, attitudes, values, and personality, which influences interpersonal liking (Mannix & Neale, 2005). Drawing from this theory, the males in a team are likely to likely to perceive their leader narcissism trait like theirs based similarity attraction (Berscheid & Walster, 1969). Similarly, the female followers/team members are likely to perceive their female leaders as less narcissistic based on similarity attraction theory (Berscheid & Walster, 1969). Thus, gender match or mismatch between leaders and followers may have influenced the results of this study on the effects of leader narcissism on individual and team self-worth, burnout, and work engagement.

For gender match, if both the leaders and followers are mostly males, the male followers are likely to perceive their leader trait like theirs and the effect of leader narcissism on their self-worth and well-being is likely to low or of no effect because of the similarity of their gender and their expectations of the leader based on the gender similarity. Hence, more male team members are likely to perceive their leader narcissism from the lens of the gender similarity and interpret their narcissism in a way like that’s how our gender is with regards to trait narcissism (Twenge, 2009). Similarly, if both the leaders and followers are mostly females, the followers are also likely to perceive their leader narcissism moderately from gender similarity lens, that is, their female leader are like them and are less narcissistic than male leaders (Jonason *et al.,* 2017). Thus, the effect of leader narcissism will be low or of no effect on their self-worth and well-being because of their expectations that their leader act in similar ways to them, based on gender similarity attribution (Krueger *et al.,* 2008).

For gender mismatch, if the leader is male and more followers are females, this is likely to influence the predicted relationships in a way that there will be a stronger effect of leader narcissism on follower/team self-worth and well-being. This is based on the dissimilarity in gender match, that is, more female followers are likely to perceive their leader as more narcissistic because of the dissimilarity in gender trait (Mannix & Neale, 2005) and this might influence their interpersonal liking of the leader such that it will have more effect on their self-worth, and well-being. Last, if the leader is female and more of the followers are males, this may have little or no effect on the predicted relationships because the male followers are likely to perceive their female leaders as less narcissistic than them based on dissimilarity of gender (Grijalva *et al.,* 2015; Mannix & Neale, 2005), and this will likely have little or no effect their self-worth, and well-being.

## 6.3.6. How the global pandemic might have influenced the relationships between constructs in this research

The data for this research was collected from the study participants during the COVID-19 global pandemic, via online method. The global pandemic disrupted organisations in many ways and changed the ways of working. For example, many organisations introduced work from home system that allowed employees in many roles to work virtually (Rudolph *et al.,* 2021). This implies that face-to-face interactions between leaders and team members reduced during the global pandemic and the resultant lockdown in many countries (Contreras *et al.,* 2020). However, employees and teams interacted more using technology such as Microsoft Teams, Zoom, Google Hangout, and other information technologies (Müller & Niessen, 2019). Also, during this period, the mental health of many employees was seriously affected, for example, employees reported more cases of workplace loneliness, stress, anxiety, and exhaustion (Giorgi et al., 2020; Mäkiniemi *et al.,* 2021).

The disruptions in organisations occasioned by the global pandemic might have influenced the relationships between constructs in this research, for example, follower-rated leader narcissism, burnout and work engagement, and the team characteristics of cohesiveness, resilience, and climate for psychological safety. Regarding follower-rated leader narcissism, team members could have perceived their leaders as narcissistic during the global pandemic because they typically lack empathy and have challenges in developing team interactions and processes (Grijalva *et al.,* 2020). These shortcomings of narcissistic leaders could have been further exacerbated due to the disruptions in the work system. Research shows that narcissistic leaders are helpful to organisations in times of crisis because of their ability to be go-getters in terms of ensuring organisational transitions (Swid & Ragab, 2018). However, their lack of empathy harm followers’ well-being in the process of managing crisis in organisations (Rosenthal & Pittinsky, 2006). The global pandemic is recorded as one of the biggest health crises, spiralling to organisational crises the world over (da Silva & Pena, 2021). Thus, in this context, followers could have perceived their leaders as more narcissistic, and this could have influenced the relationships between constructs in this research. With regards to burnout and work engagement, the global pandemic could have affected these variables such that team members work engagement was lower and their burnout was higher, because of other factors not connected to their leader narcissism but as a result of other work-related and personal factors outside the work environment, occasioned by the global pandemic and the anxiety and uncertainty it brought to many people at the time (Mäkiniemi *et al.,* 2021).

Finally, regarding the team characteristics of cohesiveness, resilience, and climate of psychological safety, these could have been affected by the global pandemic in such a way that teams were less cohesive, less resilient and with a lower climate for psychological safety because of the limited or non-existent face-to-face interactions and the uncertainty that team members could have faced at that time. Despite more virtual interactions because of the lockdown and work-from-home system for many employees, virtual working environment potentially limits team building opportunities for team members (Whillans *et al.,* 2021). These could have influenced the relationships between constructs in this research. For example, team cohesiveness could have had a stronger moderating effect in the relationship between leader narcissism and team CSE. Next is the discussion of the theoretical contributions and implications for management practice.

# 6.4 Theoretical implications

This research contributes to the leadership, teamwork, and well-being literatures in various ways. First, leader narcissism and employee well-being research have taken steps in demonstrating that leader narcissism affects employees’ well-being at work in areas including job satisfaction, and performance-based self-esteem (Bernerth, 2020; Fehn, & Schütz, 2021). There is limited research on the link between leader narcissism and team well-being, and the underlying processes and boundary conditions of this relationship. For example, how leader narcissism affects team burnout and work engagement is lacking in leadership studies. However, to progress further, it needed to be established if leader narcissism affects burnout and work engagement of team members, to deepen our understanding of the effects of leader narcissism on teams’ functioning and thriving at work, given the potential destructive tendency of leader narcissism to organisations (Padilla *et al.,* 2007). This research examined the leader narcissism-well-being link and explored the underlying processes and boundary conditions that shape this link. In so doing, it contributes to the discussion on the effects of leader narcissism by demonstrating that leader narcissism affects individual and team burnout and work engagement.

Second, consistent with studies that have shown that CSE is affected by external factors such as organisational dehumanisation and work environment (Nguyen & Borteyrou, 2016; Nguyen & Stinglhamber, 2021), this study revealed that leader narcissism negatively affects individual and team CSE. There is limited research on the individual and team processes in which leader narcissism affects individual and team well-being. The findings of this study have extended research on CSE and provided evidence that CSE has intrapersonal fluctuations, such that leader narcissism negatively affects individual and team CSE. In so doing, it contributes to the leadership narcissism literature because it highlights an important pathway through which leader narcissism affects individual and team burnout and work engagement.

Third, this thesis contributes to the leadership and teamwork literature by considering various team characteristics that shape the leader-narcissism-team CSE link. Research on the moderating effect of team characteristics on leader narcissism and team well-being is lacking in the leadership field. In answering the call Schyns and Schilling’s meta-analysis (2013) to examine team characteristics as moderators of leader narcissism in the organisational context, the findings of this study are novel and contribute to the literature by demonstrating that a team’s ability to stick together (cohesiveness; Carron *et al.,* 1998), and have a positive shared belief (climate for psychological safety; Bradley *et al.,* 2012) are valuable team qualities that shape the effects of leader narcissism on team self-worth.

Fourth, this study contributes to the literature by examining the interaction between leader and followers’ narcissism on processes and outcomes. Previous studies have largely overlooked how leader gender shapes the link between leader narcissism and follower well-being. By embracing a multi-trait perspective, that is, the leader gender in combination with their narcissism and follower gender and their narcissism, this study contributes to the literature by strengthening our understanding of how followers respond to narcissistic leaders based on their gender and highlights the role of followers’ narcissism as a buffer of leader narcissism. It also contributes to the literature by strengthening our understanding of the undesirable consequences of leader narcissism on follower and team self-worth and thriving at work irrespective of gender differences.

Fifth, this study contributes to the teamwork literature by examining the effects of leader narcissism on team outcomes. There is limited research on the effects of leader narcissism on team outcomes in narcissism research bearing in mind that organisations are mostly structured in teams (West *et al.,* 2009). By studying the effects of leader narcissism at the team level, this research contributes to the teamwork literature by highlighting team level conditions that are different from the effects of leader narcissism on individual-level outcomes, thereby underscoring the importance of teamwork in organisations.

Finally, this research contributes to the leadership literature by employing multi-source and repeated measures of study constructs over three waves of data collection, reducing potential inflated findings from the same source measurement, and drawing some inference of causality (Chen *et al.,* 2019; Spector, 2019). The findings from this research contribute to multilevel research in leadership studies by highlighting the level of consensus among team members regarding their leader narcissism. This approach should inform more research using multi-source longitudinal data. Similarly, this study contributes to the literature by bringing for the first-time data on leader narcissism from organisational leaders and team members from Nigeria, Africa’s largest country by population, landmass, and natural resources (Sohn, 2020), which answers calls (e.g., Zhao *et al.,* 2019) and contributes to the generalisability of narcissism research across countries and cultures. The findings of this study are consistent with previous research from Western countries (e.g., Braun *et al.,* 2018; Fehn & Schütz, 2021) that leader narcissism affects followers' well-being at work.

