



**Workaholism:
“The Dark Side of Transformational Leadership”.**

by Wenjuan Cai

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Philosophy

under the supervision of

Dr. Anthony Fee, Dr. Ace Simpson, and Dr. Paul Wang.

University of Technology Sydney Faculty of Management, UTS Business School

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CERTIFICATE OF ORIGINAL AUTHORSHIP

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirement for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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ABSTRACT

It has long been recognised that there is a dark side to charismatic/transformational leadership. Such dark-side characteristics are most commonly attributed to undesirable personal motives and behaviours (e.g., narcissism, unethical leadership) of the leader. This research adopts a different perspective by examining if charismatic/transformational leadership might precipitate workaholism among followers, even in the presence of desirable personal characteristics/motives of the leader.

Although many antecedents of workaholism have been examined, including organisational policies and practice, the effects of transformational leadership and its psychological mechanisms (i.e., value congruence, identification) on workaholism among followers has not been considered in previous studies. Drawing on an extensive literature review, particularly the work of Shamir, House and Arthur (1993) in an effort to address identified gaps, a theoretical model was developed. The model proposes that transformational leadership increases value congruence with the leader and the organisation, which then increases identification with the leader and the organisation, which in turn increases work centrality and ultimately leads to workaholism. In addition to the sequential mediation proposed in the model, work centrality was proposed to be another psychological mechanism through which transformational leadership could motivate followers and lead to workaholism.

The research addresses important gaps in the literature on transformational leadership and workaholism by examining whether: (1) transformational leadership is positively related to workaholism among followers; (2) psychological mechanisms (i.e., value congruence, identification) through which transformational leadership operates can result in workaholism among followers; (3) value congruence positively mediates the relationship between transformational leadership and two types of identification (i.e., personal and social); and (4) work centrality positively mediates the relationship between transformational leadership and workaholism.

The research adopted a positivism-based, cross-sectional, quantitative methodology. Data was collected via an online questionnaire. The sample comprised 576 Australian white-collar professionals, a population regarded as representing the 'typical' workaholic.

Sampling adequacy, convergent validity and dimensionality of the items, scale reliability,

and consistency all met minimum requirements, and the measurement model was first tested with Exploratory Factor Analysis using IBM SPSS software. Additionally, the measurement model including internal reliability, convergent validity, and discriminant validity was tested again by using Partial Least Squared analysis via PLS Smart3 to ensure the data were valid and reliable before testing the structural model. A five-step procedure was then adopted to assess the structural model (i.e., hypotheses testing) as suggested by Hair et al. (2017) using PLS Smart3. Preceding this analysis, several procedural remedies were considered when designing the questionnaire and invitation letter, and statistical remedies were used after the data were collected to mitigate common method bias. All stages of the study were approved by UTS Human Research Ethics Committee (approval number ETH 18-2188).

The results supported the hypothesis that transformational leadership can affect workaholism among followers but only through its psychological mechanism. Specifically, the model extends previous studies, particularly Shamir et al.'s (1993) work, by revealing sequential mediating relationships between transformational leadership and two types of identification, namely personal identification (followers' personal identification with the leader) and social identification (followers' social identification with the organisation), are strongly mediated by value congruence (i.e., follower–leader and follower–organisation value congruence). The findings revealed that the psychological mechanism of value congruence (i.e., followers' value congruence with their leader and organisation) was a key driver through which transformational leadership could reinforce followers identifying with the leader as well as with the organisation.

This study's results draw attention to the importance of the psychological process of value congruence in shaping how followers form identification with their leaders and organisations and, in the process, establishing counter-productive attitudes and behaviours associated with workaholism. Very high levels of value congruence with leaders or organisations — while often perceived favourably in organisational settings — may be early warning signs that followers are susceptible to the potentially negative consequence, workaholism. The study's findings raise questions about organisations' (and leaders') moral responsibilities to ensure that their efforts to create organisational cultures and/or strong associations between their (transformational) leaders and others in the organisation are managed in ways that might prevent or mitigate some of the less desirable outcomes of transformational/charismatic leadership.

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CHAPTER 1. OVERVIEW OF THE STUDY

1.1 Introduction

This chapter provides an overview of the thesis. It presents the research background, key research constructs, research contributions, research methodology, findings, and an outline for the structure of the overall thesis.

The remainder of the Chapter is structured as follows: Section 1.2 discusses the research background and its contributions to the literature on the role of transformational leadership and workaholism among followers, whilst Section 1.3 outlines the objectives, hypotheses, and key constructs of the research. Justification of the research is presented in Section 1.4. Section 1.5 discusses the research methodology. Section 1.6 contains the major findings of the research, and Section 1.7 discusses the structure of the research.

1.2 Background of the Research

1.2.1 *Leadership*

Leadership has been the topic of research for centuries and still receives considerable attention from scholars. Various types of leadership have been researched by leadership scholars. The current study focuses on transformational leadership and its effects on followers. Bass and Steidlmeier (1999) identified two types of transformational leadership, namely authentic or moral and inauthentic or pseudo. A major difference between moral and pseudo transformational leaders lies in the values they uphold. Moral transformational leaders call for universal brotherhood whereas pseudo transformational leaders emphasise we-they differences. In addition, moral transformational leaders are altruistic and foster organisational cultures that have high ethical standards and aim for all followers to internalise shared moral standards. In contrast, pseudo transformational leaders deceive and manipulate, pursue power and position, show no regard for the concerns of others, and are egocentric. Furthermore, pseudo transformational leaders may appear to empower followers but need to be in control, so they ensure their followers remain dependent on them (Bass & Steidlmeier, 1999).

The current study investigates moral transformational leadership. An assumption underlying this research is moral charismatic/transformational leadership can result in

long-term negative outcomes for followers if the leader is a personalised charismatic (i.e., has a proself value orientation) and in long-term positive outcomes if the leader is a socialised charismatic (i.e., has a prosocial value orientation). However, it is possible followers could suffer serious adverse consequences even when the charismatic/transformational leader is ethical and prosocial. The purpose of this research is to examine this proposition. Specifically, the major objective of this research is to examine if “authentic” or socialised charismatic/transformational leadership can result in workaholism among followers.

1.2.2 *Shamir et al’s (1993) Motivational Theory*

Shamir, House and Arthur (1993) proposed a motivational theory that explains how charismatic/transformational leadership¹ can profoundly influence followers. According to this theory, charismatic/transformational leadership influences followers by engaging the self-concepts of followers such that followers become personally committed to the ideals and goals (i.e., vision) of charismatic/transformational leadership because they identify with the leader and with the leader’s group/organisation. Specifically, transformational leaders display behaviours (e.g., emphasising collective identities, expressing confidence in followers, ‘walking the talk’) that increase the salience of shared or collective identities, the self-esteem of followers and their personal identification with the leader, thus increasing the intrinsic attractiveness of exerting effort to achieve collective goals that are regarded as virtuous and self-expressive rather than as simply instrumental-calculative.

Transformational leadership thus profoundly affects followers partly because followers identify with their leaders along with the leaders’ work groups and organisations (Yukl, 1998; Kark et al., 2003; Mohamad & Saad, 2016). Identifying with the leader and the leader’s group influences the perceptions, attitudes and behaviours of followers (Pratt, 1998) and thus has important consequences not only for followers but also for the group. These consequences are due in part to the effects of transformational leadership on the self-concepts of followers.

¹ As explained on pages 45–47, charismatic leadership and transformational leadership are often operationalised in ways that make them synonymous. For this reason, the terms are used interchangeably in Chapters 2 and 3 according to the terminology used by the study’s author.

The work by Shamir et al. (1993) on the motivational effects of charismatic leadership, a self-concept-based theory, is used to underpin the current study. Although considerable attention has been given to transformational leadership and its effects on followers, relatively little attention has been given to the psychological mechanisms via which transformational leadership achieves its effects on followers. Shamir et al. (1993) proposed that transformational leadership achieves its effects on followers by influencing the self-concepts of followers in several ways: i) increasing self-esteem and self-worth; ii) increasing individual and collective self-efficacy beliefs; iii) value internalisation; and iv) personal identification with the leader and social identification.

Shamir et al.'s (1993) theory has been partially supported by some studies. Kark, Shamir and Chen (2003) found that that identification with the leader mediates the relationship between transformational leadership and follower dependence on the leader, whilst social identification with the work unit mediates the relationship between transformational leadership and followers' empowerment. Cavazotte, Moreno and Bernardo (2013) found that self-efficacy mediates the relationship between transformational leadership and task performance, whereas identification with the leader mediates the relationship between transformational leadership and helping behaviour.

Only a few studies (e.g., Kark et al., 2003; Hobman, Jackson, Jimmieson, & Martin, 2011) in the literature have examined the mediating effects of personal and/or social identification on the relationship between transformational leadership and outcome variables. In all the theoretical explanations and empirical studies that were found, personal identification with the leader and social identification are treated as two separate outcomes of transformational leadership. However, this assumption rules out the possibility that personal identification with the leader drives social identification. In all of the studies that were found, only direct relationships between the two types of identification and various outcomes were proposed and tested. Furthermore, numerous mediators have been proposed for the effects of transformational leadership on follower outcomes such as trust in the leader, empowerment of followers, the quality of the leader–follower relationship, and affective commitment to the organisation. However, no studies were found in which work centrality was regarded as a mediator of the effects of transformational leadership on the attitudes or behaviours of followers. The purpose of this research is to address these gaps in the literature in relation to how transformational leadership might foster workaholism among followers.

1.2.3 *Workaholism*

Workaholism or work addiction is a term that has a long history and is commonly used to describe people who work too much without any apparent need to do so: that is, they are addicted to their work. Although there are numerous definitions of workaholism in the literature, they all share the idea originally proposed by Oates (1971) that workaholism is "...the compulsion or the uncontrollable need to work incessantly..." (p. 11). For example, Robinson (1989) defined workaholism as a preoccupation with work that is detrimental to the workaholic's health, intimate relationships, and ability to fulfil familial responsibilities. In other words, workaholics are individuals who cannot disengage from their work and thus work excessively, without any obvious, objective environmental necessities (e.g., deadlines or economic need) to do so, to the extent that it has detrimental effects on them.

There is currently little specific knowledge about the number and type of people affected by workaholism (Andreassen, 2014). More than 10% of the general U.S. population may be workaholics (Andreassen et al., 2012). Australia ranks second in the world behind Japan on one common measure of workaholism. In Japan, just 33% of full-time workers take their allocated vacation days, while in Australia the figure is 47% (Business Insider, 2011). In Sydney, workaholism is more prevalent in affluent suburbs — up to 67% of residents in wealthy suburbs reported working more than 40 hours per week (Sydney Morning Herald, 2017).

Workaholism, by definition, negatively impacts one's wellbeing. The negative effects of workaholism are partly due to working excessively but mainly to the obsession with and compulsion to work (McMillan et al., 2001; Taris, Schaufeli & Shimazu, 2010; Van den Broeck et al., 2011). Workaholism has been shown to be related to many harmful consequences not only for workaholics but also for their families and organisations (Caruso, 2006). For example, the consequences of workaholism include insomnia (Andreassen et al., 2011), stress, and health issues (Robinson, 2000c). As a result, workaholics experience a decrease in physiological and neuro-cognitive functioning that leads to increased errors and injuries (Nakata et al., 2000), increased health-care costs for their organisations (Vodanovich & Piotrowski, 2006), decreased self-reported job performance (Shimazu & Schaufeli, 2009), increased absenteeism (particularly from mental-health problems) (Matsudaira et al., 2013) and increased intention to quit (Burke

& MacDermid, 1999). Furthermore, workaholics are not interested in activities that are not work-related. As a result, they spend little time with their families (Dahlgren, Kecklund, & Akerstedt, 2006) and often experience marital estrangement (Sussman, 2012).

Numerous antecedents of workaholism have been considered in the literature on workaholism. The social environment can lead to workaholism as it can provide a haven for individuals who have little to look forward to outside of their work activities and it can satisfy specific psychological needs (Van den Broeck et al., 2011). For example, some individuals avoid unpleasant non-work activities and environments (e.g., unhappy personal lives, marital estrangement) by immersing themselves in their work (Aziz & Zickar, 2006). Working excessively and being obsessed with work (e.g., constantly discussing work-related matters with colleagues to the exclusion of other topics) can meet esteem needs as it allows one to demonstrate one's capabilities and can result in praise and recognition from work-related significant others (e.g., supervisors, senior managers) (Spence & Robbins, 1992; Ng et al., 2007) for performing beyond expectations and demonstrating one's total commitment to one's work and organisation (e.g., being a good organisational citizen).

Several other antecedents of workaholism have been examined. Technological factors such as continuous access to email and work-related IT systems allow employees to work outside traditional work hours (Cooper, 1998). Psychological factors such as some personality traits (e.g., conscientiousness, narcissism, neuroticism, perfectionism) can result in workaholism (Andreassen, 2014). Work-related factors such as unclear role expectations, emphasis on careers and commitment, and boundaries between work and personal life having become blurred (Fletcher & Bailyn, 2001). Despite the wide range of antecedents that have been considered, no research could be found that considered whether transformational leadership can result in workaholism among followers via its psychological mechanisms. The aim of this study is to address these gaps in the literature by providing theoretical and conceptual arguments and empirical support.

1.2.4 Value Congruence

Individuals and organisations have value systems that determine their attitudes and behaviours. Values influence emotional responses to information and events and

ultimately behaviour (Edwards & Cable, 2009). Value congruence occurs when the value system of an individual is consistent with the value system of another individual (e.g., person–leader) or an organisation (person–organisation) (Hoffman et al., 2011).

People tend to behave in ways that are not only consistent with their own ideologies but also with those of powerful superiors (Beyer, 1981). Values are important because they influence the way in which information and events are interpreted (Schwartz, 1992). Individuals are guided by their personal value systems when making decisions. Organisational value systems guide members on how to behave and how organisational resources should be used through the provision of formal policies and informal norms (Edwards & Cable, 2009). According to the previous literature, there are several ways in which transformational leadership can influence followers to align their values with those of the leader and the organisation, including empowering followers, expressing confidence in follower (Conger & Kanungo, 1998), articulating an inspiring vision (Conger, Kanungo & Menon, 2000; Posner, 1992), conveying the importance of the shared values (Dirks and Ferrin, 2002), as well as possessing self-confidence and genuinely caring for the well-being of their followers (Hoffman et al., 2011).

The current study proposes value congruence (i.e., follower–leader, follower–organisation value congruence) as the psychological mechanism (i.e., a mediator) through which transformational leadership can reinforce followers’ identifying with the leader as well as with the organisation. This can potentially lead to followers perceiving work as their central life interest and eventually lead to workaholism among followers.

1.2.5 Identification

According to Social Identity Theory, self-concept consists of a personal identity and a social identity. Personal identity encompasses idiosyncratic characteristics (e.g., physical attributes, abilities, psychological traits, interests), whereas the social identity encompasses the characteristics of those groups that one identifies with most closely (Ashforth & Mael, 1989). Social Identity Theory proposes that individuals tend to classify themselves in relation to various social categories such as nation, religion, gender, and organisational membership (Tajfel & Turner, 1985). Social identification occurs for two reasons: i) it helps individuals define and locate themselves in societies by classifying themselves and others into different social categories; and ii) it enhances individual’s self-

esteem (Stinglhamber et al., 2015).

The existing literature reveals that transformational leadership can profoundly affect followers partly because followers identify with their leaders and the leaders' work groups and organisations (Yukl, 1998; Kark et al., 2003; Mohamad & Saad, 2016). Identifying with the leader and the leader's group influences the perceptions, attitudes and behaviours of followers (Pratt, 1998) and thus has important consequences not only for followers but also for the group. These consequences are due in part to the effects of transformational leadership on the self-concepts of followers (Shamir et al., 1993).

The current study proposes identification (i.e., personal identification with the leader, social identification with the organisation) as one of the important psychological mechanisms that can enhance the effectiveness of transformational leadership and ultimately result in followers perceiving work as their central life interest.

1.2.6 *Work Centrality*

The term 'work centrality' was introduced by England and Misumi (1986). They defined work centrality as "...the degree of general importance that working has in the life of an individual at any given point in time" (p. 402). A high level of work centrality indicates that one attaches a great deal of importance to work in one's life (Diefendorff et al., 2002), strongly identifies with one's work (Bal & Kooij, 2011), and believes that work is to be engaged in for its own sake (Hattrup et al., 2007). Work centrality therefore influences how one behaves at the workplace and outside the workplace (Alvesson, Ashcraft, & Thomas, 2008).

There are several reasons why work can become an important part of one's life. Work can become a central part of a person's life for instrumental reasons. For example, income from work can provide financial security and satisfy material needs (Aziz et al., 2013). Work can also become a central part of a person's life for intrinsic reasons. Work can satisfy socio-psychological needs such as esteem and belongingness through rewarding interpersonal interactions with co-workers. Work can also be fulfilling if it becomes a form of self-expression such that the work identity becomes central to person and his/her identity (May, Gilson, & Harter, 2004).

Work identity is a major part of the self-concept for most individuals (Arvey, Harpaz, &

Liao, 1996; Walsh & Gordon, 2008). Many individuals identify with and are identified by the work they do (Gini, 1998). Work identity is likely to become a central part of the self-concept when individuals identify with their leaders and organisations. Close ties to the leader and organisation can satisfy certain psychological needs (e.g., belongingness, esteem, and social embeddedness), which can result in individuals identifying with their work role. Work then becomes more meaningful and intrinsically satisfying, ultimately increasing the salience of one's work identity. As a result, the centrality of work in one's life increases. The current study proposes work centrality as an additional psychological mechanism through which transformational leadership may trigger certain responses due to followers' psychological needs and subsequently result in workaholism among followers.

1.2.7 Research Concept

Despite there being an extensive literature on transformational leadership and its various effects on followers, no studies have tested the effects of transformational leadership on workaholism through its psychological mechanisms (i.e., value congruence, identification, work centrality). Drawing on an extensive literature review, particularly the work of Shamir et al. (1993) in an effort to address identified gaps, a theoretical model was developed. The model proposes that transformational leadership increases value congruence with the leader and the organisation, which then increases identification with the leader and the organisation, which in turn increases work centrality and ultimately leads to workaholism.

An unpublished conceptual paper by O'Donoghue (2012) was found that considered the effects of transformational leadership on workaholism. However, this proposition has not been tested empirically and runs counter to what is proposed in this thesis. A recent study of Lithuanian employees, published after the data were collected for the current thesis, also looked at transformational leadership and workaholism (Morkevičiūtė, Endriulaitienė & Jočienė, 2019). Their study is, in a way, similar to the current study; however, it is not identical. They focused on testing the relationship between each dimension of the perceived transformational leadership style and the employee's excessive work and general workaholism. However, the current study looked at a group of Australian professionals from a range of different professional areas and tested five components of transformational leadership as a whole unit rather than testing each

dimension. More importantly, the current study not only examines whether the effects of transformational leadership could facilitate workaholism but also whether transformational leadership could increase follower workaholism through the influence of three psychological mechanisms (i.e., value congruence, identification, and work centrality), as no attention has been given to the psychological mechanisms via which transformational leadership could affect followers' workaholism. Charismatic/transformational leaders are arguably highly likely to be workaholics given the visionary nature of their leadership style requires self-sacrificial behaviours. Such behaviours, however, are demanded not only from the leaders but also from their followers. Hence, it could be posited that similar workaholism could be anticipated among their followers.

The lack of interest in the effects of transformational leadership on workaholism is surprising because it has long been recognised that there is a negative or 'dark' side of charisma and therefore to transformational leadership because charisma is the central component of transformational leadership. Research on the 'dark side' of charismatic/transformational leadership has examined how personality traits of the leader (e.g., Machiavellianism, narcissism) and/or various types of leadership behaviours (e.g., abusive supervision, bullying, destructive leadership, supervisor aggression, toxic leadership, unethical leadership) adversely affect followers and others (Takala, 2010; Stachowicz-Stanusch, 2011). However, the influence of moral/prosocial transformational leadership on workaholism through its psychological mechanisms is yet to be examined. The current study aims to address these gaps and answer the following research questions.

1.3 Research Aims and Key Constructs

1.3.1 *Research Questions and Aims*

To address the gaps in the literature in relation to how transformational leadership might foster workaholism among followers, particularly via its psychological mechanisms, 20 hypotheses are proposed for the current study based on two research questions that are stated as follows:

1. Can transformational leadership result in workaholism among followers?
2. What are the psychological mechanisms (e.g., follower–leader value congruence, follower–organisation value congruence, personal identification with the leader,

social identification with the organisation, work centrality) through which transformational leadership could result in workaholism among followers?

In answering these questions, the study has the following aims: to examine if the effect of transformational leadership can positively influence followers workaholism. In addition, the hypotheses are proposed to examine if transformational leadership could influence followers' workaholism via psychological mechanisms / two or three sequential mediators, that is, either through identification and work centrality or value congruence, identification, and work centrality. Besides, the hypotheses are proposed to extend Shamir et al.'s (1993) theory, that is, value congruence is proposed as a key driver through which transformational leadership could reinforce followers' identification with the leader as well as with the organisation. This study is also proposed to examine if transformational leadership is directly related to work centrality as well as if work centrality positively mediates the relationship between transformational leadership and workaholism. The hypotheses testing results are summarised in Table 6.1. (Please refer to Table 6.1 for the details.) There are a total of 20 hypotheses postulated in the current study; however, the 11 hypotheses that are in a direct relationship are presented in Figure 3.1.

1.3.2 Definitions of the Constructs

The definitions of the constructs adopted in the study are presented in Table 1.1.

Table 1.1: Definitions of the Constructs

Construct	Definition	Source
Transformational Leadership	Transformational leadership motivates followers to change their values, goals, needs and aspirations. Transformational leadership inspires followers to focus on higher-order needs rather than on lower-order needs, raises followers' level of morality, and shifts followers' focus from self-interests to collective interests such as those of the team/organisation to which they belong.	(Bass, 1985)
Workaholism	Although there are numerous definitions of workaholism in the literature, they all share the idea originally proposed by Oates (1971) that workaholism is "...the compulsion or the uncontrollable need to work incessantly..." (p.11).	(Oates, 1971, p.11)
Value Congruence	Individuals and organisations have value systems that determine their attitudes and behaviours. Values influence emotional responses to information and events and ultimately behaviour (Edwards & Cable, 2009). Value congruence occurs when the value system of an individual is consistent with the value system of another individual (e.g., person–leader) or an organisation (person–organisation).	(Hoffman et al., 2011)
Identification	According to Social Identity Theory, self-concept consists of a personal identity and a social identity. Personal identity encompasses idiosyncratic characteristics (e.g., physical attributes, abilities, psychological traits, interests), whereas the social identity encompasses the characteristics of those groups that one identifies with most closely.	(Ashforth & Mael, 1989)
Work Centrality	Work centrality is "the degree of general importance that working has in the life of an individual at any given point in time".	(England & Misumi, 1986, p.402)

1.4 Research Contributions

1.4.1 *Theoretical Contributions*

This research is unique, and the design of the study aims to make four major substantial contributions to the leadership and workaholism literature as well as managerial practice. These are presented below.

First, the current model contributes to the leadership literature by extending Shamir et al.'s (1993) motivational theory/model: transformational leadership achieves its profound effects on followers via self-concepts. Shamir et al. (1993) found direct relationships between transformational/charismatic leadership and person–leader value congruence, person–organisation value congruence, personal identification, and social identification. However, the current model is the first model to propose sequential mediating hypotheses for the relationship between transformational leadership and two types of identification (i.e., personal and social) through the mediating effect of value congruence. The proposed hypotheses provide insights into the importance of the psychological mechanism of value congruence. The theory around identification formation from the current research suggests how followers form identification (i.e., with their leaders and organisations) — it first comes through shared values. Hence, the psychological process of value congruence is an important prerequisite for personal identification with leaders and with organisations.

Secondly, the current research enriches the existing knowledge by exploring new insights into a psychological mechanism (i.e., identification) through which transformational leadership could positively influence work centrality among followers. More specifically, it provides insights into the mediating role of identification in the relationship between transformational leadership and follower work centrality. The prior research argues that individuals who identify with a referent person (i.e., leader) or group (i.e., organisation) incorporate the person's or group's norms and values into their self-concepts (Tajfel & Turner, 1985) and are, therefore, likely to perceive work identity as central to who they are (i.e., their self-concept). Work identity becomes central to the person and their identity (May, Gilson, & Harter, 2004). In line with this notion, the current study suggests that transformational leadership could positively influence work centrality among followers through the mediating effects of both types of identification. This is because when

followers identify with the leader and the organisation and with certain values that are highly regarded by the leader and the organisation, they are more susceptible to significant psychological and social forces, and thus this increases the likelihood of enhancing work centrality and their willingness to perceive and place work as the dominant part of their lives. The current study empirically examines the mediating effect of identification on the relationship between transformational leadership and follower work centrality.

Thirdly, this study also enriches the workaholism literature by proposing work centrality as an additional psychological mechanism through which transformational leadership could foster followers' motivation and subsequently result in workaholism among followers. Numerous antecedents of workaholism have been proposed in the previous literature. The various antecedents of workaholism can be regarded as being at the different levels, specifically, the individual level (e.g., personality), the organisational level (e.g., organisational culture) and the sociocultural level (e.g., unfulfilling family life). However, no literature has been found to investigate the relationship between identification (i.e., personal, social) and workaholism via the psychological mechanism of work centrality. This study addresses the gap by testing this proposition empirically. Even though a recent study of Lithuanian employees (Morkevičiūtė et al., 2019) also looked at the transformational leadership and workaholism, that study focused on testing the relationship between each individual dimension of the perceived transformational leadership style and the employee's excessive work and general workaholism, Morkevičiūtė et al.'s study (2019) also did not provide explanations for any discrepancy and provided no insight into how transformational leadership along with psychological mechanisms could affect workaholism among followers. The current study focuses on examining whether the effects of transformational leadership could facilitate workaholism. To do so, it incorporates five components of transformational leadership as a single construct rather than testing each dimension individually because a single dimension cannot fully reflect the characteristics/traits, behaviours, and effects of transformational leadership on followers. Most importantly, the current study examines the relationship between the effects of transformational leadership and workaholism among followers by considering the impact of various psychological mechanisms.

In particular, this study investigates whether transformational leadership could increase follower workaholism through the influence of psychological mechanisms (i.e., value

congruence, identification, and work centrality) which have not been considered in earlier studies. Specifically, the current study simultaneously examines the relationship between transformational leadership and workaholism via the serial mediating effects of value congruence, identification, and work centrality. The current model proposes that transformational leadership increases value congruence with the leader and the organisation, which then increases identification with the leader and the organisation, which in turn increases work centrality and ultimately leads to workaholism. This study emphasises the importance of psychological mechanisms (i.e., value congruence, identification, and work centrality) as mediators that magnify the impact of transformational leadership and ultimately lead to follower workaholism.

Finally, this study also contributes to the leadership field by testing previous research findings in a new context. More specifically, it examines whether transformational leadership is positively associated with follower–leader value congruence (Shamir, 1995; Hoffman et al., 2011), follower–organisation value congruence (Hoffman et al., 2011), and/or with personal identification with the leader and social identification with the organisation, respectively (Shamir et al., 1993; Kark et al., 2003). Aziz and Cunningham (2008) and Porter (2001) suggested that full-time white-collar professionals can be regarded as representative of typical workaholics. Therefore, the sample of the current study consists entirely of full-time white-collar professionals in Australia. This study helps to validate the previous findings and provide research findings in a new context.