# 6.5 Practical implications

Considering the importance of teamwork for organisational functioning and employee well-being (Ogbonnaya *et al.,* 2018), and the negative consequences of leader narcissism for employee job satisfaction (Bernerth, 2020) and job engagement (Fehn & Schütz, 2021), which is in line with the findings of this thesis, I suggest valuable practical implications for organisations.

First, by integrating the narcissism and well-being literatures, this research revealed that leader narcissism negatively affects follower and team cognitions, burnout, and work engagement. Consequently, organisations should evaluate leaders’ personality trait of narcissism at the time of recruitment into their organisations. This can be done through, for example, administering personality indicators such as the NPI to individuals as part of the selection and onboarding exercises. This will aid in the monitoring of their levels of narcissism in the workplace, and potentially ensure the selection of less narcissistic leaders to leadership positions.

Second, in light of the negative influence of leader narcissism on individual and team burnout and work engagement, this research has implications for the training and management of leaders who are high in trait narcissism. Organisations should invest in training and managing leaders and followers through counselling (Schilling, 2009), to ensure early management of destructive tendencies of leaders’ and followers’ trait that could harm followers and organisations. For leaders, training on self-awareness (Higgs & Rowland, 2010), self-regulation (Collins & Jackson, 2015), mindfulness (Reitz *et al.,* 2020), and servant leadership (Eva *et al.,* 2019) will be helpful as potential avenues to help leaders apply restrain on their narcissistic tendencies and in the workplace. This is based on research findings that servant leadership, for example, is an antithesis of leader narcissism (Brouns *et al.,* 2020). On the part of followers and teams, I propose training on building a climate for psychological safety (Dollard & Bailey, 2021), resilient teams (Chapman *et al.,* 2020), and cohesive teams (Goffnett, 2020) that could help build protective characteristics when teams are exposed to narcissistic leaders. This is because narcissistic leaders have challenges in developing team processes and building collaborative long-term relationships with their followers (Grijalva *et al.,* 2020; Rosenthal & Pittinsky, 2006). By providing team-building opportunities, organisations will ensure a thriving work team system, which will promote the well-being of team members.

Third, this research has implications for building strong institutions and processes that prevent the rising and thriving of narcissistic leaders and followers in organisations. This study showed that in the context of this research, Nigeria, a power distant collective culture (Van der Vegtet *al.,* 2005), narcissistic leaders exist. Building strong institutions and team structures will buffer the negative influence of narcissistic leaders on followers and team self-worth and well-being outcomes. In addition, organisations should promote a system that psychologically empowers followers (Kirrane *et al.,* 2018) by providing a helpline or reporting system where followers can anonymously report actions of leaders that they perceive are narcissistic towards them, based on the findings of this research that a strong climate for psychological safety is beneficial for team well-being.

Fourth, this research has implications on team designing, team building, coaching of teams, and enhancing teams’ characteristics to buffer the negative effects of leader narcissism on team cognition and thriving at work. Specifically, it highlights the interpersonal dynamics of teams and how certain conditions at the team level are different from the effect of leader narcissism at the cross-level, that is, the effect of leader narcissism on individual self-worth and well-being. Therefore, organisations should invest in developing team cohesiveness, and climate for psychological safety, which this research showed shapes the negative effects of leader narcissism on team self-worth, burnout, and work engagement.

Lastly, this research has implications for promoting employee and team well-being in organisations. Organisations are increasingly becoming aware of the importance of well-being while some pay lip service to it (Biron & Bamberger, 2011). This research revealed that leader narcissism has negative effects on employee and team burnout. Therefore, organisations should offer training to both leaders and followers on the well-being of followers and teams (Ogbonnaya *et al.,* 2018) which should lead to more awareness about the importance of well-being and promotion of employees thriving at work. Next is the discussion of the strengths and limitations of this thesis.

# 6.6 Strengths and limitations

The contributions of this thesis need to be interpreted in light of the following limitations. First, the process of data collection was complex and time-consuming. Although the thesis was based on multisource data collected over three-time points, not all the time points of the study constructs were analysed and used for the research. Additionally, the time frame of the six-week interval should be informed by a theoretical understanding of the constructs and how much they are changeable (Selig & Preacher, 2009). For example, CSE was handled as a trait but in relation to time frame, it is more state-like, and this research showed variation in the reliability of individual team members' self-report of their CSE between time 1 and 2 (time 1 (α = .74), time 2 (α = .77), time 3 (α = .77)). In any case, the data was not analysed with respect to changes in variables based on time points, thus, limiting our understanding of changes in the study constructs in the context of leader narcissism and follower outcomes.

Second, the data for this thesis was collected from organisational leaders and team members, which is a difficult process considering the challenges associated with access to organisations and the recruitment of participants (Sadler *et al.,* 2010). The data for this research was collected online with the application of some form of relationship-based recruitment of participants, and snowballing sampling technique limits the data quality as respondents could be socially biased (Ward *et al.,* 2012).

Third, the within-group agreement of the data that suggest that individual members in the teams hold shared perceptions measured by the rwg(j) index (James *et al.,* 1984) was moderate for some of the study constructs. The recommended threshold of .7 (James *et al.,* 1084) was not met for variables including CSE, 0.51 (time 1), 0.60 (time 2), 0.64 (time 3), burnout, 0.66 (time 1), 0.66 (time 2), 0.66 (time 3), work engagement, 0.62 (time 1), 0.65 (time 2), climate for psychological safety, 0.54 (time 2), and 0.62 (time 3). The range of cut-off by LeBreton and Senter (2008) classifies the rwg(j) of these variables as moderate agreement, which limits the shared perception of team members in this research. This means that the findings of the study on self-worth, well-being, and climate for psychological safety should be interpreted with caution. A strong agreement of 0.7 and above (LeBreton & Senter, 2008) for all the study constructs would have been more ideal to evaluate the shared perception of team members on their leader narcissism and its influence on their cognition and well-being. However, this is understandable given that they are individual-level constructs.

Fourth, this research is limited to the extent that it examined leader trait narcissism, measured by the short version of the NPI (Ames *et al.,* 2006). This version was used to make the survey shorter for the participants considering the other constructs that were examined in this research. This is consistent with the use of the short version of the NPI in other studies (e.g., Cozma et al.*,* 2012; Owens *et al.,* 2015). Despite the strong internal consistency of this short version (Miller *et al.,* 2014), it limits our understanding of the seven factor-based full scale of leader narcissism including authority, exhibitionism, superiority, entitlement, exploitativeness, self-sufficiency, and vanity (Del Rosario & White, 2005). In addition, this research did not examine leader narcissistic behaviours. Some researchers in organizational behaviour are advocating for the study of actual behaviours of leaders in terms of their true actions and choices as opposed to their traits or perception of their behaviour (e.g., Banks *et al.,* 2021). Thus, a study on narcissistic leader behaviours will be beneficial for a better understanding of leadership processes and outcomes.

Last, this research examined the hypothesised model with samples from multiple organisations largely from Lagos, Nigeria. While the CFA results for both the individual and team levels showed support for the model, the generalisability of the findings should be regarded with caution. This is because Nigeria is a highly culturally diverse country with a large population of over two hundred million (Isiugo-Abanihe, 1994). Due to the influence of culture in the perception of narcissism (Foster *et al.,* 2003), the findings from mostly the southern part of the country cannot be generalised to all the states of Nigeria, especially the northern parts. The northern parts of Nigeria have a strong hierarchy culture of leadership structure due to the high illiteracy rate compared to the southern parts (Shuaib & He, 2021). In other words, the strong conformity to the natural order of power relations (Kirkbride *et al.,* 1991) in the northern parts of Nigeria could imply different underlying processes and effects of leader narcissism on followers’ sense of worth and well-being.

These limitations are compensated for by the following strengths. First, the data from this study included 127 leaders and 439 team members at time 1, 101 leaders and 348 team members at time 2, and 96 leaders and 293 team members at time 3. This indicates a strong sample size from matched leader and team members data because it is argued that studies that use smaller sample sizes, which are less than 30 groups and fewer than 30 observations, have low statistical effect power and validity challenges (Peterson *et al.,* 2020). Second, another strength of this research is that the findings are based on samples from organisational leaders and team members. The use of such data constitutes a strength as much existing research on narcissism relies on student samples (Grijalva *et al.,* 2015) which limits their applicability to real organisational settings (Bernerth, 2020). Consequently, the obtained findings from this research represent a close image of narcissism, burnout, and work engagement in organisations.