1.4.2 *Practical Contributions*

Apart from its theoretical contribution, this research is also designed to make a couple of contributions to managerial practice. The study contributes to managerial practice by identifying three important psychological mechanisms (i.e., value congruence, identification, and work centrality) which can profoundly affect follower workaholism under the effect of prosocial/moral transformational leadership. This study helps to verify whether moral transformational leadership through psychological processes could potentially affect followers' workaholism. This could help organisations, managers, followers to be aware of the potential side effects of moral transformational leadership, its psychological mechanisms, and adverse outcomes (i.e., workaholism) so as to diminish the workaholism tendencies that can undermine the well-being of followers, followers' families, and the organisations.

In addition, this study contributes to managerial practice by drawing attention to the importance of the psychological process of value congruence in shaping how followers form identification with their leaders and organisations, and the role it plays in the process of establishing counter-productive attitudes and behaviours associated with workaholism.

This study helps to create an understanding that very high levels of value congruence with leaders or organisations — while often perceived favourably in organisational settings — may be early warning signs that followers are susceptible to the potentially negative consequence, workaholism. This study also raises questions about organisations' (and leaders') moral responsibility to ensure that their efforts to create organisational cultures and/or strong associations between their (transformational) leaders and others in the organisation are managed in ways that might prevent or mitigate some of the less desirable outcomes of transformational/charismatic leadership.

1.5 Research Methodology

The current research adopted a positivism-based, cross-sectional, quantitative methodology. A pilot study was conducted to test if the research instruments were adequate and to assess if the full-scale study was feasible. This was undertaken before data collection for the full-scale study began. Data for the latter were collected via a pre-validated online questionnaire. The sample comprised 576 Australian white-collar professionals, a population regarded as representing the 'typical' workaholic. Sampling adequacy, convergent validity and dimensionality of the items, scale reliability, and consistency all met minimum requirements, and the measurement model was first tested with Exploratory Factor Analysis using IBM SPSS software. Additionally, the measurement model, including internal reliability, convergent validity and discriminant validity, was tested again by using Partial Least Squares analysis via PLS Smart3 to ensure the data were valid and reliable before testing the structural model. A five-step procedure was then adopted to assess the structural model (i.e., hypotheses testing) as suggested by Hair et al. (2017) using PLS Smart3. Preceding this analysis, several procedural remedies were considered when designing the questionnaire and invitation letter, and statistical remedies were used after the data were collected to mitigate common method bias. All stages of the study were approved by UTS Human Research Ethics Committee (approval number ETH 18-2188).

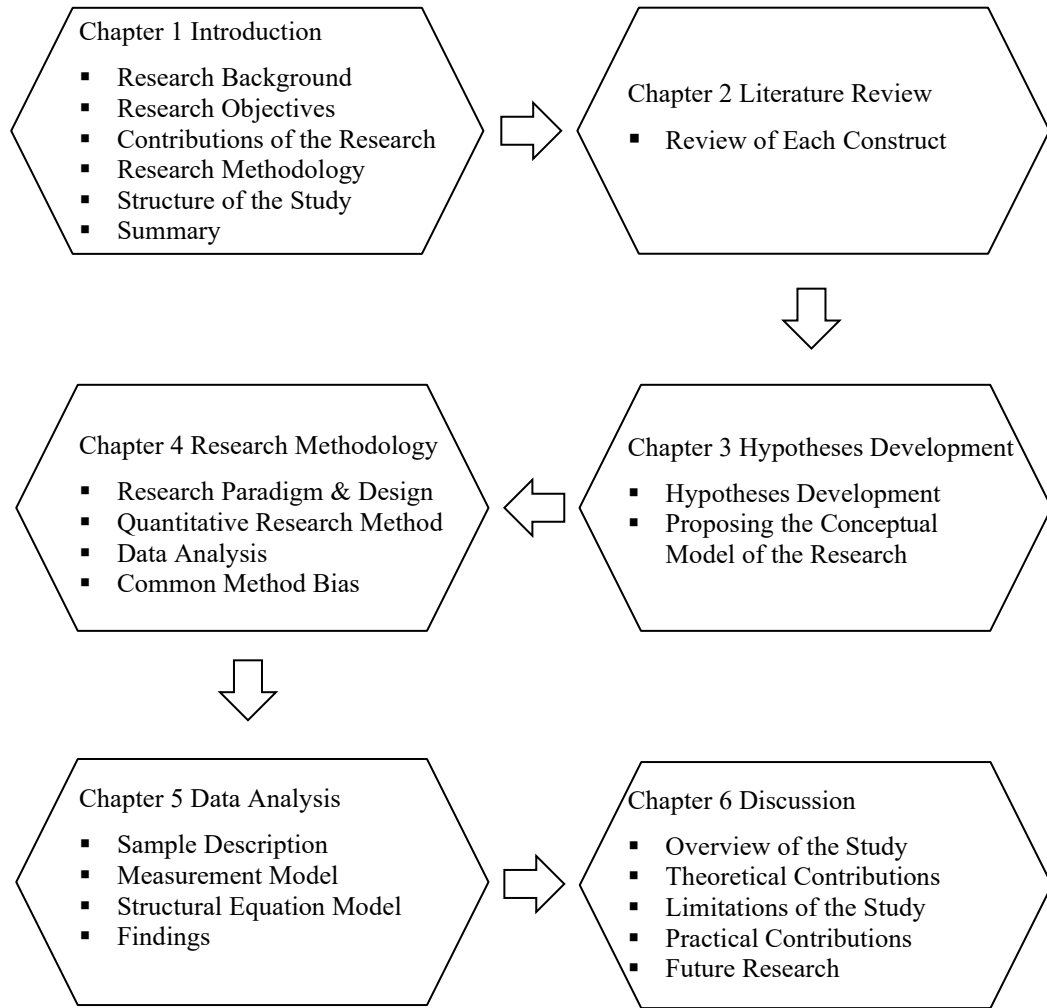
1.6 Major Findings

The major findings in relation to the proposed hypotheses to address the gaps in the literature on transformational leadership and workaholism are as follows: The empirical evidence of this study demonstrated that transformational leadership does affect workaholism among followers but only through the psychological mechanisms involved (i.e., value congruence and identification) (see H8c, H8d, H8e and H8f in Chapter 5 — Table 5.14). Also, the findings revealed that value congruence was a key driver through which transformational leadership could reinforce followers identifying with the leader as well as with the organisation (H4a and H4b). Furthermore, transformational leadership was not directly related to work centrality (H5a) nor workaholism (H8a), and the findings did not support the hypothesis that work centrality positively mediates the relationship between transformational leadership and workaholism (H8b). Nevertheless, the findings supported the hypothesis that personal identification and social identification positively mediated the relationship between transformational leadership and work centrality (H5b and H5c). The findings indicated that identification (i.e., personal identification, social identification) strengthened the effects of transformational leadership to achieve its effects on followers and followers subsequently perceived/placed work as their central life interest (i.e., work centrality). Finally, the relationship between two types of identification and workaholism were found to be positively mediated by work centrality (H7b and H7c). Please refer to Chapter 5 — Tables 5.9 and 5.14 — for details.

1.7 The Structure of the Thesis

This study is organised into five chapters and the structure is depicted in Figure 1.1. Specifically, Chapter 1 contains an overview of the dissertation. Chapter 2 discusses the literature review and hypotheses development, whilst Chapter 3 provides the justification for the research methodology, paradigm and strategy that are adopted in the research. Chapter 4 presents the data analysis and findings of the research, and it is followed by Chapter 5 which contains the discussion and conclusion of the research project. The contents of the remaining four chapters are summarised as follows:

Figure 1.1: Structure of the Study



Chapter 2 contains the detailed literature review of each construct, specifically, the various definitions of each construct as conceptualised by different scholars, followed by the antecedents and consequences of the constructs in the existing literature.

Chapter 3 comprises a discussion of the series of hypotheses of the relationship among constructs that are being developed, and the theoretical underpinnings for each hypothesis are provided.

Chapter 4 provides the justification for the research methodology, paradigm and strategy that are implemented in the research. The chapter consists of nine major sections, each of which addresses a different aspect of research methodology. The first aspect to be discussed is the research paradigm. The remaining sections provide (and in the following order) a discussion of the research design, quantitative research method, data analysis,

mediating analysis, common method bias, and ethical considerations.

Chapter 5 presents the findings of the data analysis for the study. First, the sample description of the respondents is discussed, and the findings of the measurement model follow. Moreover, procedural remedies and statistical remedies are presented to reduce common method bias. Furthermore, the findings of the hypotheses testing, and the overall conceptual model based on the proposed hypotheses by employing Structural Equation Modelling (SEM) is presented.

Chapter 6 is the last chapter of the study. The discussion involves summarising the findings of the study, followed by presenting its theoretical contributions and limitations. This chapter ends by outlining the practical contributions of the study and suggesting directions for future research.

1.8 Summary

This chapter provides a roadmap of the dissertation. It briefly describes the background of the study and the research concept along with the research objectives, questions, hypotheses and the key constructs of the study, followed by a presentation of the theoretical and practical contributions of the study. Additionally, it discusses the research methodology and major findings. Finally, it provides the structure of the dissertation. The next chapter (Chapter 2) will present a detailed review of the existing literature for each construct as well as an account of the development of the study's hypotheses, and how the hypotheses have been combined to build a research model that will then follow (Chapter 3).

CHAPTER 2. LITERATURE REVIEW

2.1 Overview of Chapter 2

Chapter 1 provides an overview of the study. Chapter 2 extends the thesis by reviewing key literature on each construct of the conceptual model to build a theoretical foundation for the thesis. Specifically, the literature on workaholism, transformational leadership, value congruence, identification and work centrality will be reviewed. Section 2.2 contains a discussion of the literature on leadership. Section 2.3 covers the approaches to the study of leadership. Section 2.4 discusses the literature on charismatic leadership. Section 2.5 looks at the literature on transformational leadership. Section 2.6 contains a discussion of the literature on workaholism. Section 2.7 presents the literature on value congruence. Section 2.8 provides a discussion of the literature on identification, and Section 2.9 covers the literature on work centrality.

2.2 Leadership

Leadership has been the topic of research for centuries yet still receives considerable attention from scholars. Various perspectives have been adopted by leadership scholars and the definitions of leadership used by scholars are strongly influenced by such perspectives. For instance, scholars who adopt a behavioural perspective define leadership largely in terms of behaviours enacted by specific individuals whereas the attributional perspective sees leadership as stemming from how one is perceived by others and thus includes the leader–follower relationship.

2.2.1 Definitions of Leadership

Despite the long-standing interest in leadership, leadership remains difficult to define, and various definitions of leadership are provided in previous literature. Table 2.1 presents definitions of leadership.

Table 2.1: Definition of Leadership

Leadership Definitions
1. Hemphill and Coons (1957, p.7) defined leadership as behaviour that directs “...the activities of a group toward a shared goal.”
2. Katz and Kahn (1978, p. 528) defined leadership as “the influential increment over and above mechanical compliance with routine directives of an organisation.”
3. Burns (1978, p. 10) suggested that “leadership over human beings is exercised when persons with certain motives and purposes mobilise, in competition or conflict with others, institutional, political, psychological, and other resources so as to arouse, engage, and satisfy the motives of followers”.
4. Rauch and Behling (1984, p. 46) defined leadership as “the process of influencing the activities of an organized group toward goal achievement.”
5. Hersey and Blanchard (1988, p. 86) defined leadership as “...the process of influencing the activities of an individual or a group in efforts toward goal achievement in a given situation.”
6. Lord and Maher (1991) defined a leader as someone who is perceived by others as a leader.
7. Leadership is defined by Wren (1995, p. 10) as “...an interactive process in which leaders and followers engage in mutual goals”.
8. According to Northouse (2015), leadership involves essentially motivating and guiding others to achieve specific goals.

The leadership study stemmed from Max Weber’s work early last century which has evolved over time. Leadership study can be generally classified into three phases: The first phase focused on identifying leaders’ traits (Johnson, 2002) which was later shifted to leaders’ behaviours as researchers suggested leadership can be learned and developed (Barling, Weber & Kelloway, 1996) and thus resulted in the research on behaviour and styles of the leaders (Johnson, 2002). The third and current phase concentrates on the relationship between leaders and their followers (Johnson, 2002) which involves leadership guiding and motivating followers to achieve specific organisational goals (Northouse, 2015).

Various approaches to leadership have been developed by the scholars over the years. The most prominent leadership approaches include i) *trait approach* such as the ‘Great

Man Theory' (Kirkpatrick & Locke, 1991); ii) *behavioural approach* such as is exemplified in Lewin et al.'s (1939) 'Three Leadership Styles', McGregor's (1960) 'Theory X and Theory Y' and Blake and Mouton's (1964) 'Managerial Grid'; (iii) *situational or contingency approach* such as that of House's (1971) 'Path-goal Theory', Graen and Scandura's (1987) 'Leader-member Exchange Theory', Misumi's (1985) PM theory', Fiedler's (1964) 'Contingency Theory'; iv) *charismatic theory* such as Weber's 'theory of charisma', House's (1976) 'Charismatic Leadership'; and v) *transformational leadership* such as Burns' (1978) 'Transforming and Transactional Leadership', Bass's (1985) 'Transformational and Transactional Leadership', Conger and Kanungo's (1987) 'Transformational Leadership'. This study focuses on three approaches, namely, the trait approach, the behavioural approach, and the contingency approach to leadership because the overarching construct of 'transformational leadership' is regarded as a combination of trait, behavioural and contingency approaches to leadership (Trice & Beyer, 1986).