Third, the use of team members' rating of leader narcissism is a notable strength of this thesis. The data for this thesis includes follower self-rated narcissism and follower-rated leader narcissism. Previous narcissism research either employ follower-rated leader narcissism or leader self-rated narcissism (e.g., Bernerth, 2020l Owens *et al.,* 2015), except for Fehn and Schütz’s (2021) study, which used both ratings but not in a team context. The use of subordinate rating of their leader narcissism in this research eliminates potential social desirability responding of leaders about their narcissism (Forsyth *et al.,* 2012). Also, by employing team members' ratings of leader narcissism, this thesis helps us to examine the consensus among team members on their leaders’ narcissism from multiple organisations. For example, team members' consensus about their leader narcissism assessed rwg(j) index (James *et al.,* 1984) showed 0.73 at time 1, 0.73 at time 2, and 0.81 as time 3, which indicated that individual members hold a strong shared perception of their leader narcissism within teams (LeBreton & Senter, 2008). Fourth, this thesis benefits from the examination of leader narcissism and follower/team wellbeing with data at the team level and cross-level. Team-level effect of leader narcissism is relatively scarce (Braun, 2017) considering that individuals work mostly in team arrangements under a leader (Herdman *et al.,* 2017). By testing team level effect of leader narcissism, this research has a unique strength and answers calls for more research on leader narcissism and team outcomes (Schyns & Schilling, 2013). Last, the findings from the study are from multiple organisations and various industries in Nigeria is considered a strength. This implies that the findings can be generalised across a range of industries in the country and applies to leaders, followers, and team members in Nigeria. Next is the discussion of the directions of the suggestions for further research.

# 6.7 Directions for future research

The limitations of this thesis present potential opportunities and directions for further research. First, I encourage further research to empirically examine whether leader narcissism negatively affects employee and team turnover, follower withdrawal behaviour, and team members relations. This is based on the findings of this research that leader narcissism negatively influenced individual and team CSE and well-being. Thus, individuals might be inclined to display psychological withdrawal from their work (Chi & Liang, 2013) and potentially quit the organisations (Tepper, 2000; Weaver & Yancey, 2010). The findings from further research on these relationships will potentially strengthen our understanding of other effects of leader narcissism in the workplace, which will be beneficial in providing insights on how to mitigate employee withdrawal behaviour and turnover. Second, future research should examine leader vulnerable narcissism and follower outcomes. Despite being a less prominent facet of narcissism (Jauk *et al.,* 2017), scholars have acknowledged that there are vulnerable narcissists in leadership (Braun *et al.,* 2019). This thesis only examined leader and follower grandiose narcissism despite data being collected for both leader and follower grandiose and vulnerable narcissism. This is because the scope of this research does not extend to vulnerable narcissism considering that it is more introverted and less observable by others (e.g., followers) in organisations (Zajenkowski *et al.,* 2018). Research has shown vulnerable narcissists do not care about providing support to other people (Malesza & Poland, 2020) and are more likely to endorse spiteful punishment to third-party transgressors because of their lack of empathy (Parton & Ent, 2018). Since research has shown that grandiose narcissism and vulnerable narcissism are significantly correlated (Malesza & Kaczmarek, 2018), future studies on the effects of leader vulnerable narcissism on employee and team outcomes will be beneficial, to account for the multifaceted nature of narcissism (Wirtz & Rigotti, 2020), and strengthen our understanding of the interpersonal dynamism of leader and follower vulnerability and work outcomes.

Third, more research using longitudinal measures of leader narcissism and follower outcomes is needed. Future research should collect data at three or more time points and provide for a longer time interval between waves. Despite the cumbersome nature of longitudinal studies (Avey *et al.,* 2008), it enables more inference from the pattern of changes in the predictor variable to be associated with changes in the outcomes, and inference on causality can be made (Chen *et al.,* 2019; Spector, 2019), which will better inform leadership research. Furthermore, future research should consider diary studies in narcissism research. This will encourage employees to record daily or weekly leader narcissistic behaviour, its temporal patterns, and the dynamics of leader-follower interactions (Ohly & Gochmann, 2017), in line with calls for the study of actual narcissistic leader behaviours of leaders as opposed to their traits or perception of their traits (e.g., Banks *et al.,* 2021). This will strengthen our understanding of narcissism and its effect on leadership processes and outcomes. Lastly, more research is needed from Nigeria and indeed other African countries on leader and follower narcissism, to replicate this study, and increase research findings from non-Western countries. For example, future research should investigate the processes that account for the rise of narcissistic leaders in Africa, how they attain leadership positions, and the role of followers in the promotion and sustenance of narcissistic leaders considering that African history is filled with experiences of narcissistic individuals having their way to positions of power and causing damage to innocent people (Kets de Vries *et al.,* 2016). This will inform leadership theory and practice in those regions and increase the generalisation of findings across cultures and countries.

Finally, besides the limitations of this thesis, future research should examine other explanatory processes and boundary conditions of the relationship between leader narcissism and follower well-being using multilevel modelling. At the individual level, future research should consider employee psychological capital (PsyCap) as a potential moderator in the relationship between leader narcissism and follower well-being. This is based on the findings of this research that follower narcissism moderated the negative effects of leader narcissism on individual CSE. PsyCap is an individual personal resource and core construct of positive organisational behaviour (positive human resource strengths and capacities; Luthans, 2002), described as a personal psychological state of development with dimensions including efficacy, optimism, hope, and resilience (Luthans *et al.,* 2007). Further research on the role of PsyCap would help better understand how employees with high/low PscyCap thrive under narcissistic leaders and whether it makes any difference. At the time level, this thesis examined team moderators including team cohesiveness, team resilience, and climate for psychological capital in the leader narcissism-team well-being link. Future research should examine other team constructs including team reflexivity, which is an important part of team learning (Schippers *et al.,* 2017). This is based on the findings of this research that team cohesiveness moderated the relationship between leader narcissism and team CSE. It is also based on the practical implications of this research that by providing team-building opportunities, organisations will ensure a thriving work team system, which will promote the well-being of team members. Team reflectivity is an after-event review (Chen *et al.,* 2018) defined as “the extent to which teams’ members collectively reflect upon the team’s objectives, strategies, and processes” (West, 1996, p. 559). It will be interesting to examine this as a potential moderator, to better understand team building and learning processes when faced by a narcissistic leader, thereby informing leadership and teamwork theory and practice. Last, future research should examine team narcissism, which is the collective narcissism of team members, in the relationship between leader narcissism and team outcomes. This research did not examine team narcissism because it is outside the scope of the study. Team narcissism is an untapped area of team variability in narcissism research (Grijalva *et al.,* 2020). It will be interesting to understand how teams with high/low trait narcissism interact with narcissistic leaders and whether team narcissism buffers the negative effects of leader narcissism on team effectiveness. This will potentially inform future research on leadership, and teamwork processes and outcomes. Next is the concluding note of this thesis.

# 6.8 Overall conclusion

This research examined the effects of leader narcissism on employee and team burnout and work engagement at the cross and team levels. It explored CSE as a mediator in the relationship between leader narcissism and individual and team burnout and work engagement. Furthermore, at the team level, this research tested the moderating role of leader gender, and the team characteristics of team cohesiveness, team resilience, and climate for psychological safety of the leader narcissism-team CSE link. At the individual/cross-level, follower narcissism and follower gender were tested as moderators in the leader narcissism-individual CSE link.

The study was conducted in Nigeria, through a multi-source survey design, with data from organisational leaders and team members at three points in time. The survey was conducted by online method and involved 127 leaders and 439 team members at time 1, 101 leaders and 348 team members at time 2, and 96 leaders and 293 team members at time 3, from multiple organisations. CFA, correlation, hierarchical regression, moderator, moderated mediation, using bootstrapping, and multilevel analyses were utilised to test the hypothesised relationships. The findings revealed that leader narcissism significantly influenced individual and team CSE for follower-rated leader narcissism and not for leader-rated leader narcissism. Also, individual and team CSE influenced employee and team burnout and work engagement. However, CSE did not mediate the relationships between follower-rated leader narcissism and burnout or work engagement. In addition, followers’ gender did not moderate the relationship between both follower-rated and leader-rated leader narcissism and individual CSE. In the moderating relationship at the cross-level, follower narcissism did not moderate the relationship between both follower-rated and leader-rated leader narcissism and individual CSE. However, when tested using a moderated mediation model, follower narcissism moderated the relationship between leader narcissism and individual burnout or work engagement via CSE only when leaders rated their own narcissism and not or follower-rated leader narcissism. In the moderating relationship between leader narcissism and team CSE, for teams with high cohesiveness, team CSE was higher when their leader was high on narcissism for follower-rated leader narcissism and not for leader-rated leader narcissism. Similarly, climate for psychological safety moderated the leader narcissism-team CSE link, such that for teams with a high climate for psychological safety, team CSE was higher when their leader was high on narcissism when followers rated their leader narcissism and not when leaders self-rated their narcissism. However, team resilience did not moderate the relationship between both follower-rated and leader-rated leader narcissism and team CSE.

Lastly, leader gender did not moderate the link between leader narcissism and CSE at the cross-level and team level both for follower-rated leader narcissism and for leader-rated leader narcissism. This thesis contributes to the discussion on the effects of leader narcissism by demonstrating that leader narcissism affects individual and team burnout and work engagement. Practically, this research has implications for the training and management of leaders who are high in trait narcissism and the promotion of employees and team well-being in organisations.

In conclusion, this study addressed narcissism in leaders and team members, and its effects on employee and team well-being, drawing on identity, social identity threat, and role congruity theories. This research extends leadership theory, providing practical implications, and informing future research. The suggestions for future research have the potential to inform a better understanding of the underlying processes and boundary conditions that leader narcissism has on work outcomes. Taken together, research on leader narcissism is increasing as researchers have become more interested in understanding negative behaviours in the workplace (Grijalva *et al.,* 2015). The findings of this research underscore the value of understanding leader and follower narcissism and highlighting ways in which organisations can build protective strategies against destructive tendencies of leader narcissism and promote employee and team well-being at work.

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# Appendix

**Appendix 1- Flier**

Diagram, website

Description automatically generated

**Appendix 2- Participant’s information sheets and full leader and team members surveys (used for the three waves)**

Research project: Leadership and Team Working

Researcher: Godbless O Akaighe

Supervisors: Dr Anna Topakas & Dr Kristin Hildenbrand, University of Sheffield (UK)

Participant Information Sheet

1. **Invitation**

Thank you for considering taking part in this study. Your time is greatly appreciated. Before you decide whether you would like to take part, it is important for you to understand why this research is being conducted and what it will involve. Please take time to read the below information carefully and contact the researcher on the details provided, should you have any questions. Take time to decide whether or not you wish to take part. Thank you for reading this.

1. **What is the project purpose?**

The aim of the project is to investigate leadership and team working in organisations. The study explores the interactions of leaders and team member characteristics in organisations and how different factors affect team member well-being and ability to work together effectively.

1. **Why have I been chosen?**

You have been chosen because you are working as a member of a team.

1. **Do I have to take part?**

It is up to you to decide whether to take part or not. Participation is on a voluntary basis. If you decide to take part, you will be able to keep a copy of this information sheet and you should indicate your agreement to the consent form. You can still withdraw at any time before the questionnaire have been submitted. You do not have to give a reason. After submission, it will be impossible to find your information because it is anonymised.

1. **What does taking part involve?**

If you agree to take part, you will be asked to complete three short surveys. The first one you can complete now, the second one in one month and the third one in two months from now. Each will take approximately 20 minutes to fill.

**6.** **What are the possible disadvantages and risks of taking part?**

Participating in this project is not anticipated to cause you any disadvantage or discomfort. As this research involves questions regarding feeling stressed, some questions might remind you of a past experience or cause some negative emotions. Do not participate or answer questions that make you feel uncomfortable. You should speak with your GP or HR services should you feel distressed following the completion of the survey. Remember, if you experience any discomfort, you can withdraw without providing the reason.

1. **What are the possible benefits of taking part?**

Whilst there are no immediate benefits for those participating in the project, this work will produce knowledge that may benefit employee wellbeing through improvements in leadership and team working in organisations.

1. **What if something goes wrong?**

If you have any complaints about the project in the first instance, please contact the researcher, Godbless O Akaighe. If you feel your complaint has not been handled to your satisfaction, please contact his supervisors.

1. **Will my taking part in this project be kept confidential?**

All the information that we collect about you during the research will be kept strictly confidential. You will not be identified or identifiable in any reports or publications. Your organisation will also not be identified or identifiable. Any data collected about you in the questionnaire will be stored online on a secured server and protected by passwords. Anonymised data may be shared to allow reuse by the research team. Data will not be passed to members of your organisation.

1. **What is the legal basis for processing my personal data?**

I will comply with all requirements of the Data Protection Act (DPA) 1998, General Data Protection Regulation (GDPR) 2016 and the Common Law duty of confidence. According to data protection legislation, we are required to inform you that the legal basis we are applying in order to process your personal data is that ‘processing is necessary for the performance of a task carried out in the public interest’ (Article 6(1)(e)). Further information can be found in the University’s Privacy Notice <https://www.sheffield.ac.uk/govern/data-protection/privacy/general>.

1. **Who is organising and funding the research?**

This is a research organised and funded by the University of Sheffield.

**12. Who is the data controller?**

The University of Sheffield will act as the Data Controller for this study. This means that University of Sheffield is responsible for looking after your information and using it properly.

**13. What will happen to the data collected, and the results of the research project?**

The anonymised data will be stored online on a secured server. The data will used for my thesis and resulting publications. The data will be held for 5 years following PhD completion and paper publications.

**14.** **Who has ethically reviewed the project?**

The research has been approved by The University of Sheffield ethics review procedure. The University of Sheffield Ethics Committee monitors the application and delivery of the University’s Ethics Review Procedure across the University.

**15. What if something goes wrong and I wish to complain about the research?**

If you have any concerns or complaints about the study, you may contact me (Godbless Akaighe, [goakaighe1@sheffield.ac.uk](mailto:goakaighe1@sheffield.ac.uk)) directly. Alternatively, you can contact the supervisors of this research: Dr Anna Topakas ([a.topakas@sheffield.ac.uk](mailto:a.topakas@sheffield.ac.uk)) and Dr Kristin Hildenbrand ([k.hildenbrand@sheffield.ac.uk](mailto:k.hildenbrand@sheffield.ac.uk)).

Contact for further information:

If you have any questions regarding this study, please feel free to contact Godbless Akaighe. Alternatively, you can contact the supervisors of this research (details provided above).

Thank you for considering the information provided. Next, please read the terms of consent and indicate whether you agree to take part in the project below.

**Declaration of consent**

In order to take part in this survey, you need to indicate that you consent with the following:

1. I have read and understood the project information sheet dated 26/02/2020 or the project has been fully explained to me.  (If you will answer No to this question, please do not proceed with this consent form until you are fully aware of what your participation in the project will mean).

2. I have been given the opportunity to ask questions about the project.

3. I agree to take part in the project.  I understand that taking part in the project will include completing three surveys.

4. I understand that my taking part is voluntary and that I can withdraw from the study during the survey; I do not have to give any reasons for why I no longer want to take part and there will be no adverse consequences if I choose to withdraw.

5. I understand my responses to the survey will not be revealed to people outside the project.

6.  I understand and agree that the authorised team of researchers will have access to this data only for learning and development purpose.

7. I understand that my data will be used in an anonymised form so that no personal details will be revealed/recognised by others.

8. I give permission for the questionnaire data that I provide to be deposited in The University of Sheffield repositoryso it can be used for future research and learning. The data will be destroyed at the end of the project.

9. I agree to assign the copyright I hold in any materials generated as part of this project to The University of Sheffield.

10. If I want to take part in the following part of the study, I understand that the researcher will contact me by email to invite me to the follow-ups.

**Leader**

**For each of the items below, please indicate the extent to which you agree or disagree with the statements below**

SD= Strongly disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly agree

**Burnout**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S/N | Items | SD | D | N | A | SA |
| 1 | I always find new and interesting aspects in my work. |  |  |  |  |  |
| 2 | There are days when I feel tired before I arrive at work. |  |  |  |  |  |
| 3 | It happens more and more often that I talk about my work in a negative way. |  |  |  |  |  |
| 4 | After work, I tend to need more time than in the past in order to relax and feel better. |  |  |  |  |  |
| 5 | I can tolerate the pressure of my work very well. |  |  |  |  |  |
| 6 | Lately, I tend to think less at work and do my job almost mechanically. |  |  |  |  |  |
| 7 | I find my work to be a positive challenge. |  |  |  |  |  |
| 8 | During my work, I often feel emotionally drained. |  |  |  |  |  |
| 9 | Over time, one can become disconnected from this type of work. |  |  |  |  |  |
| 10 | After working, I have enough energy for my leisure activities. |  |  |  |  |  |
| 11 | Sometimes I feel sickened by my work tasks. |  |  |  |  |  |
| 12 | After my work, I usually feel worn out and weary. |  |  |  |  |  |
| 13 | This is the type of work that I can imagine myself doing. |  |  |  |  |  |
| 14 | Usually, I can manage the amount of work well. |  |  |  |  |  |
| 15 | I feel more and more engaged in my work. |  |  |  |  |  |
| 16 | When I work, I usually feel energised. |  |  |  |  |  |