According to trait theory, leaders are extraordinary individuals who have certain inherent traits and abilities that allow them to be great leaders (Kirkpatrick & Locke, 1991). Similar to other leadership theories, "transformational leadership theories reflect the implicit assumptions associated with the heroic leadership" (Yukl, 1999, p. 292) Transformational leaders are admired, respected and trusted by their followers because of their extraordinary traits or characteristics such as perseverance, determination, confidence, enthusiasm and optimism (Bass & Riggio, 2006).

The behavioural approach to leadership focusses on the behaviours of leaders rather than the characteristics of leaders (Daft & Noe, 2001). Transformational leaders' behaviours such as recognising followers' achievements, engaging in followers' personal growth, and stimulating followers intellectually could engender higher levels of trust with the followers (Braun et al., 2013). When transformational leaders exemplify their commitment and determination to implement a compelling vision by acting as a role model, making personal sacrifices and 'walking the talk' to achieve shared goals, those behaviours then generate credibility and result in trust (Conger & Kanungo, 1988).

The situation/contingency approach proposes that the most effective style of leadership is a leadership style that fits the contingencies of the situation (Harrison, 2018). Theories of transformational/charismatic leadership have elements of a situational approach because transformational leadership is most likely to be effective in crisis situations (e.g.,

organisational restructuring, political unrest) (Trice & Beyer, 1986; Ensari & Murphy, 2003). Zhang et al.'s (2012) empirical study, however, suggested transformational leadership is effective during both times of crisis and normal times (Zhang et al., 2012). The following section provides a more detailed discussion of the three approaches and various phases in the study of leadership.

2.3 Approaches to the Study of Leadership

Early research on leadership regards leaders as individuals (mainly males) who possess specific characteristics that differentiate leaders from non-leaders. This approach to the study of leadership is known as the 'trait approach' or 'great man' theories. According to this approach, leaders are born and not made. They are extraordinary individuals who have certain inherent traits and abilities that allow them to be great leaders. In other words, leadership is largely innate and cannot be taught (Kirkpatrick & Locke, 1991).

The trait approach to the study of leadership focused on examining the mental, physical and social characteristics of leaders to determine which characteristics or combination of characteristics distinguish leaders from non-leaders. Trait theories were very popular during the first half of the 20th century with over a hundred studies conducted that examine which personality traits are related to leadership (Zaccaro, 2007). Numerous traits were proposed to be related to leadership emergence and effectiveness including general intelligence, self-confidence, ability to be persuasive, extroversion, dominance, and drive (House & Aditya, 1997). Nevertheless, these studies did not show that effective leadership is related to these traits, nor did they explain how each trait influenced leadership style or effectiveness (Yukl, 2010).

In the late 1930s, researchers started to focus on a behavioural approach to explain effective leadership. The behavioural approach to leadership examines the behaviours of leaders instead of the inherent characteristics of leaders (Daft & Noe, 2001).

The behavioural approach to leadership that was pioneered by researchers at the University of Iowa was later adopted by scholars at other universities including Ohio State University and the University of Michigan. Researchers at Ohio State University found that although leaders exhibit numerous types of behaviours, these behaviours can be classified into two categories: i) initiating structure, which consists of task-oriented behaviours such as specifying the roles of followers and setting deadlines; and ii)

consideration, which consists of socio-emotional behaviours such as showing respect for followers' opinions and feelings. Researchers at Michigan University found there are essentially two types of leaders: those who focus on the task (i.e., production-oriented) and those who focus on interpersonal relations with followers (i.e., employee-oriented).

Additionally, they identified a third type of leadership, which they called participative leadership (Daft & Noe, 2001; Robbins et al., 2012). Blake and Mouton (1964) from the University of Texas developed the 'Managerial Grid', which is a diagram for conceptualising leadership styles. It depicts five different leadership styles based on two dimensions of leadership behaviours: i) concern for production, which emphasises working towards task accomplishment; and ii) concern for people, which emphasises providing followers with socio-emotional support and maintaining positive working relations with followers. These two dimensions are similar to the two leadership styles later proposed by the researchers at the University of Michigan and Ohio State University. The behavioural approach to the study of leadership assumes there is a single leadership style that is always more effective than other leadership styles. Specifically, the most effective leadership style is one that places a high level of emphasis on both task-oriented leadership and socio-emotional leadership dimensions of leadership (i.e., the high-high paradigm) (Larson, Hunt, & Osborn, 1976). However, inconsistent findings were reported with regards to the effectiveness of leadership styles premised on the two-factor approach. The inconsistent findings were attributed to the neglect of situational factors (e.g., task characteristics) on the effectiveness of a leadership style (Hsu, Hsu, Huang, Leong, & Li, 2003). As a result, several 'contingency' theories of leadership that incorporated situational factors were developed.

Contingency/situational theories of leadership are unlike the earlier trait and behavioural perspectives of leadership in offering that leading does not work in all situations. Instead, the optimal leadership style is dependent upon the situation at a given time (Palestini, 2009). Various contingency/situational theories of leadership have been developed such as path-goals theories, situational leadership theory, leadership substitutes theory, normative decision model, cognitive resources theory and a multiple linkage model (Yukl, 2011). This section will present a brief review of Fiedler's (1964) contingency theory.

Fiedler (1964) conceptualised a contingency theory of leadership that is regarded as one of the most common contingency leadership theories (Palestini, 2009). According to

contingency theory, there is no ‘best’ leadership style because the effectiveness of any leadership depends on it being aligned with the context of leading. This context includes an organisation’s internal work environment, the nature of work, and the external economic and social environment (Clegg et al., 2019). The contingency approach proposes that optimal leadership efficiency depends on a fit or match between two or more contingent factors. That is, leadership is most effective when a leader’s leadership style matches the contingencies they face because matching or fitting one’s environment results in synergistic relationships between leadership style and environmental variables (e.g., favourability of the leadership situation) (Yukl, 2011).

2.4 Charismatic Leadership

Theories of charismatic leadership can be regarded as a combination of trait, behavioural, attributional, and contingency approaches to leadership (Trice & Beyer, 1986). Theories of charismatic leadership have elements of the trait approach in that they propose charismatic leaders possess unusual personal characteristics (e.g., are persuasive). Theories of charismatic leadership also have elements of a behavioural approach because they specify behaviours that charismatic leaders display (e.g., exceptional deeds). Theories of charismatic leadership have elements of a situational approach because they propose that charismatic leadership is most likely to be effective in crisis situations. Finally, theories of charismatic leadership have elements of an attributional approach in that charisma is seen as depending on how followers perceive the leader rather than from objectively determined personal qualities or exceptional deeds (Trice & Beyer, 1986; Ensari & Murphy, 2003). The purpose of this section is to provide a review of the literature on charismatic leadership. This section consists of four parts. This first part, Section 2.4.1. provides various definitions of the charismatic leadership. The second part, Section 2.4.2. presents a discussion of various typologies of charismatic leadership that have developed. The third part, Section 2.4.3, discusses the dark side of ‘charisma’.

2.4.1 Definitions of Charismatic Leadership

The term charisma originally derives from the Greek, “χάρισματα” (phonetically “ka’rɪzmata”), which means “divinely inspired gift[s]” (Dubrin, Dalglish, & Miller, 2006) (Chamankhah, 2014). *Charismata* (plural) are described in the Christian Bible as “the gifts of the Holy Spirit and include prophecy, governing, teaching, ministry, wisdom and

healing” (Conger & Kanungo, 1987, p. 637). There are numerous definitions of charisma from scholars. Max Weber initiated the “concept of charisma as involving any authority which obtains legitimacy rather than from rules, traditions and positions, [instead] ... from a devotion to the specific and exceptional sanctity, heroism or exemplary character of an individual person and of the normative patterns or orders revealed or ordained by him” (Eisenstadt, 1968, p. 46; cited in Conger & Kanungo, 1987). Daft and Noe (2001, p. 402) defined charisma as “a fire that ignites followers’ energy and commitment, producing results above and beyond the call of duty”. Table 2.2 provides some additional charismatic leadership or charisma definitions.

Table 2.2: Definitions of Charismatic Leadership

Definitions of Charismatic Leadership	
1.	A certain quality of an individual personality by virtue of which he or she is set apart from ordinary people and treated as endowed with supernatural, superhuman, or at least specifically exceptional powers or qualities.
2.	A devotion to the specific and exceptional sanctity, heroism, or exemplary character of an individual person, and of the normative patterns revealed or ordained by that person.
3.	Endowment with the gift of divine grace.
4.	The process of influencing major changes in the attitudes and assumptions of organisation members and building commitment for the organisation’s objectives.
5.	Leadership that has a magnetic effect on people.
6.	In combination with individualised consideration, intellectual stimulation, and inspirational leadership, a component of transformational leadership.

Source: Dubrin et al. (2006, p. 92)

2.4.2 Theories of Charismatic Leadership

There is a long history of theories of charismatic leadership. Max Weber is acknowledged as being the first to provide a theory of charismatic leadership, which he did approximately a century ago. The mid-1970s saw the emergence of charismatic leadership theory that shifted the emphasis from mundane types of leadership behaviours (e.g., planning and organising the work of followers, and punishing and rewarding followers) to behaviours that are inspirational, symbolic and visionary (House, Spangler, & Woycke, 1991). A key feature of the new genre of charismatic leadership theories is their ‘Neo-Weberian’ approach to charisma, which focuses on an “everyday charisma”

that does not require the charismatic leader to be blessed with divine grace (Jermier, 1993) but does require the charismatic leader to have a vision (De Hoogh et al., 2005). The most influential of these theories are arguably those proposed by House (1976), Conger and Kanungo (1988), and Shamir et al. (1993). The following section covers these theories and starts with a discussion of Max Weber's seminal work on charisma.

2.4.2.1 *Max Weber's Theory of Charisma*

Weber is widely acknowledged as providing the first theory of charisma. His conceptualisation of charisma contains elements of a trait approach, a situational approach and an attributional approach, and consists of five components: i) an individual who possesses extraordinary talents; ii) a crisis or predicament; iii) a radical or unconventional solution to a crisis; iv) followers who perceive the individual as exceptional and are attracted to the individual; and v) repeated instances of success that are regarded as proof of the individual's gifts and transcendence (Trice & Beyer, 1986). Besides pure charismatic authority that involves miracles and supernatural power, Weber identified other types of charisma that are less impactful, more moderate and more rational and which can occur in and be accommodated by more stable, bureaucratic cultures. However, he is not clear in explaining how pure charismatic authority can transition to other more stable forms of charisma (Bryman, 1992).

Central to Weber's view of charisma is that it is an attribution made by others and that genuine charisma requires the individual to embody the characteristics of extraordinariness and irrationality (Greenfeld, 1985, cited in Calás, 1993). Charismatic authority requires others to perceive the individual as exceptional, and this perception is the initial basis through which the individual attracts followers (Bryman, 1992). There are various ways in which charismatic leaders can increase the likelihood of being perceived as exceptional, such as by demonstrating their personal talents via a history of success, unconventional behaviour, persuasive skills, and shared values (Conger, 1989). Weber saw charismatic authority not only as stemming from the ability to impose one's will on others by demonstrating exceptional characteristics (e.g., courage, self-confidence, drive) and providing unconventional solutions to important problems or crises (Shils, 1965) but also as requiring recognition from followers. The individual is recognised as being charismatic through some victory or the achievement of repeated success (Friedland, 1964). Weber thus regarded charisma as a form of influence that relies

on the individual being perceived by others as possessing exceptional qualities and is not based on tradition or formal authority (Yukl, 1998). In fact, for Weber, the crucial test of charisma is whether others acknowledge the individual's claims of exceptional abilities/powers (Jermier, 1993).

Weber (1947) regarded charisma as a divine gift that will result in charismatic influence only over those who recognise the individual as being exceptional or gifted. In other words, charisma is based on how the leader is perceived rather than on how/what the leader is (Wilner, 1984). Charismatic authority can only be legitimised through personal charisma if it is recognised by and satisfies the needs of followers. This 'recognition' by followers has profound psychological effects on them as it results in complete personal devotion to the charismatic individual that arises out of enthusiasm, or of despair and the hope that the leader can resolve the crisis faced by followers (Weber, 1947).

The following section provides a discussion on three theories of charismatic leadership: those of House's (1976), Conger and Kanungo (1987), and Shamir, House and Arthur (1993).

2.4.2.2 *House's (1976) Theory of Charismatic Leadership*

Weber's idea of charismatic authority was criticised for lacking clarity. For instance, Weber generally described the qualities of the leaders, such as leaders having a heroic character with magical capabilities, possessing a powerful mind, and being articulate (Etzioni, 1961; cited in Conger & Kanungo, 1987). House (1976) further extended Max Weber's study and focus on traits and behaviours of the leader.

House (1976) proposed that the combination of personal characteristics/traits of leaders (i.e., need for influence, self-confidence, dominance, and a strong conviction in his other moral perspectives) along with leaders' behaviours (i.e., acting as a role model, articulating followers' goals, indicating confidence in and having expectations of followers, stimulating motives, building self-image and behaviours) — as well as this occurring in a context of favourable situational factors necessary for the emergence of charismatic leadership — provided such leaders' charismatic effects and distinguished them from other leaders.

House (1976) stated that articulating followers' goals and building their self-image make

followers view their leaders in a positive light which eventually strengthens the relationship between leaders and followers (i.e., followers are inclined to trust the leader, and become more submissive and more loyal to their leader) as well as mediating the rest of the leaders' behaviours and followers' reactions (e.g., with proper stimulating behaviours it can lead to followers' higher performance).

House (1976) developed a theory to explain the emergence of charismatic leadership and its effects in modern organisations. Building on earlier writings, House (1976) proposed that the effects of charismatic leadership on followers are more emotional than calculative. The emotional effects of charismatic leadership on followers stem primarily from followers identifying with the leader. Followers who identify with the charismatic leader accept the leader's values, goals, and behaviours, such that they model leader's behaviours, feelings, and cognition (Friedrich, 1961, cited in House, 1976). Other emotional effects of charismatic leadership include loyalty and devotion to the leader as well as the commitment to the cause that the leader represents (House, 1976). This conceptualisation is central to the current study.