**For each of the items below, please rate how often you feel in the following statements**

**Work engagement**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S/N | Items | Never | Rarely | Sometimes | Often | Always |
| 1 | At my work, I feel bursting with energy |  |  |  |  |  |
| 2 | At my job, I feel strong and vigorous |  |  |  |  |  |
| 3 | I am enthusiastic about my job |  |  |  |  |  |
| 4 | My job inspires me |  |  |  |  |  |
| 5 | When I get up in the morning, I feel like going to work |  |  |  |  |  |
| 6 | I feel happy when I am working intensely |  |  |  |  |  |
| 7 | I am proud of the work that I do |  |  |  |  |  |
| 8 | I am immersed in my work |  |  |  |  |  |
| 9 | I get carried away when I am working |  |  |  |  |  |

**For each of the items, rate how you have felt in the past few days?**

**Positive and negative affect**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S/N | Items | Very slightly or not at all | A little | Moderately | Quite a bit | Extremely |
| 1 | Interested |  |  |  |  |  |
| 2 | Distressed |  |  |  |  |  |
| 3 | Excited |  |  |  |  |  |
| 4 | Upset |  |  |  |  |  |
| 5 | Strong |  |  |  |  |  |
| 6 | Guilty |  |  |  |  |  |
| 7 | Scared |  |  |  |  |  |
| 8 | Hostile |  |  |  |  |  |
| 9 | Enthusiastic |  |  |  |  |  |
| 10 | Proud |  |  |  |  |  |
| 11 | Irritable |  |  |  |  |  |
| 12 | Alert |  |  |  |  |  |
| 13 | Ashamed |  |  |  |  |  |
| 14 | Inspired |  |  |  |  |  |
| 15 | Nervous |  |  |  |  |  |
| 16 | Determined |  |  |  |  |  |
| 17 | Attentive |  |  |  |  |  |
| 18 | Jittery |  |  |  |  |  |
| 19 | Active |  |  |  |  |  |
| 20 | Afraid |  |  |  |  |  |

**For each of the items below, please indicate the extent to which you agree or disagree with the statements below**

**Stress**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S/N | Items | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 1 | I experience tension from my job |  |  |  |  |  |
| 2 | Aspects of my job are a source of frustration to me. |  |  |  |  |  |
| 3 | There is no strain from working in my job. |  |  |  |  |  |
| 4 | I never feel pressured in my job. |  |  |  |  |  |

**For each of the items below, please indicate the extent to which you agree or disagree with the statements below**

**Narcissistic personality inventory**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| S/N | Items | Strongly disagree | Disagree | Somewhat disagree | Undecided | Somewhat agree | Agree | Strongly agree |
| 1 | I know that I am good because everybody keeps telling me so. |  |  |  |  |  |  |  |
| 2 | I like to be the centre of attention. |  |  |  |  |  |  |  |
| 3 | I think I am a special person. |  |  |  |  |  |  |  |
| 4 | I like having authority over people. |  |  |  |  |  |  |  |
| 5 | I find it easy to manipulate people. |  |  |  |  |  |  |  |
| 6 | I insist upon getting the respect that is due to me. |  |  |  |  |  |  |  |
| 7 | I am apt to show off if I get the chance. |  |  |  |  |  |  |  |
| 8 | I always know what I am doing. |  |  |  |  |  |  |  |
| 9 | Everybody likes to hear my stories. |  |  |  |  |  |  |  |
| 10 | I expect a great deal from other people. |  |  |  |  |  |  |  |
| 11 | I really like to be the centre of attention. |  |  |  |  |  |  |  |
| 12 | People always seem to recognise my authority. |  |  |  |  |  |  |  |
| 13 | I am going to be a great person. |  |  |  |  |  |  |  |
| 14 | I can make anybody believe anything I want them to. |  |  |  |  |  |  |  |
| 15 | I am more capable than other people. |  |  |  |  |  |  |  |
| 16 | I am an extraordinary person. |  |  |  |  |  |  |  |

#### **Please answer the following questions by deciding to what extent each item is characteristic of your feelings and behaviour.**

**Hypersensitive narcissism scale**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S/N | Items | Very untrue | Untrue | Neutral | True | Very true |
| 1 | I can be somebody very absorbed in thinking about my personal affairs, my health, my cares or my relation to others. |  |  |  |  |  |
| 2 | My feelings are easily hurt by ridicule or the slightest remarks of others. |  |  |  |  |  |
| 3 | When I enter a room, I often become self-conscious and feel that the eyes of others are upon me. |  |  |  |  |  |
| 4 | I dislike sharing the credit of an achievement with others. |  |  |  |  |  |
| 5 | I feel that I have enough on my hands without worrying about other people’s troubles. |  |  |  |  |  |
| 6 | I feel that I am temperamentally different from most people. |  |  |  |  |  |
| 7 | I often interpret the remarks of others in a personal way. |  |  |  |  |  |
| 8 | I easily become wrapped up in my own interests and forget the existence of others. |  |  |  |  |  |
| 9 | I dislike being with a group unless I know that I am appreciated by at least one of those present. |  |  |  |  |  |
| 10 | I am secretly “put out” or annoyed when other people come to me with their troubles, asking me for my time and sympathy. |  |  |  |  |  |

**Please indicate if the following descriptions are true of you.**

**Social desirability**

|  |  |  |  |
| --- | --- | --- | --- |
| S/N | Items | NO | YES |
| 1 | I’m always willing to admit it when I make a mistake. |  |  |
| 2 | I always try to practice what I preach. |  |  |
| 3 | I never resent being asked to return a favour. |  |  |
| 4 | I have never been irked when people expressed ideas very different from my own. |  |  |
| 5 | I have never deliberately said something that hurt someone’s feelings. |  |  |
| 6 | I like to gossip at times. |  |  |
| 7 | There have been occasions when I took advantage of someone. |  |  |
| 8 | I sometimes try to get even rather than forgive and forget. |  |  |
| 9 | At times, I have really insisted on having things my own way. |  |  |
| 10 | There have been occasions when I felt like smashing things. |  |  |

Strahan, R., & Gerbasi, K. C. (1972). Short, homogeneous versions of the Marlow‐Crowne

Social desirability scale. *Journal of Clinical Psychology*, *28*(2), 191-193.

**Demographic Information**

1. Gender: Male, female, others (please specify), prefer not to say
2. Age:  \_\_\_\_\_\_
3. How long have you held a manger role? \_\_\_\_\_
4. How long have you worked for your current employer? \_\_\_\_\_\_\_\_
5. How many years of experience do you have in total? \_\_\_\_\_\_\_\_
6. How many people work in your department? \_\_\_\_\_\_\_
7. How many of these people have you as their line manger?
8. How long have you led or supervised the department/team? \_\_\_\_\_\_\_\_
9. How often do you have contact with your team members during a normal working week? daily, most of the days, a couple of times a week, about once a week, less than once a week.
10. Generate a personal code. The initials of your mother’s name, the second, fourth and six digits of your phone number \_\_\_\_\_\_\_\_\_

**Followers**

**For each of the items below, please indicate the extent to which you agree or disagree with the statements about your team**

SD= Strongly disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly agree

**Team Cohesiveness**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S/N | Statements | SD | D | N | A | SA |
| 1 | There is a friendly atmosphere amongst people in my team. |  |  |  |  |  |
| 2 | People in my work group trust each other. |  |  |  |  |  |
| 3 | People are warm and friendly. |  |  |  |  |  |
| 4 | People treat each other with respect. |  |  |  |  |  |
| 5 | People work well together as a team. |  |  |  |  |  |
| 6 | People cooperate with each other. |  |  |  |  |  |
| 7 | People are willing to share resources. |  |  |  |  |  |
| 8 | People almost always speak well of the team. |  |  |  |  |  |
| 9 | People are proud to belong to the group. |  |  |  |  |  |

**For each of the items below, please indicate the extent to which you agree or disagree with the statements about your team**

SD= Strongly disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly agree

**Team resilience**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S/N | Items | SD | D | N | A | SA |
| 1 | This team knows how to cope with challenges. |  |  |  |  |  |
| 2 | This team is able to cope with difficult periods of time. |  |  |  |  |  |
| 3 | We know how to handle difficult situations when we face them. |  |  |  |  |  |

**For each of the items below, please indicate the extent to which you agree or disagree with the statements about your team**

SD= Strongly disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly agree

**Climate for psychological safety**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S/N | Items | SD | D | N | A | SA |
| 1 | If you make a mistake on this team, it is often held against you. |  |  |  |  |  |
| 2 | Members of this team can bring up problems and tough issues. |  |  |  |  |  |
| 3 | People of this team are sometimes rejecting 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 my effort. |  |  |  |  |  |
| 7 | Working with members of this team, my unique skills and talents are valued and utilised. |  |  |  |  |  |

**For each of the items below, please indicate the extent to which you agree or disagree with the statements about you**

**Stress**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S/N | Items | Strongly disagree | Disagree | Neutral | Agree | Strongly agree |
| 1 | I experience tension from my job |  |  |  |  |  |
| 2 | Aspects of my job are a source of frustration to me. |  |  |  |  |  |
| 3 | There is no strain from working in my job. |  |  |  |  |  |
| 4 | I never feel pressured in my job. |  |  |  |  |  |

**For each of the item below, please rate how well your team feel in the following statements**

**Teamwork engagement**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S/N | Items | Never | Rarely | Sometimes | Often | Always |
| 1 | During the task, my team feels full of energy. |  |  |  |  |  |
| 2 | My team can continue working for very long periods of time. |  |  |  |  |  |
| 3 | My team keeps on working, even when things do not go well. |  |  |  |  |  |
| 4 | Hard work is not much of an effort for my team. |  |  |  |  |  |
| 5 | My team feels very persistent during the task. |  |  |  |  |  |
| 6 | My team feels strong and vigorous during the task. |  |  |  |  |  |
| 7 | When the task is finished, my team has quite some energy left for other activities. |  |  |  |  |  |
| 8 | My team is involved in the task. |  |  |  |  |  |
| 9 | My team is enthusiastic about the job. |  |  |  |  |  |
| 10 | My team enjoys doing the task. |  |  |  |  |  |
| 11 | My team feels very motivated to do a good job. |  |  |  |  |  |
| 12 | When my team is working, we forget everything else around us. |  |  |  |  |  |
| 13 | My team takes new initiatives. |  |  |  |  |  |
| 14 | My team is immersed in the task. |  |  |  |  |  |
| 15 | Time flies when my team is working. |  |  |  |  |  |
| 16 | My team feels happy when we are engrossed in the task. |  |  |  |  |  |
| 17 | It is difficult for the team to detach from the task. |  |  |  |  |  |
| 18 | My team gets “carried away” by the task. |  |  |  |  |  |

#### **Please answer the following questions by deciding to how true each item is characteristic of your feelings and behaviour.**

**Psychological withdrawal**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S/N | Items | Very untrue | Untrue | Neutral | True | Very true |
| 1 | I have thoughts of being absent. |  |  |  |  |  |
| 2 | I chat with co-workers about nonwork topics. |  |  |  |  |  |
| 3 | I left workstation for unnecessary reasons. |  |  |  |  |  |
| 4 | I engage in daydreaming. |  |  |  |  |  |
| 5 | I spent work time on personal matters. |  |  |  |  |  |
| 6 | I put less effort into job than should have. |  |  |  |  |  |
| 7 | I have thoughts of leaving current job. |  |  |  |  |  |
| 8 | I let others do my work. |  |  |  |  |  |

For each of the item below, please rate how well the item describes you

SD= Strongly disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly agree

**Core self-evaluations**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S/N | items | SD | A | N | A | SA |
| 1 | I am confident I get the success I deserve in life. |  |  |  |  |  |
| 2 | Sometimes I feel depressed. (r) |  |  |  |  |  |
| 3 | When I try, I generally succeed. |  |  |  |  |  |
| 4 | Sometimes when I fail, I feel worthless. (r) |  |  |  |  |  |
| 5 | I complete task successfully. |  |  |  |  |  |
| 6 | Sometimes, I do not feel in control of my work. (r) |  |  |  |  |  |
| 7 | Overall, I am satisfied with myself. |  |  |  |  |  |
| 8 | I am filled with doubts about my confidence. (r) |  |  |  |  |  |
| 9 | I determine what will happen in my life. |  |  |  |  |  |
| 10 | I do not feel in control of my success in my career. (r) |  |  |  |  |  |
| 11 | I am capable of coping with most of my problems. |  |  |  |  |  |
| 12 | There are times when things look pretty bleak and hopeless to me. (r) |  |  |  |  |  |

**For each of the items below, please indicate the extent to which you agree or disagree with the statements about your feelings**

**Self-esteem**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| S/N | Items | Strongly disagree | Disagree | Agree | Strongly agree |
| 1 | On the whole, I am satisfied with myself. |  |  |  |  |
| 2 | At times, I think I am no good at all. |  |  |  |  |
| 3 | I think that I have a number of good qualities. |  |  |  |  |
| 4 | I am able to do things as well as most other people. |  |  |  |  |
| 5 | I feel I do not have much to be proud of. |  |  |  |  |
| 6 | I certainly feel useless at times. |  |  |  |  |
| 7 | I feel that I am a person of worth. |  |  |  |  |
| 8 | I wish I could have more respect for myself. |  |  |  |  |
| 9 | All in all, I am inclined to think that I am a failure. |  |  |  |  |
| 10 | I take a positive attitude toward myself. |  |  |  |  |

#### **Please answer the following questions by deciding how true each item is characteristic of your feelings and behaviour.**

**Generalised self-efficacy**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S/N | Items | Very untrue | Untrue | Neutral | True | Very true |
| 1 | I will be able to achieve most of the goals that I have set for myself. |  |  |  |  |  |
| 2 | When facing difficult tasks, I am certain that I will accomplish them. |  |  |  |  |  |
| 3 | In general, I think that I can obtain outcomes that are important to me. |  |  |  |  |  |
| 4 | I believe I can succeed at most any endeavour to which I set my mind. |  |  |  |  |  |
| 5 | I will be able to successfully overcome my challenges. |  |  |  |  |  |
| 6 | I am confident that I can perform effectively on many different tasks. |  |  |  |  |  |
| 7 | Compared to other people, I can do most tasks very well. |  |  |  |  |  |
| 8 | Even when things are tough, I can perform quite well. |  |  |  |  |  |

**For each of the items below, please indicate the extent to which you agree or disagree with the statements about you**

SD= Strongly disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly agree

**Work engagement**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S/N | Items | SD | D | N | A | SA |
| 1 | I always find new and interesting aspects in my work. |  |  |  |  |  |
| 2 | There are days when I feel tired before I arrive at work. |  |  |  |  |  |
| 3 | It happens more and more often that I talk about my work in a negative way. |  |  |  |  |  |
| 4 | After work, I tend to need more time than in the past in order to relax and feel better. |  |  |  |  |  |
| 5 | I can tolerate the pressure of my work very well. |  |  |  |  |  |
| 6 | Lately, I tend to think less at work and do my job almost mechanically. |  |  |  |  |  |
| 7 | I find my work to be a positive challenge. |  |  |  |  |  |
| 8 | During my work, I often feel emotionally drained. |  |  |  |  |  |
| 9 | Over time, one can become disconnected from this type of work. |  |  |  |  |  |
| 10 | After working, I have enough energy for my leisure activities. |  |  |  |  |  |
| 11 | Sometimes I feel sickened by my work tasks. |  |  |  |  |  |
| 12 | After my work, I usually feel worn out and weary. |  |  |  |  |  |
| 13 | This is the type of work that I can imagine myself doing. |  |  |  |  |  |
| 14 | Usually, I can manage the amount of work well. |  |  |  |  |  |
| 15 | I feel more and more engaged in my work. |  |  |  |  |  |
| 16 | When I work, I usually feel energised. |  |  |  |  |  |

**For each of the item below, please rate how often you feel in the following statements**

**Burnout**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S/N | Items | Never | Rarely | Sometimes | Often | Always |
| 1 | At my work, I feel bursting with energy |  |  |  |  |  |
| 2 | At my job, I feel strong and vigorous |  |  |  |  |  |
| 3 | I am enthusiastic about my job |  |  |  |  |  |
| 4 | My job inspires me |  |  |  |  |  |
| 5 | When I get up in the morning, I feel like going to work |  |  |  |  |  |
| 6 | I feel happy when I am working intensely |  |  |  |  |  |
| 7 | I am proud of the work that I do |  |  |  |  |  |
| 8 | I am immersed in my work |  |  |  |  |  |
| 9 | I get carried away when I am working |  |  |  |  |  |