2.4.2.3 *Conger and Kanungo's (1987) Theory of Charismatic Leadership*¹

Conger and Kanungo (1994) developed a questionnaire (the C–K Scale) to measure charismatic leadership. According to Conger and Kanungo, the difference between transformational leadership and charismatic leadership formulations is the perspective from which the leadership phenomenon is perceived rather than leader's behaviour or tactics. For instance, transformational leadership theories are concerned primarily with how a leader influences a follower's outcomes (Yukl, 1999) whereas charismatic leadership theories are an attribution on the basis of how a leader's behaviour is perceived by followers.

Some of the formulations of transformational leadership and charismatic leadership overlap including the vision and follower sensitivity dimensions, whereas the other two

¹ As explained on pages 45–47, charismatic leadership and transformational leadership are often operationalised in ways that make them synonymous. For this reason, the terms are used interchangeably in Chapters 2 and 3 according to the terminology used by the study's author. In this case where authors have operationalised charismatic leadership differently, this is made clear in the main text.

dimensions (unconventional behaviour and not maintaining the status quo) are unique features of charismatic leadership. Four of Conger and Kanungo's (1994) C-K dimensions including vision and articulation, environmental sensitivity, personal risk, and sensitivity to member needs have been found to be positively associated with Bass's transformational leadership scale (Conger & Kanungo, 1994).

Conger and Kanungo's (1987) theory of charismatic leadership has elements of an attributional approach in that charisma is seen as being dependent on how followers perceive the leader based on the leader's behaviour, and followers are inspired by their leader without the leader using formal power or authority (Shamir et al., 1993). Conger and Kanungo have distinguished the behavioural components of charismatic leaders from those of non-charismatic leaders. For instance, a leader's personal power is based on expertise, respect, and admiration rather than rewards and punishments. This provides important psychological impact on shaping the perceptions, attitudes, and behaviours of followers (Kets de Vries, 1988a; Shamir et al., 1993; Ashforth & Mael, 1989; Conger & Kanungo, 1998) and thus facilitates followers becoming committed to the leader as well as the organisation. The effect of a leader's personal power will be applied to the current model and lead to various follower outcomes. This will be discussed in Chapter 3.

2.4.2.4 *Shamir, House and Arthur's (1993) Theory of Charismatic Leadership*

Shamir et al's (1993) theory is central to the current study. Shamir et al. (1993) suggested that transformational/charismatic leadership achieves its motivational effects on followers by influencing the self-concepts of followers. "Self-concept" is difficult to define but can be regarded as representing the answer to the question "Who am I?" (Myers, 2009). Self-concept can be regarded as the central attitudes, beliefs, and opinions one has about oneself and is thus a multifaceted representation of oneself that contains information used to define oneself (Lord & Brown, 2004). Self-concept consists of various identities that one chooses to accept or 'identify with' and this process is referred to as "identification" or "self-categorisation" (Stets & Burke, 2000). "Personal identification" refers to identifying with an individual whereas "social identification" refers to identifying with a group or collective (van Knippenberg et al., 2005).

According to Social Identity Theory, the various identities that constitute self-concept can be classified into two categories (i.e., personal and social/collective), thus the self-concept

is seen as consisting of a personal identity and a social identity (Tajfel & Turner, 1985). Personal identity is based on one's distinctive personal characteristics (e.g., physical characteristic, psychological traits, and abilities) whereas social identity is based on the characteristics of those groups (e.g., nation, religion, and organisation) with which one identifies most closely (Ashforth & Mael, 1989).

Shamir et al.'s (1993) theory of transformational/charismatic leadership is regarded as the main theory of how transformational/charismatic leadership achieves its effects on followers which is the central to this study. Shamir et al. (1993) proposed that transformational/charismatic leadership achieves its motivational effects on followers by influencing the self-concepts of followers in several ways: (i) increasing self-esteem and self-worth; (ii) increasing self-efficacy and collective-efficacy beliefs; (iii) achieving value internalisation; and (iv) increasing personal identification with the leader and social identification with the organisation. These influences on followers' self-concepts are regarded as occurring independently of each other. Changing the self-concepts of followers changes the way followers perceive their work such that work is no longer seen in instrumental terms (i.e., a means to an end) but rather as an opportunity for self-expression, self-consistency, and the enhancement of self-esteem and self-worth (Shamir et al., 1998). The following section provides a discussion on the dark side of charisma.

The current model proposes that transformational leadership increases value congruence with the leader and the organisation, which then increases identification with the leader and the organisation, which in turn increases work centrality and ultimately leads to workaholism. In addition to the sequential mediation proposed in the model, work centrality was proposed to be another psychological mechanism through which transformational leadership could motivate followers and lead to workaholism.

2.4.3 *Dark Side of Charisma*

Charismatic people are not more moral than 'ordinary' people, yet there is empirical evidence that charisma increases the likelihood that one will be treated and perceived as an authority, and this often dictates who is assigned to leadership positions (Flanigan, 2013). The literature on and popular accounts of charisma have emphasised it as a positive influence in organisations (Oplatka, 2017; Judge, Woolf, Hurst, & Livingston, 2008). However, charismatic leaders can go against tradition (unwisely rather than wisely) and

can be immoral and corrupt (Epley, 2015).

Weber's conceptualisation of charismatic authority is "value free". Weber emphasised an attributional or relational approach wherein the focus is on whether leaders prove their charisma in the minds of their followers rather than on value judgments about the leader's vision or behaviour (Epley, 2015). Charismatic authority is a powerful force that provides the leader with significant influence over followers when followers personally identify with their leaders and become emotionally dependent on their leaders (Kark, Shamir, & Chen, 2003). The same qualities that distinguish visionary leaders from other more mundane leaders have, however, the potential to cause disaster for followers and organisations (Conger, 1990).

Several scholars have considered the intentions and consequences of charismatic authority and created a dichotomy of charismatic leadership whereby charismatic leaders are regarded as being either "good" or "bad". Howell's (1988) dichotomy consists of socialised and personalised charismatics. Howell and Avolio's (1992) dichotomy consists of ethical and unethical charismatics. Bass and Steidlmeier's (1999) dichotomy consists of authentic (moral) and inauthentic (pseudo) transformational leadership.

Howell (1988) distinguished between socialised and personalised charismatics. The primary difference between socialised and personalised charismatics lies in their use of power. Socialised charismatics use their power in a restrained way to benefit collective interests. They adopt an egalitarian approach and encourage followers to provide viewpoints that contradict their own as they seek to empower followers. Socialised charismatics do not exploit their followers and instead focus on meeting the needs of their followers (Choi, 2006). In contrast, personalised charismatics use their power in an unrestrained way to pursue their personal agendas and seek to control their followers by making their followers highly dependent on them. They tend to use an authoritarian style because they resent dissension and thus demand unquestioning obedience from followers (Chandler, 2009).

Expanding on the work of Howell (1988), Howell and Avolio (1992) distinguished between ethical and unethical charismatic leaders. Ethical charismatic leaders have moral standards that benefit collective interests and foster a climate in which open communication and constructive disagreement are welcome. They encourage their

followers to think critically, provide opportunities for followers to develop, and recognise the contributions of others. On the other hand, unethical charismatic leaders have moral standards that promote their self-interest rather than collective interests as they pursue status and power. They seek to control and manipulate their followers and use a style that stresses dominance (rather than serving) and winning at all costs. Unethical charismatic leaders have a heightened sense of self-importance, seek the limelight, thrive on admiration and shun contrary opinions (Howell & Avolio, 1992).

Charismatic leaders can cause a range of problems for their organisations. The reasons for these problems are varied and occur in part because charismatic leaders often find it difficult to foster healthy interpersonal relationships, lack sound administrative practices, are reluctant to plan for succession (Conger, 1990), and often make decisions that are self-serving rather than in the best interests of their organisations (Howell & Avolio, 1992). Charismatic leaders can indulge in fantasies of power and position and be more interested in self-aggrandisement than in the interests of their organisations or followers. Charismatic leaders tend to be overconfident, impulsive and unconventional (Conger, 1990). They sometimes unconsciously misread market demand and overestimate the availability of resources to promote visions that seek to address their personal shortcomings or needs, with such behaviours based on an underlying neurosis (Sankowsky, 1995). As a result, they rely on impression management to sell their ideas and engage in self-promoting behaviours to both gain attention and enhance their apparent trustworthiness and competence (Bass & Steidlmeier, 1999). Not surprisingly, charismatic leaders are great actors, who are always on stage and thus become 'larger than life' (Bass, 1990).

Various perspectives have been adopted by leadership scholars and theorists; the conceptualisation of charismatic leadership theory is heavily influenced by the perspective they adopt. For instance, House's (1976) theory of charismatic leadership focused on both traits (e.g., self-confidence, need for influence) and behaviours of the leader (e.g., role modelling for the followers). Whereas Conger and Kanungo's (1987) theory of charismatic leadership has elements of an attributional approach in that charisma is seen as being dependent on how followers perceive their leader based on their leader's behaviour. Shamir et al.'s (1993) motivational theory of charismatic leadership involves a range of leader's behaviours; these behaviours change the self-concept of their followers, specifically, charismatic leaders display behaviours (e.g., emphasising

collective identities, reference to history, expressing confidence in followers) that increase followers' self-esteem, self-confidence, and aspects of followers' self-concept.

The perspectives of charismatic leadership theories proposed by these scholars are similar to the characteristics of the transformational leadership theories in the current study as specified below. The current study measures transformational leadership by adopting Bass and Avolio's (1997) MLQ Short Form (5X), which comprises five components: i) idealised influence attributes; ii) idealised influence behaviour; iii) inspirational motivation; iv) intellectual stimulation; and v) individualised consideration. First, the dimensions of idealised influence behaviour and inspirational motivation refer to the leader's charisma and represent behaviours and characteristics that are akin to those specified in House's (1976) theory of charismatic leadership; they focus on both traits (e.g., need for influence) and behaviours of the leader (e.g., role modelling for the followers). Charisma is inherent within transformational leadership and is regarded as the essential feature or key aspect of transformational leadership (Barbuto, 1997). In fact, there is considerable evidence (e.g., Bycio, Hackett, & Allen, 1995; Lowe, Kroeck, & Sivasubramaniam, 1996) that the effects of transformational leadership are predominantly due to its charismatic elements. Secondly, the dimension of 'idealised influence attributed' refers to a leader's charisma which is seen as being dependent on how followers perceive the leader (trusted and respected) based on the leader's behaviour, and followers are inspired by their leader without formal power which is identical to Conger and Kanungo's (1987) theory of charismatic leadership. Thirdly, the dimension of 'intellectual stimulation' refers to how a transformational leader challenges the status quo, questions assumptions, and encourages their followers to come up with new approaches to doing their work or solving problems. Transformational leaders themselves are highly capable, they influence their followers by using personal/referent power that is based on expertise, respect, and admiration rather than rewards and punishments; this is also identical to Conger and Kanungo's (1998) charismatic leadership theory: a leader influences followers primarily through referent power (i.e., the ability to influence people because they admire and respect you) which results in followers wanting to be like the leader.

In addition, several theorists (e.g., Bass, 1985; Shamir, 1991; House & Shamir, 1993) regard transformational and charismatic leadership as similar and compatible and these two approaches have been commonly treated in their books and publications as equivalent

and used interchangeably, whereas another scholar (e.g., Yukl, 1999) perceives transformational and charismatic leadership as partially overlapping processes but maintains they are distinct.

Most importantly, Shamir (1991) pointed out that transformational and charismatic leadership can be used interchangeably as it is implied in their theory of charismatic leadership, a self-concept-based theory, that followers are more likely to accept and obey their charismatic leader when the leader's values and identities are highly attractive to the followers. According to this concept, followers do not automatically obey their leaders, they only do so when their leader embodies values and identities that are highly regarded and the mission one that reflects who they are. Shamir's attribution-based theory of charismatic leadership is consistent with the transformational leadership theories of Burns (1978), Bass (1985), and Bass and Avolio (1997) (adopted by this study). Both approaches focus on followers' independent judgement in the leadership process (Shamir, 1991). Another implication for both transformational and charismatic leadership is that Burns (1978), Bass (1985) and Bass and Avolio (1997) stated that transformational leadership influences followers to transcend their self-interest for the sake of the collective interest (e.g., organisational interest). The psychological attachment (i.e., value internalisation and social identification) and symbolic-sociological self-concept are the explanation for such an effect. Manifestations of collectivistic orientation (e.g., pro-social behaviour) should increase as a result of charismatic leadership which is consistent with the effect of transformational leadership in the current study (Shamir, 1991).

In short, the current study used Bass and Avolio's (1997) MLQ Short Form (5X) to measure transformational leadership which is akin to how Shamir et al. (1993) conceptualised their motivational theory of charismatic leadership. Shamir et al.'s (1993) model is central to the current study. It is arguably the main theory of how charismatic leadership achieves its effects on followers. One of the major contributions of the current study is to extend Shamir et al.'s study; therefore, the current study will follow Shamir's and other scholars' and theorists' approaches (e.g., Bass, 1985; Shamir, 1991; House & Shamir, 1993) to transformational and charismatic leadership by considering them as interchangeable.

2.5 Transformational Leadership

As discussed in Section 2.4, the concept of transformational leadership can be traced back to Weber's theory of charisma. The theory was extended by House (1977) to one where charisma is a vital element of transformational leadership. Burns (1978) was the first scholar who theorised and distinguished the transactional leadership style from that of the transforming leadership style. His work is regarded as seminal in the leadership literature. It was followed by Bass's (1985) work, which extended Burns' (1978) ideas by developing multi-dimensional conceptualisations and measures of transformational leadership and transactional leadership. The following section provides a discussion on the development of transformational leadership.