**For each of the items, rate how you have felt in the past few days?**

**Positive and negative affect**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S/N | Items | Very slightly or not at all | A little | Moderately | Quite a bit | Extremely |
| 1 | Interested |  |  |  |  |  |
| 2 | Distressed |  |  |  |  |  |
| 3 | Excited |  |  |  |  |  |
| 4 | Upset |  |  |  |  |  |
| 5 | Strong |  |  |  |  |  |
| 6 | Guilty |  |  |  |  |  |
| 7 | Scared |  |  |  |  |  |
| 8 | Hostile |  |  |  |  |  |
| 9 | Enthusiastic |  |  |  |  |  |
| 10 | Proud |  |  |  |  |  |
| 11 | Irritable |  |  |  |  |  |
| 12 | Alert |  |  |  |  |  |
| 13 | Ashamed |  |  |  |  |  |
| 14 | Inspired |  |  |  |  |  |
| 15 | Nervous |  |  |  |  |  |
| 16 | Determined |  |  |  |  |  |
| 17 | Attentive |  |  |  |  |  |
| 18 | Jittery |  |  |  |  |  |
| 19 | Active |  |  |  |  |  |
| 20 | Afraid |  |  |  |  |  |

#### **How often have you done each of the following things on your present job?**

**Counterproductive work behaviour**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S/N | Items | Never | Once or twice | Once or twice/month | Once or twice/week | Everyday |
| 1 | Purposely wasted your employer’s materials/supplies. |  |  |  |  |  |
| 2 | Complained about insignificant things at work. |  |  |  |  |  |
| 3 | Told people outside the job what a lousy place you work for. |  |  |  |  |  |
| 4 | Came to work late without permission. |  |  |  |  |  |
| 5 | Stayed home from work and said you were sick when you weren’t. |  |  |  |  |  |
| 6 | Insulted someone about their job performance. |  |  |  |  |  |
| 7 | Made fun of someone’s personal life. |  |  |  |  |  |
| 8 | Ignored someone at work. |  |  |  |  |  |
| 9 | Started an argument with someone at work. |  |  |  |  |  |
| 10 | Insulted or made fun of someone at work. |  |  |  |  |  |

**For each of the items below, please indicate the extent to which you agree or disagree with the statements about you**

**Narcissistic personality inventory: self-rating**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| S/N | Items | Strongly disagree | Disagree | Somewhat disagree | Undecided | Somewhat agree | Agree | Strongly agree |
| 1 | I know that I am good because everybody keeps telling me so. |  |  |  |  |  |  |  |
| 2 | I like to be the centre of attention. |  |  |  |  |  |  |  |
| 3 | I think I am a special person. |  |  |  |  |  |  |  |
| 4 | I like having authority over people. |  |  |  |  |  |  |  |
| 5 | I find it easy to manipulate. |  |  |  |  |  |  |  |
| 6 | I insist upon getting the respect that is due to me. |  |  |  |  |  |  |  |
| 7 | I am apt to show off if I get the chance. |  |  |  |  |  |  |  |
| 8 | I always know what I am doing. |  |  |  |  |  |  |  |
| 9 | Everybody likes to hear my stories. |  |  |  |  |  |  |  |
| 10 | I expect a great deal from other people. |  |  |  |  |  |  |  |
| 11 | I really like to be the centre of attention. |  |  |  |  |  |  |  |
| 12 | People always seem to recognise my authority. |  |  |  |  |  |  |  |
| 13 | I am going to be a great person. |  |  |  |  |  |  |  |
| 14 | I can make anybody believe anything I want them to. |  |  |  |  |  |  |  |
| 15 | I am more capable than other people. |  |  |  |  |  |  |  |
| 16 | I am an extraordinary person. |  |  |  |  |  |  |  |

#### **Please answer the following questions by deciding how true each item is characteristic of your feelings and behaviour.**

**Hypersensitive narcissism scale: self-rating**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| S/N | Items | Very untrue | Untrue | Neutral | True | Very true |
| 1 | I can be somebody very absorbed in thinking about my personal affairs, my health, my cares or my relation to others. |  |  |  |  |  |
| 2 | My feelings are easily hurt by ridicule or the slightest remarks of others. |  |  |  |  |  |
| 3 | When I enter a room, I often become self-conscious and feel that the eyes of others are upon me. |  |  |  |  |  |
| 4 | I dislike sharing the credit of an achievement with others. |  |  |  |  |  |
| 5 | I feel that I have enough on my hands without worrying about other people’s troubles. |  |  |  |  |  |
| 6 | I feel that I am temperamentally different from most people. |  |  |  |  |  |
| 7 | I often interpret the remarks of others in a personal way. |  |  |  |  |  |
| 8 | I easily become wrapped up in my own interests and forget the existence of others. |  |  |  |  |  |
| 9 | I dislike being with a group unless I know that I am appreciated by the least one of those present. |  |  |  |  |  |
| 10 | I am secretly “put out” or annoyed when other people come to me with their troubles, asking me for my time and sympathy. |  |  |  |  |  |

**For each of the items below, please indicate the extent to which you agree or disagree with the statements about your team leader**

**Narcissistic personality inventory: Other (leader) rating**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| S/N | Items | Strongly disagree | Disagree | Somewhat disagree | Undecided | Somewhat agree | Agree | Strongly agree |
| 1 | My leader knows that He/she is good because everybody keeps telling him/her so. |  |  |  |  |  |  |  |
| 2 | My leader likes to be the centre of attention. |  |  |  |  |  |  |  |
| 3 | My leader thinks he/she is a special person. |  |  |  |  |  |  |  |
| 4 | My leader likes having authority over people. |  |  |  |  |  |  |  |
| 5 | My leader finds it easy to manipulate. |  |  |  |  |  |  |  |
| 6 | My leader insists upon getting the respect that is due to him/her. |  |  |  |  |  |  |  |
| 7 | My leader is apt to show off if he/she gets the chance. |  |  |  |  |  |  |  |
| 8 | My leader always knows what he/she is doing. |  |  |  |  |  |  |  |
| 9 | Everybody likes to hear my leader’s stories. |  |  |  |  |  |  |  |
| 10 | My leader expects a great deal from other people. |  |  |  |  |  |  |  |
| 11 | My leader really likes to be the centre of attention. |  |  |  |  |  |  |  |
| 12 | People always seem to recognise my leader’s authority. |  |  |  |  |  |  |  |
| 13 | My leader is going to be a great person. |  |  |  |  |  |  |  |
| 14 | My leader can make anybody believe anything he/she wants them to. |  |  |  |  |  |  |  |
| 15 | My leader is more capable than other people. |  |  |  |  |  |  |  |
| 16 | My leader is an extraordinary person. |  |  |  |  |  |  |  |

**Please indicate if the following descriptions are true of you.**

**Social desirability scale**

|  |  |  |  |
| --- | --- | --- | --- |
| S/N | Items | NO | YES |
| 1 | I’m always willing to admit it when I make a mistake. |  |  |
| 2 | I always try to practice what I preach. |  |  |
| 3 | I never resent being asked to return a favour. |  |  |
| 4 | I have never been irked when people expressed ideas very different from my own. |  |  |
| 5 | I have never deliberately said something that hurt someone’s feelings. |  |  |
| 6 | I like to gossip at times. |  |  |
| 7 | There have been occasions when I took advantage of someone. |  |  |
| 8 | I sometimes try to get even rather than forgive and forget. |  |  |
| 9 | At times, I have really insisted on having things my own way. |  |  |
| 10 | There have been occasions when I felt like smashing things. |  |  |

**Demographic Information**

1. Gender: Male, female, other (please specify), prefer not to say.
2. Age:  \_\_\_\_\_\_
3. How long have you worked for your current employer? \_\_\_\_\_
4. How many years of experience do you have in total? \_\_\_\_\_\_\_
5. How many people work in your department? \_\_\_\_\_\_\_
6. How long have you been supervised by your departmental leader? \_\_\_\_\_\_\_\_\_
7. How often do you have contact with your leader during a normal working week? Daily, most of the days, a couple of times a week, about once a week, less than once a week.
8. Generate a personal identification code. The initials of your mother’s name, the second, fourth and six digits of your phone number \_\_\_\_\_\_\_\_\_

**Appendix 3: Syntax for the computation of within group agreement (selected variables)**

Computing r.w.g. on Work engagement (WE), 9 items scale

WE\_T1

1. Compute SDs aggregated by team.

AGGREGATE

/OUTFILE='C:\Users\GODBLESS 247\Desktop\WE\_T1.sav'

/BREAK=Team

/SDWE\_1\_T1 = SD(WE\_1\_T1)/SDWE\_2\_T1 = SD(WE\_2\_T1) /SDWE\_3\_T1 = SD(WE\_3\_T1) /SDWE\_4\_T1 = SD(WE\_4\_T1) /SDWE\_5\_T1 = SD(WE\_5\_T1) /SDWE\_6\_T1 = SD(WE\_6\_T1)/SDWE\_7\_T1 =

SD(WE\_7\_T1) /SDWE\_8\_T1 = SD(WE\_8\_T1) /SDWE\_9\_T1 = SD(WE\_9\_T1)

/N\_BREAK=N.

GET

FILE='C:\Users\GODBLESS 247\Desktop\WE\_T1.sav'.

COMPUTE VWE\_T1 = ((SDWE\_1\_T1\*SDWE\_1\_T1)+(SDWE\_2\_T1\*SDWE\_2\_T1)+(SDWE\_3\_T1\*SDWE\_3\_T1)+(SDWE\_4\_T1\*SDWE\_4\_T1)+(SDWE\_5\_T1\*SDWE\_5\_T1)+(SDWE\_6\_T1\*SDWE\_6\_T1)

+(SDWE\_7\_T1\*SDWE\_7\_T1)+(SDWE\_8\_T1\*SDWE\_8\_T1)+(SDWE\_9\_T1\*SDWE\_9\_T1))/9.

Execute.

COMPUTE rwgWE\_T1 = (2\*(1-(VWE\_T1/2)))/((2\*(1-(VWE\_T1/2)))+(VWE\_T1/2)).

Execute.

if (rwgWE\_T1 < 0) rwgWE\_T1 = 0.

execute.

if (rwgWE\_T1 > 2) rwgWE\_T1 = 2.

execute.

DESCRIPTIVES

VARIABLES=rwgWE\_T1

/STATISTICS=MEAN STDDEV RANGE MIN MAX .

Computing r.w.g. on Narcissistic personality inventory (NPI), 16 items scale

NPI\_T1

1. Compute SDs aggregated by team.

AGGREGATE

/OUTFILE='C:\Users\GODBLESS 247\Desktop\NPI\_T1.sav'

/BREAK=Team

/SDNPI\_1\_T1 = SD(NPI\_1\_T1)/SDNPI\_2\_T1 = SD(NPI\_2\_T1) /SDNPI\_3\_T1 = SD(NPI\_3\_T1) /SDNPI\_4\_T1 = SD(NPI\_4\_T1) /SDNPI\_5\_T1 = SD(NPI\_5\_T1) /SDNPI\_6\_T1 = SD(NPI\_6\_T1)/SDNPI\_7\_T1 =

SD(NPI\_7\_T1) /SDNPI\_8\_T1 = SD(NPI\_8\_T1) /SDNPI\_9\_T1 = SD(NPI\_9\_T1) /SDNPI\_10\_T1 = SD(NPI\_10\_T1) /SDNPI\_11\_T1 = SD(NPI\_11\_T1) /SDNPI\_12\_T1 = SD(NPI\_12\_T1) /SDNPI\_13\_T1 = SD(NPI\_13\_T1)/SDNPI\_14\_T1 =

SD(NPI\_14\_T1) /SDNPI\_15\_T1 = SD(NPI\_15\_T1) /SDNPI\_16\_T1 = SD(NPI\_16\_T1)

/N\_BREAK=N.

GET

FILE='C:\Users\GODBLESS 247\Desktop\NPI\_T1.sav'.

COMPUTE VNPI\_T1 = ((SDNPI\_1\_T1\*SDNPI\_1\_T1)+(SDNPI\_2\_T1\*SDNPI\_2\_T1)+(SDNPI\_3\_T1\*SDNPI\_3\_T1)+(SDNPI\_4\_T1\*SDNPI\_4\_T1)+(SDNPI\_5\_T1\*SDNPI\_5\_T1)+(SDNPI\_6\_T1\*SDNPI\_6\_T1)

+(SDNPI\_7\_T1\*SDNPI\_7\_T1)+(SDNPI\_8\_T1\*SDNPI\_8\_T1)+(SDNPI\_9\_T1\*SDNPI\_9\_T1)+(SDNPI\_10\_T1\*SDNPI\_10\_T1)+(SDNPI\_11\_T1\*SDNPI\_11\_T1)+(SDNPI\_12\_T1\*SDNPI\_12\_T1)+(SDNPI\_13\_T1\*SDNPI\_13\_T1)

+(SDNPI\_14\_T1\*SDNPI\_14\_T1)+(SDNPI\_15\_T1\*SDNPI\_15\_T1)+(SDNPI\_16\_T1\*SDNPI\_16\_T1))/16.

Execute.

COMPUTE rwgNPI\_T1 = (4\*(1-(VNPI\_T1/4)))/((4\*(1-(VNPI\_T1/4)))+(VNPI\_T1/4)).

Execute.

if (rwgNPI\_T1 < 0) rwgNPI\_T1 = 0.

execute.

if (rwgNPI\_T1 > 2) rwgNPI\_T1 = 2.

execute.

DESCRIPTIVES

VARIABLES=rwgNPI\_T1

/STATISTICS=MEAN STDDEV RANGE MIN MAX .

Computing r.w.g. on Leader Narcissistic personality inventory (LNPI), 16 items scale

LNPI\_T1

1. Compute SDs aggregated by team.

AGGREGATE

/OUTFILE='C:\Users\GODBLESS 247\Desktop\LNPI\_T1.sav'

/BREAK=Team

/SDLNPI\_1\_T1 = SD(LNPI\_1\_T1)/SDLNPI\_2\_T1 = SD(LNPI\_2\_T1) /SDLNPI\_3\_T1 = SD(LNPI\_3\_T1) /SDLNPI\_4\_T1 = SD(LNPI\_4\_T1) /SDLNPI\_5\_T1 = SD(LNPI\_5\_T1) /SDLNPI\_6\_T1 = SD(LNPI\_6\_T1)/SDLNPI\_7\_T1 =

SD(LNPI\_7\_T1) /SDLNPI\_8\_T1 = SD(LNPI\_8\_T1) /SDLNPI\_9\_T1 = SD(LNPI\_9\_T1) /SDLNPI\_10\_T1 = SD(LNPI\_10\_T1) /SDLNPI\_11\_T1 = SD(LNPI\_11\_T1) /SDLNPI\_12\_T1 = SD(LNPI\_12\_T1) /SDLNPI\_13\_T1 = SD(LNPI\_13\_T1)/SDLNPI\_14\_T1 =

SD(LNPI\_14\_T1) /SDLNPI\_15\_T1 = SD(LNPI\_15\_T1) /SDLNPI\_16\_T1 = SD(LNPI\_16\_T1)

/N\_BREAK=N.

GET

FILE='C:\Users\GODBLESS 247\Desktop\LNPI\_T1.sav'.

COMPUTE VLNPI\_T1 = ((SDLNPI\_1\_T1\*SDLNPI\_1\_T1)+(SDLNPI\_2\_T1\*SDLNPI\_2\_T1)+(SDLNPI\_3\_T1\*SDLNPI\_3\_T1)+(SDLNPI\_4\_T1\*SDLNPI\_4\_T1)+(SDLNPI\_5\_T1\*SDLNPI\_5\_T1)+(SDLNPI\_6\_T1\*SDLNPI\_6\_T1)

+(SDLNPI\_7\_T1\*SDLNPI\_7\_T1)+(SDLNPI\_8\_T1\*SDLNPI\_8\_T1)+(SDLNPI\_9\_T1\*SDLNPI\_9\_T1)+(SDLNPI\_10\_T1\*SDLNPI\_10\_T1)+(SDLNPI\_11\_T1\*SDLNPI\_11\_T1)+(SDLNPI\_12\_T1\*SDLNPI\_12\_T1)+(SDLNPI\_13\_T1\*SDLNPI\_13\_T1)

+(SDLNPI\_14\_T1\*SDLNPI\_14\_T1)+(SDLNPI\_15\_T1\*SDLNPI\_15\_T1)+(SDLNPI\_16\_T1\*SDLNPI\_16\_T1))/16.

Execute.

COMPUTE rwgLNPI\_T1 = (4\*(1-(VLNPI\_T1/4)))/((4\*(1-(VLNPI\_T1/4)))+(VLNPI\_T1/4)).

Execute.

if (rwgLNPI\_T1 < 0) rwgLNPI\_T1 = 0.

execute.

if (rwgLNPI\_T1 > 2) rwgLNPI\_T1 = 2.

execute.

DESCRIPTIVES

VARIABLES=rwgLNPI\_T1

/STATISTICS=MEAN STDDEV RANGE MIN MAX .

1. https://www.oecd.org/swac/publications/Nigeria\_e-version\_en\_light.pdf [↑](#footnote-ref-1)
2. https://worldpopulationreview.com/countries/nigeria-population [↑](#footnote-ref-2)
3. https://tribuneonlineng.com/nigerias-major-ethnic-groups-geopolitical-zones/ [↑](#footnote-ref-3)
4. https://en.wikipedia.org/wiki/Lagos [↑](#footnote-ref-4)
5. https://en.wikipedia.org/wiki/History\_of\_Nigeria [↑](#footnote-ref-5)
6. https://www.investopedia.com/updates/top-developing-countries/ [↑](#footnote-ref-6)
7. https://www.bbc.com/travel/article/20210124-nigeria-the-country-that-loves-to-overachieve [↑](#footnote-ref-7)