2.5.1 Burns' (1978) Theory of Transformational Leadership

Research on transactional and transformational leadership has been the most prevalent area of study among leadership scholars. Burns (1978) was the first scholar to theorise "transactional" and "transforming" leadership styles and his work is regarded as seminal in the leadership research area. Burns (1978) argued that leadership occurs in two ways (i.e., transforming and transactional) and that the critical difference between these two types of leadership is the way in which they motivate followers. Transactional leadership relies on extrinsic factors such as rewards, whereas transforming leadership relies on intrinsic rewards such as making work more meaningful and satisfying.

According to Burns' (1978) conceptualisation, transactional leadership is characterised by a 'give and take' relationship. Specifically, transactional leaders adopt contingent rewards and a 'management by exception' leadership style, which means leaders rely on rewarding and punishing their followers based on a follower's work-related performance to achieve an organisation's goals. In other words, a transactional leadership style focuses on the exchange relationship between leaders and followers to fulfil their respective goals (e.g., followers exchange their service for salary and promotion) (Tourish, 2014). Transactional leadership can be effective in certain organisations (i.e., assembly lines, bureaucratic organisations) as leaders strictly require followers to 'follow the rules'. Transactional leaders have been found to be able to maintain organisational stability; however, such leaders are unable to promote any changes in the organisations (Daft & Noe, 2001). With the critical observation of transactional leadership style, Burns (1978)

claimed that the transactional leadership approach to fulfilling the ultimate (leader/organisational) goal is not based on collective interest (i.e., not through leaders and follower's shared interests and goals). Instead, they separately seek to satisfy their own needs (Tourish, 2014).

Burns (1978) presented transforming leadership in a positive light. Leaders with a transforming leadership style seek to change their followers' goals to be better and higher level; here, transformation or change represents shared goals and interests between leaders and followers (Tourish, 2014). Transforming leaders consider all the parties' best interests, and because of that, followers have a deep faith and trust in their leaders. Transforming leaders eventually lead and turn all the followers' independent goals ultimately into a shared goal to achieve the organisational mission (Tourish, 2014)

2.5.2 Bass's (1985) Theory of Transformational Leadership

Bass argued that transformational leadership, which is primarily based on charismatic authority, could be heroic or villainous, depending on the leader's values (Bass & Steidlmeier, 1999). However, Bass later changed his conceptualisation of transformational leadership and aligned it with the view of Burns (1978) in that he regarded only heroic or moral leadership as being truly transformational. Bass regarded transformational leadership that was immoral as not truly transformational.

Bass (1985) extended the ideas of Burns (1978) by developing multi-dimensional conceptualisations and measures of transformational leadership and transactional leadership. Bass (1985) conceptualised transformational leadership as comprising four different factors: i) idealised influence; ii) inspirational motivation; iii) intellectual stimulation; and iv) individualised consideration. The current study has applied Bass's conceptualisation and measure of transformational leadership.

Idealised influence

The followers perceive transformational leaders as their role models due to the leaders' extraordinary behaviours and characteristics. Leaders are seen as having astonishing abilities (e.g., highly determined, perseverant). Leaders are risk-takers, consistent, as well as people who can be relied on and who demonstrate high levels of ethical and moral standards. Followers imitate and identify with their leaders as they trust, respect and admire those leaders (Bass, 1998). A 2004 study found that idealised influence was

significantly correlated with follower trust in leader (Gillespie & Mann, 2004).

Inspirational motivation

Transformational leaders inspire and motivate their followers by providing a vision, and they state their expectations that followers need to meet, and they convince followers that all the effort and pain of challenge and change are worthwhile (Daft & Noe, 2001). Transformational leaders display their commitment to fulfilling the shared vision and goals. In turn, followers demonstrate their enthusiasm, optimism, and commitment to achieving their ultimate shared goals (Bass, 1998). One of the major aspects of transformational leadership is the shared vision that transforms the organisation into something better and inspires the follower to perform beyond expectations to achieve the shared dreams (Daft & Noe, 2001). Without vision, there can be no transformation (Daft & Noe, 2001, p. 404).

Intellectual stimulation

Transformational leaders encourage innovation and creativity. They constantly challenge the status quo, question assumptions, and encourage their followers to come up with new approaches to doing their work or solving problems. Followers are not blamed if their ideas are different from those of the leaders (Bass, 1998). Leaders do not publicly criticise their followers for errors. Instead, leaders involve their followers in problem solving and decision-making processes. Transformational leaders encourage followers to 'think outside the box' (i.e., creatively) and try new ways, which leads to followers' willingness to contribute their inventive ideas to the vision (Dubrin et al. 2006).

Individualised consideration

Transformational leaders care about their followers. They pay attention to each of their followers' needs (e.g., lower-order needs: safety; higher-order needs: self-esteem, self-actualisation) and provide individualised consideration to each follower to satisfy their needs. Transformational leaders work to meet followers' lower-order needs such as working conditions and salary as well as their high-order needs such as personal growth and development ((Daft & Noe, 2001). Leaders accept individual differences and strive to satisfy followers' respective needs (e.g., some followers might need more encouragement or better-structured work, whereas others may need greater autonomy) (Bass, 1998). "Transformational leaders encourage two-way communication and management by walk around" (Bass, 1998, p. 6), that is, they actively mingle with

employees in the workplace and make others aware they are amenable to conversation. Leaders perceive followers as individuals rather than as followers. They remember their followers' concerns through personal interaction (e.g., previous conversations) and delegate work-related tasks to develop their followers and monitor until followers feel comfortable with what they do and do not need to be supported and directed (Bass, 1998). In short, transformational leaders act as mentors and set an example for followers. They delegate work-related tasks not only to satisfy follower's needs but also lead them to achieve the organisational mission (Daft & Noe, 2001).

Transformational leadership occurs "when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality" (Burns, 1978, p. 20; cited in Krishnan, 2005). Bass (1985) extended Burns' (1978) work and defined transformational leadership as the relationship between leaders and followers, in which leaders exert profound effects on followers. For example, leaders inspire followers to perform beyond expectation, and followers admire, trust and become loyal to the leaders) (Krishnan, 2005). The effects of transformational leadership have been examined extensively. This section provides a discussion on transformational leadership and motivational theories.

Bass and Steidlmeier (1999) identified two types of transformational leadership, namely authentic or moral and inauthentic or pseudo. A major difference between moral and pseudo transformational leaders lies in the values they uphold. Moral transformational leaders call for universal brotherhood whereas pseudo transformational leaders emphasise we-they difference. Furthermore, moral transformational leaders are altruistic and foster organisational cultures that have high ethical standards and aim for all followers to internalise shared moral standards. In contrast, pseudo transformational leaders deceive and manipulate, pursue power and position, show no regard for the concerns of others and are egocentric. Furthermore, pseudo transformational leaders may appear to empower followers but need to be in control, so they ensure their followers remain dependent on them (Bass & Steidlmeier, 1999).

The current study looks at the effects of moral transformational leadership and whether through the operation of its psychological mechanism of value congruence in shaping how followers identify with their leaders and organisations, counter-productive attitudes and behaviours associated with follower workaholism are established.

2.5.2.1 *Transformational Leadership and Motivational Theories*

Shamir et al. (1993) highlighted that although numerous studies have shown that transformational leadership has profound effects on followers, there is a lack of a sound theoretical rationale for how transformational leadership motivates followers to change their values, goals, needs, and aspirations. They argue that although motivational explanations for the effects of transformational leadership have been provided (e.g., it makes followers focus on higher-order needs rather than on lower-order needs, raises followers' level of morality, and shifts followers' focus from self-interest to collective interests such as those of the team, organisation or society), none of these explanations can account for the profound effects of transformational leadership on followers. Shamir et al. (1993) propose a motivational theory that explains how transformational leadership can profoundly influence followers. According to this theory, transformational leaders influence followers by engaging the self-concepts of followers such that followers become personally committed to the ideals and goals (i.e., vision) of transformational leaders because they identify with the leader and with the leader's group/organisation. Specifically, transformational leaders display behaviours (e.g., emphasising collective identities, expressing confidence in followers, 'walking the talk') that increase the salience of shared or collective identities, the self-esteem of followers, and followers' personal identification with the leader thus increasing the intrinsic attractiveness of exerting effort to achieve collective goals that are regarded as virtuous and self-expressive rather than as simply instrumental-calculative.

Kark et al. (2003) used the work of Bass (1997), Conger and Kanungo (1998), Tajfel (1982) and Shamir et al.'s (1993) motivational theory of transformational leadership to justify their hypothesis that transformational leadership results in follower empowerment. According to Bass (1997), a defining feature of transformational leadership is its emphasis on follower empowerment and development. The dimension of intellectual stimulation represents behaviours such as delegating responsibility and encouraging followers to think for themselves to come up with better ways to do their work. According to Conger and Kanungo (1998), transformational leadership involves expressing confidence in followers' ability to achieve demanding goals and this empowers followers as it increases their self-confidence (i.e., self-efficacy beliefs). According to Social Identity Theory (Tajfel, 1982), the attribution of positive qualities to a group is associated with identification with the group and vice versa. Transformational leadership involves

expressing confidence in followers, highlighting the worthiness of the collective vision and increasing the importance of group membership in followers' self-concepts. These behaviours result in followers seeing group membership in a positive light and increase collective-efficacy beliefs (i.e., believing that the group can function effectively and achieve its goals) (Tajfel, 1982).

Transformational leadership thus profoundly affects followers partly because followers identify with their leaders and the leaders' work groups and organisations (Yukl, 1998; Kark et al., 2003; Mohamad & Saad, 2016). Identifying with the leader and the leader's group influences the perceptions, attitudes, and behaviours of followers (Pratt, 1998) and thus has important consequences not only for followers but also for the group. These consequences are due in part to the effects of transformational leadership on the self-concepts of followers (Shamir et al., 1993).

Self-concept

“Self-concept” is difficult to define but can be regarded as the totality of attitudes, beliefs, and opinions one has about oneself. In other words, self-concept is a multifaceted representation of oneself that contains all the information that is regarded as relevant to the self (Lord & Brown, 2004). Self-concept is learned, organised, and dynamic, and includes various identities that one chooses to embrace. These identities can be classified as either personal or social/collective (Tajfel & Turner, 1985). The self-concept operates at three levels: i) individual or independent — attitudes and behaviours motivated primarily by concern for one's own advantage and well-being; ii) relational — attitudes and behaviours motivated primarily by concern for significant other individuals (e.g., supervisors); and iii) collective — attitudes and behaviours motivated primarily by concern for one's in-groups (Brewer & Gardner, 1996; Hardie, Kashima, & Pridmore, 2005).

The self is reflexive such that it can monitor itself (i.e., perceive itself as an object) thereby allowing it to classify itself according to various social categories. This process can occur consciously or unconsciously and is referred to as “identification” in Identity Theory and “self-categorisation” in Social Identity Theory. An individual's identity is formed via identification or self-categorisation (Stets & Burke, 2000) and essentially refers to an individual identifying with significant others. The significant others with whom one can identify can be individuals (e.g., parents or other role models such as leaders) or

groups/collectives. Identifying with an individual is referred to as “personal identification” whereas identifying with a group or collective is referred to as “social identification” (van Knippenberg, van Knippenberg, De Cremer, & Hogg, 2005).

Followers identify with transformational leaders because the leader is perceived as charismatic (Kets de Vries, 1988a; Conger & Kanungo, 1998) and articulates a compelling vision based on carefully chosen values (Bryman, 1992). Followers attribute charisma to their leaders when they regard their leaders as extraordinarily capable persons who are willing to self-sacrifice to achieve a compelling collective vision based on shared values. Consequently, transformational leaders rely on referent power (Kark et al., 2003) as they become role models for their followers who admire, respect and trust them because of their exceptional qualities and vision, and because they “walk the talk” (Bass & Riggio, 2006). Followers identifying with the leader is arguably the major reason for the profound effects of transformational leadership on followers’ attitudes, beliefs, and behaviour.

2.5.3 Conclusion (leadership theories)

Leadership has been a topic of research, writing and instruction in earlier centuries both generally and in specific contexts (e.g., in the 16th century, Niccolò Machiavelli’s “The Prince” [*Il Principe*]) and in the 5th century BC military treatise by Sun Tzu, “The Art of War”). The latter is among early writings that reputedly continue to impact not just military but business stratagems. Leadership continues to exercise the minds of researchers today, particularly in relation to the political and business spheres. This thesis focuses on the latter.

Various perspectives have been adopted by leadership scholars, and the definitions of leadership used by scholars are strongly influenced by the perspective they adopt. For instance, scholars who adopt the trait approach to the study of leadership focus on examining the mental, physical, and social characteristics of leaders to determine which characteristics or combination of characteristics distinguish leaders from non-leaders. Scholars who adopt a behavioural perspective define leadership largely in terms of behaviours enacted by specific individuals, whereas the attributional perspective sees leadership as stemming from how one is perceived by others and thus includes the leader–follower relationship. Transformational leadership can be regarded as a combination of

trait, behavioural, contingency, and attributional approaches to leadership (Trice & Beyer, 1986). Charisma is one of the vital elements of transformational leadership (House, 1977).

A survey of the existing literature revealed that theories of transformational leadership have dominated the leadership literature over the last three decades, and there is an extensive literature on transformational leadership and its various effects on followers, such as transformational leaders' influence on followers by their engaging the self-concepts of followers such that followers become personally committed to the ideals and goals (i.e., vision) of transformational leaders. In line with this concept, the current study looks at the influence of transformational leadership and the psychological mechanisms involved (e.g., identification, value congruence) on follower workaholism as no attention has been given to the possibility that transformational leadership through its various psychological mechanisms can foster workaholism among followers. This next section provides a review of the literature on workaholism.

2.6 Workaholism

Since the end of the 19th century, workers and society have demanded a decrease in the number of working hours. During the Industrial Revolution, working for 14–16 hours per day was not uncommon. The International Labor Organization was created at the end of World War I and adopted a Convention that generally limited the maximum number of working hours per day to 8 and the maximum number of working hours per week to 48 (Hours of Work (Industry) Convention, 1919 (No. 1) arts 2–5). These limits were put into place to protect workers from work-related fatigue and to ensure they had enough time for social and recreational activities (International Labor Organization, 2013b). This in no way meant that countries legislated such limits (in Australia, for example, the 8-hour day / 40-hour week did not become a national standard for all workers until 1948, and clearly these limits have been routinely breached in the developing world both then and now). However, due to various factors, including increased need for businesses to be globally competitive for employment and business survival to be secure, increased perception of precariousness of employment, and more recently the advent of advanced telecommunications and telecommuting eroding the barrier between work hours and home/commuting/leisure time, working long hours have again become a part of normal life for many employees across the globe (Schlachter et al., 2018; Hewlett & Luce, 2006). While full time employees are working an average of more than 5 hours a week unpaid

overtime, significant levels of unpaid overtime also exist across part-time and casual employment (Browne, 2019). Many work far longer extended working hours (Dawson, McCulloch, & Baker, 2001). In fact, many people nowadays “live to work rather than work to live”. In the U.S.A., it has been estimated that more than 10% of the general population may be workaholics (Andreassen et al., 2012b). The topic of workaholism has consequently become increasingly important for both academics and practitioners (Clark et al., 2016; Ng, Sorensen, & Feldman, 2007).

The legal weekly hour limits vary across countries. For instance, Kenya has a legal limit of 49 hours per week, whereas Belgium, France and Australia have legal limits of less than 40 hours per week (International Labor Organization, 2013b). Despite legislation limiting the number of weekly working hours, many employees work in excess of these legal limits. According to the European Foundation for the Improvement of Living and Working Conditions (2010), 18% of European male employees and 8% of female employees work more than 48 hours a week. According to Jacobs and Gerson (2004), 25% of males and 11% of females in the U.S.A. work more than 50 hours a week, whilst a study of high earners in the U.S.A. revealed that 35% of high earners work more than 60 hours a week and 10% work more than 80 hours a week (Hewlett & Luce, 2006).

Japan seems to have the biggest problem of employees working excessively. According to Iwasaki, Takahashi and Nakata (2006), 12% of Japanese employees work more than 60 hours a week and 28% work more than 50 hours a week. In terms of employees who work 50 or more hours per week, Japan has long registered the highest rate (i.e., 28.1%), followed by Germany (5.3%), Finland (4.5%), Sweden (1.9%) and Netherlands (1.4%) (Iwasaki et al., 2006). The modern tradition in Japan of working excessively has recently led to the creation of new terms such as “*Karoshi*”, which refers to sudden death or disability (such as heart attacks, strokes, asthmatic attacks even a starvation diet) from overwork, and “*Karo-Jisatsu*”, which refers to employees who commit suicide due to mental stress or depression related to overwork (Kanai, 2006).

Economic factors such as free-trade agreements and other global financial issues have made it more difficult for organisations to survive, and this has impacted the working lives of many employees. Even though many countries have legislation on how many hours employees should work per week (e.g., South Korea’s national assembly recently passed a law reducing the maximum number of hours per week from 68 to 52 (BBC, 2018)) and

on how many rest periods should be taken during the working day (e.g., lunch break), annual holidays, and medical leave, many employees feel overworked and fail to utilise their entitlements (e.g., paid time off) due to fear of retrenchment. For instance, in Australia, which ranks second in the world behind Japan (where only 33% take their allocated holidays), only 47% of full-time employees take all their allocated vacation days (Goldman, 2011). In Sydney, workaholism is more prevalent in affluent suburbs — up to 67% of residents in wealthy suburbs reported working more than 40 hours per week (Bagshaw & Wade, 2017).

Organisational and work-related factors have also resulted in working long hours becoming commonplace and the number of workaholics continue to surge globally (Andreassen, 2014; Mazzetti, Schaufeli, & Guglielmi, 2014). The increase in workaholism might be due to the nature of occupations and careers changing over the years. For instance, the boundary between personal life and work has become more obscure (Fletcher & Bailyn, 2001; Mazzetti et al., 2014), job role expectations have become unclear, and the advancement of technology (e.g., laptops, smart phones, email, video conferencing) has enabled individuals to work at any time and at any place (Shimazu, Schaufeli, & Taris, 2010). Such changes may make it more difficult for individuals to disengage from their work, resulting in them working longer hours and thus rendering them more susceptible to workaholism. This is especially the case for those who work in managerial roles as they have more opportunities and better incentives to invest themselves heavily in their work (Hewlett & Luce, 2006).

The above section provides an overview of workaholism, the next section briefly addresses pertinent definitions of the workaholism construct that can be found in the literature.

2.6.1 *Definitions of Workaholism*

Workaholism or work addiction is a term that was coined by Oates (1971). According to Oates (1971, p. 11), workaholism is “...the compulsion or the uncontrollable need to work incessantly...”. Although the topic of workaholism has drawn considerable attention from various practitioners and researchers since its inception by Oates (1971), there remains considerable disagreement on how workaholism should be conceptualised (Clark et al., 2016). This lack of consensus has hampered the progress of empirical research on

workaholism (Scott, Moore, & Miceli, 1997). Table 2.3 provides several definitions of workaholism that can be found in the literature. For example, workaholism has been defined as an addiction, a preoccupation with one's work that has adverse effects on one's wellbeing, being totally devoted to one's occupation, and in terms of how many hours per week spent working (e.g., working at least 50 hours a week: Burke (1999)).

Defining workaholism based on the number of hours one works has been a contentious issue in the literature. Some researchers define workaholism as working longer and harder than other employees (Harpaz & Snir, 2003). According to Machlowitz (1977), however, the defining element of workaholism is one's attitude to work and not the number of hours one works. Other researchers (e.g., Schaufeli, Taris, & Bakker, 2008b) argue that defining workaholism using hours worked is misleading because people work long hours for different reasons. Possible reasons include financial need (e.g., as breadwinners), organisational demands (e.g., pressure from the management team), personal needs (e.g., new graduates who are ambitious and eager to build their careers) and unhappy marriages. These reasons do not address the workaholism syndrome as an addiction to work which includes feeling compelled or driven to work and being unable to disengage from work (Schaufeli et al., 2008b). Working long hours alone is, therefore, insufficient evidence of workaholism (Clark et al., 2016).

Sussman and Sussman (2011) conducted a literature search on addiction and concluded from 52 studies that addiction has five key elements. These elements are: (i) being preoccupied with the behaviour, (ii) engaging in the activity to achieve appetitive effects such as a "high" or a "loss of sense of time" (Sussman, 2012), (iii) achieving only temporary satiation, (iv) losing self-control in relation to the activity, and (v) suffering negative consequences as a result of engaging in the activity.

Workaholics demonstrate the five elements of addiction identified by Sussman and Sussman (2011). Most scholars would agree that workaholics are individuals who cannot disengage from their work and thus work excessively, without any obvious, objective environmental necessities (e.g., deadlines or economic need) to do so, to the extent that it has detrimental effects on them. To be more specific, workaholics work obsessively due to an uncontrollable need or inner compulsion to work rather than because of any demands placed on them by external factors (e.g., job demands, financial needs) (McMillan & O'Driscoll, 2008; Schaufeli, Taris, & Van Rhenen, 2008a; Spence &

Robbins, 1992; Oates, 1971). Workaholics find it difficult to disengage from their work and constantly think of work even when they are not working (e.g., feel anxious or guilty if not working) (Schaufeli et al., 2008c; Scott et al., 1997; Spence & Robbins, 1992). Finally, because of the extra hours they work over evenings and weekends, workaholics tend to experience health problems, have limited interests outside of their work, have dysfunctional social lives and experience marital estrangement (Ng et al., 2007; Sussman, 2012).

Table 2.3: Definitions of Workaholism

Workaholism Definitions
<ul style="list-style-type: none"> ▪ An excessive and uncontrollable need to work that permanently disturbs health, happiness and relationships (Oates (1971, p. 11). ▪ Total devotion to an occupation or cause (Nagy & Davis, 1985, p. 1). ▪ Devoting more time and thought to work than the situation demands...what set workaholics apart is not the numbers of hours they work but their attitudes towards work (Machlowitz, 1980, p. 11). ▪ A progressive, fatal disorder in which a person is addicted to the process of working, the results of which lead to family disintegration and increased unmanageableness of work habits and all other areas of life (Taris, 1996, p. 447). ▪ A workaholic is a person who exhibits three properties: in comparison to others, the workaholic is highly work involved, feels compelled or driven to work because of inner pressures, and is low in enjoyment of work (Spence & Robbins, 1992, p. 162). ▪ A workaholic demonstrates excessive indulgence in work which is the same as alcoholics' neglect of other aspects of life for indulgence in alcohol (Porter, 1996, p. 71). ▪ Workaholism can be divided into three categories: i) discretionary time spent in work activities; ii) persistently and frequently thinking about work when not at work; and iii) working beyond organisational or financial requirements (Scott, Moore, & Miceli, 1997, pp. 292–293). ▪ Working at least 50 hours per week and involving an irrational commitment to excessive work and where they can't take time off or divert their interests (Burke, 1999, p. 335). ▪ The tendency to work excessively hard in a compulsive way (Schaufeli et al., 2008b, p. 204). ▪ An addiction to work that involves feeling compelled or driven to work because of internal pressures, having persistent and frequent thoughts about work when not working, and working beyond what is reasonably expected (based on the requirements of the job or basic economic needs) despite potential negative consequences (Clark et al., 2016, p. 5).

Source: Adapted from Clark et al. (2016)

Although the term workaholism has become more prevalent over the last couple of decades, researchers have yet to reach a consensus on the affective/emotional experiences of workaholics. Although most researchers agree that, even when they are not working, workaholics experience negative emotions (e.g., guilt and anxiety) about their work due to an inner compulsion that drives their addictive behaviours (Clark et al., 2016; Ng et al., 2007; Spence & Robbins, 1992), there is however relatively less agreement on the affective experiences of workaholics when they are at work. According to Spence and Robbins (1992), workaholics are highly involved in and driven by their work, but they do not enjoy their work. Aziz and Zickar (2006) also propose that one of the major characteristics of workaholism is having a low level of work enjoyment. In contrast, other researchers (e.g., Baruch, 2011; Ng et al., 2007) argue that workaholics truly enjoy the act of working. Mudrack (2006) and Schaufeli et al. (2008a) suggest that work enjoyment should not be included when defining the construct of workaholism. Consequently, work enjoyment seems to be a contentious issue in the conceptualisation of workaholism (Quinones & Griffiths, 2015).

Sussman (2012) argues that work enjoyment may not be an appropriate term to use with workaholics. Sussman (2012) claims that workaholics experience a temporary addictive “rush” or “high” from their work, especially when starting a new task or challenge or getting paid for working extra hard. Furthermore, although most individuals would tend to experience a positive emotional surge from being given a challenging new task or a bonus payment, workaholics tend to generate a higher emotional rush than do non-workaholics (Sussman, 2012).

As shown in Table 2.3, despite the disagreements among scholars regarding how to define workaholism, in those definitions that regard workaholism as encompassing more than simply working extra hours there is an underlying theme that is consistent with the original definition provided by Oates (1971). Specifically, workaholism involves a compulsion to work when one does not need to work. In other words, workaholism involves an addiction to one’s work. Furthermore, the four most widely used scales of workaholism (i.e., the Workaholism Battery by Spence & Robbins, 1992; the Work Addiction Risk Test by Robinson, 1989; the Dutch Workaholism Scale by Schaufeli et al., 2009a; and the Workaholism Analysis Questionnaire (WAQ) by Aziz, Uhrich, Wuensch, & Swords 2013), all regard workaholism as involving an addiction to work.

2.6.2 Measures of Workaholism

Multiple instruments or measures have been developed to quantify work addiction or workaholism. Each measure specifies different characteristics of workaholism depending on how workaholism has been conceptualised. The mixed findings on the consequences of workaholism could be due to the different conceptualisations and resultant measures of workaholism that have been used in different studies (Taris et al., 2008). Some instruments (e.g., the Dutch Workaholism Scale, DUWAS) measure only workaholic behaviours whereas others (e.g., the Workaholism Analysis Questionnaire, WAQ) measure workaholic behaviours, specific personality traits relevant to the workaholic profile and outcomes of workaholism (Andreassen et al., 2012a; Patel et al., 2012).

Although there have been numerous measures of workaholism used in the literature, many of these measures lack a firm theoretical basis, have not been used often, show poor psychometric properties (Andreassen et al., 2014), and have been developed using small samples, often consisting entirely of university students (Robinson, 1996) or using large homogeneous samples (Schaufeli et al., 2009b). This section will therefore provide a discussion of the major measures of work addiction or workaholism focusing on those that have been validated and/or used frequently. The measures are discussed in chronological order.

Work Addiction Risk Test (WART)

Robinson (1989) developed the Work Addiction Risk Test (WART) which was the first quantitative measure of workaholism (Andreassen et al., 2012a). The terms work addiction and workaholism have been used interchangeably in the literature. The original test was developed to be used as a self-administered screening device for workaholic tendencies (Robinson, 1998a). The WART consists of 25 items derived from symptoms related to work addiction problems diagnosed by clinicians of workaholics and their families (Andreassen et al., 2012a). A four-point Likert scale (ranging from 1 = “never true” to 4 = “always true”) is used with all the items.

Robinson (1999) conceptualised work addiction or workaholism as consisting of five major symptoms or components. One, *overdoing*, which refers to feeling guilty when not working, keeping oneself busy, working long hours, impatience, overcommitting and setting deadlines for oneself. Two, *self-worth*, which refers to focusing on the results one

achieves, and being overly critical of oneself for one's minor mistakes and setbacks. Three, *control-perfectionism*, which refers to a reluctance to delegate, an unwillingness to ask others for help when needed, and the tendency to get angry and frustrated with oneself when work performance does not meet one's high expectations. Four, *intimacy*, which refers to a lack of interest in relationships with others and the milestones in their lives, and not listening to the opinions of others. Five, *mental preoccupation-future reference*, which refers to spending a lot of time mentally planning and thinking about future events while tuning out the 'here and now', making decisions without factual support and not preparing properly before taking on new projects (Patel et al, 2012).

The WART has been widely used and applied in approximately 140 studies that examined the relationships between various outcomes (e.g., work-family conflict, anxiety). However, many researchers have criticised the WART as its five-component conceptualisation is not consistent with widely accepted definitions of workaholism. The WART focuses more on Type-A personality and anxiety rather than workaholic behaviours (Robinson, 1999; Mudrack, 2006). A simpler and shorter one-dimensional instrument of workaholism based on the tendency to work compulsively might be enough to measure workaholism (Taris, Schaufeli, & Verhoeven, 2005). Additionally, although working excessively is a critical component of workaholism, workaholism cannot be measured simply by the number of hours worked because there are numerous reasons why people work long hours (Paluchowski & Hornowska, 2013; Clark et al., 2016) including financial reasons, social pressure, poor marriages, and career advancement (Schaufeli et al., 2009a).

Workaholism Battery (WORKBAT)

Spence and Robbins (1992) developed the Workaholism Battery (WORKBAT) to assess their "workaholism triad", which is the basis for their typology of workaholism. The workaholism triad consists of three dimensions: i) *work involvement*, which refers to the extent to which one engages in work activities. An example item is "I spend my free time on projects and other activities"; ii) *drivenness*, which refers to a compulsion to work when one neither must work nor enjoys working. An example item is "I seem to have an inner compulsion to work hard"; and iii) *work enjoyment*, which refers to the pleasure one experiences from one's work. An example item is "Sometimes I enjoy my work so much I have a hard time stopping". According to Spence and Robbins (1992), workaholics are highly involved with their work, feel compelled or driven to work because of inner

pressures, and do not enjoy working.

The WORKBAT is the most popular measure of workaholism as it has been used in approximately 500 studies (Andreassen, 2014) that have examined either individual component scores or aggregated scores and their relationships with correlates of workaholism (Patel et al., 2012). However, the WORKBAT has been criticised by several scholars (e.g., Clark et al., 2016; Mudrack, 2006; Schaufeli et al., 2008a) because they believe that work enjoyment, whether high or low, should not be a defining element of workaholism. These scholars argue that work enjoyment is a correlate rather than a defining feature of workaholism. Schaufeli et al. (2006) and Ng et al. (2007) argue that work enjoyment applies to individuals who are engaged in their jobs and not to workaholics whilst Paluchowski and Hornowska (2013) doubt that work can bring satisfaction to the workaholic because of the compulsive or addictive nature of workaholism. Consequently, these authors and others (e.g., Clark et al., 2016; McMillan & O’Driscoll, 2006; Mudrack, 2006; Schaufeli et al., 2009b) suggest that only two elements of Spence and Robbins’ (1992) workaholism triad (i.e., drivenness and work involvement) are needed to measure workaholism. They suggested workaholism should be regarded as consisting of two components, one of which is cognitive (i.e., drivenness or working compulsively) and the other behavioural (i.e., work involvement or working excessively).

Dutch Work Addiction Scale (DUWAS)

The development of the Dutch Work Addiction Scale (DUWAS) was initiated by Taris et al. (2005). They essentially reduced the 25-item WART to nine items by focusing on the overdoing subscale of the WART, which is also referred to as the compulsive tendency subscale. They found the nine-item version of the WART could be used as a short measure of the WART.

The original DUWAS consists of two subscales (i.e., working excessively and working obsessively) with a total of 17 items. Nine items from the compulsive tendency subscale of the WART’s measure of working excessively whilst eight items were taken from the WORKBAT’s drive subscale to measure working compulsively (Schaufeli et al., 2008a). The 17 items are evaluated on a four-point Likert scale (ranging from 1 = “totally disagree” to 4 = “totally agree”).

Schaufeli et al. (2009b) modified the original DUWAS by reducing the total number of items from 17 to 10 while maintaining the two-factor conceptualisation of workaholism. The two subscales are *working excessively* (5 items) and *working compulsively* (5 items). Working excessively refers to individuals spending unreasonable amounts of time working while neglecting other aspects of their lives despite there being no apparent external pressures (e.g., financial, organisational demands) to do so whereas working compulsively refers to thinking about work all the time even when not working (Schaufeli et al., 2006; Schaufeli et al., 2008a).

A confirmatory factor analysis found the two-factor structure of the modified DUWAS provides a good fit for data obtained from 2115 Dutch junior doctors (Schaufeli et al., 2009a). Several other studies (e.g., Schaufeli et al., 2009b; Del Líbano et al., 2010) have found the 10-item version of the DUWAS to have good psychometric properties. The 10-item DUWAS appears to be a valid instrument for measuring a two-factor model of workaholism (i.e., working excessively and working compulsively) (Andreassen et al., 2014).

One of the limitations of the DUWAS is that its development was based on a rather homogeneous sample of highly educated professionals (i.e., junior doctors). The homogeneous nature of the sample brings into question the generalisability of the findings (Schaufeli et al., 2009b). Furthermore, 125 junior doctors chose not to participate in the study and so a non-response bias might be present in the data such that workaholic doctors would be less inclined to participate as some of the reasons provided for not participating included being too busy, being too tired, and the questionnaire being too long (Schaufeli et al., 2009b).

Bergen Work Addiction Scale (BWAS)

Most scholars (e.g., Clark et al., 2016; Ng et al., 2007; Robinson, 1996; Schaufeli et al., 2008b; Spence & Robbins, 1992; Taris et al., 2010a) agree the key element of workaholism is a compulsive drive or addiction to work. As workaholism is a form of addiction, any measure of workaholism should be closely linked to the core elements of addictions (Taris et al., 2010a; Griffiths, 2011). Measures of workaholism that have not been developed according to the addiction perspective of workaholism arguably lack face validity (Andreassen et al., 2012a).

Any addiction, whether it is a chemical or non-chemical addiction, consists of seven core components (Griffiths, 2005): One, *salience*, which refers to the activity dominating thinking and behaviour; two, *tolerance*, which refers to the need for increasing amounts of the addictive behaviour to provide the effects felt initially; three, *mood modification*, which refers to the addictive behaviour changing/improving the individual's mood; four, *relapse*, which refers to the tendency for the individual to revert to earlier levels of engaging in the addictive behaviour after a period of reduced activity or abstinence; five, *withdrawal*, which refers to the individual experiencing unpleasant feelings when the addictive behaviour is suddenly stopped or reduced; six, *conflict*, which refers to the addictive behaviour causing conflict with other activities the individual needs to engage in such as spending time with one's family and friends; and seven, *problems*, which refers to the addictive behaviour creating problems such as health issues for the individual. These seven components of addiction are consistent with criteria found in formal diagnostic manuals (e.g., APA, 1994; WHO, 1992) for addictive behaviours such as pathological gambling (Andreassen et al., 2012a).

Andreassen et al. (2012a) developed the Bergen Work Addiction Scale (BWAS) as a measure of workaholism that is based on the seven core symptoms found in traditional drug addictions: namely, salience, tolerance, mood modification, relapse, withdrawal, conflict, and problems. The BWAS uses seven items to evaluate the seven components of work addiction or workaholism over the previous 12 months using a five-point Likert scale (ranging from 1 = "never" to 5 = "always").

The BWAS is the first unidimensional measure of work addiction or workaholism (Andreassen et al., 2012a). A confirmatory factor analysis was conducted on the BWAS using two samples. The first sample consisted of 11,769 subjects from Norway who worked in various occupations at different levels in their organisations ranging from senior managers to non-managerial staff. The authors were able to obtain such a large sample because they provided a link to an electronic survey after a documentary on workaholism was shown on a popular TV channel. The documentary was presented in a neutral and balanced way by the first author so as not to create any biases towards workaholism that might influence responses to the questionnaire (Andreassen et al., 2012a). The second sample consisted of 368 full-time, white-collar employees from various firms in Norway including health care firms, human resource consultancy firms, and universities. The findings from the confirmatory factor analyses supported a single-factor solution for the

BWAS, and the Cronbach alphas for all samples were satisfactory. The BWAS was developed from the perspective that workaholism is an addictive behaviour and the seven items used represent the seven components of addiction as outlined by Griffiths (2005). Consequently, the BWAS has relatively high content validity in relation to the addiction field (Andreassen et al., 2012a). The BWAS also has high content validity as its items cover the affective, cognitive and behavioural aspects of workaholism mentioned by Ng et al. (2007) (Andreassen et al., 2012a).

Workaholism Analysis Questionnaire (WAQ)

Aziz, Uhrich, Wuensch, and Swords (2013) developed the Workaholism Analysis Questionnaire (WAQ). The WAQ is based on three main themes found in previous definitions of workaholism. First, the central theme is that workaholics are driven to work hard by an internal pressure rather than by external pressures. Secondly, workaholism is an addiction that results in negative outcomes such as poor physical and psychological health. Finally, workaholics neglect their personal, non-work-related activities and experience work–life imbalance (Aziz et al., 2013).

The WAQ consists of 29 self-report items that measure five key components of workaholism: first, *work addiction*, which refers to thinking about work constantly and working excessively and is measured using five items; secondly, *work perfectionism*, which refers to the need to constantly check one’s work to ensure it is perfect and is measured using five items; thirdly, *work–life conflict*, which refers to work interfering with one’s personal life and is measured using eleven items; fourthly, *unpleasantness*, which refers to the need to control others and being easily irritated by others and is measured using four items; and fifthly, *withdrawal symptoms*, which refers to feeling anxious or guilty when not working and is measured using four items. All 29 items are evaluated on a 5-point Likert scale (ranging from 1 = “strong disagree” to 5 = “strongly agree”).

Although the WORKBAT (Spence & Robbins, 1992) and the WART (Robinson, 1989) have made substantial contributions to the literature on workaholism, the WAQ provides a more clear, comprehensive and precise measure of workaholism as it regards workaholism as an addiction. Additionally, the WAQ further reinforces the relationships among workaholism, personal attributes of workaholics and work–life imbalance (Aziz et al., 2013). Finally, the WAQ is the first measure of workaholism to provide a broad

definition of workaholism that includes antecedents (i.e., work perfectionism and unpleasantness) and outcomes (i.e., work–life conflict and withdrawal symptoms) of workaholism (Aziz et al., 2013). However, that the WAQ includes antecedents and outcomes of workaholism may be problematic as it can be argued it measures more than workaholism.

After reviewing and analysing the workaholism measures in the literature. The current study adopts Andreassen et al.'s (2012a) BWAS measure as the BWAS measure was psychometrically pre-validated and showed high content validity. It was developed from the perspective that workaholism is an addictive behaviour and cover the affective, cognitive and behavioural aspects of workaholism based on seven core elements of addiction (Ng et al., 2007; Andreassen et al., 2012a) which reflects the key element of workaholism (i.e., compulsive drive, addiction to work) agreed by most of the scholars (e.g., Clark et al., 2016; Ng et al., 2007; Robinson, 1996; Schaufeli et al., 2008b; Spence & Robbins, 1992; Taris et al., 2010a). It is thus selected for the current study.

2.6.3 *Antecedents of Workaholism*

Workaholism is a complex and multifaceted phenomenon that is caused by various factors. Numerous antecedents of workaholism have been proposed in the literature. The various antecedents of workaholism can be regarded as being at the different levels, specifically, the individual level (e.g., personality), the organisational level (e.g., organisational culture) and the sociocultural level (e.g., unfulfilling family life). This section provides a review of the literature on antecedents of workaholism for each of these three levels.

2.6.3.1 *Individual-level antecedents*

Personality traits have been shown to be related to workaholism. Several studies have examined the relationships between the “Big Five” personality traits (i.e., agreeableness, openness to experience, extraversion, conscientiousness and neuroticism) and the components of workaholism (i.e., work enjoyment, work involvement and driveness). Some studies have found a positive correlation between workaholism and conscientiousness. However, the three remaining traits of the Big Five model of personality (i.e., agreeableness, openness to experience, extraversion) have not been found to be related to workaholism (Clark et al., 2016). Table 2.4 has summarised the

personality traits (i.e., conscientiousness, neuroticism, type A personality, narcissism, perfectionism) that have been found to be positively correlated to workaholism in the literature. Other individual antecedents such as self-efficacy, low levels of self-esteem, a tendency to emphasise intrinsic work values and being male have been found to be more associated with a susceptibility to becoming workaholic.

Table 2.4: Workaholism — Individual-level Antecedents

Workaholism: Individual-level Antecedents	
Personality Traits	
Conscientiousness	Conscientiousness can foster workaholism because workaholics tend to set very challenging and perhaps even unrealistic personal goals (Porter, 1996), and the various aspects of conscientiousness such as being organised, self-disciplined and achievement-oriented are likely to help them to persevere when trying to achieve challenging goals (Scott et al., 1997).
Neuroticism	Individuals who score high on neuroticism are likely to be anxious about their work and this drives them to work excessively (Clark et al., 2016). Neuroticism is positively correlated to compulsiveness, compulsive individuals have been shown to be susceptible to workaholism (Liang & Chu, 2009).
Type A personality	Type A personality is characterised by competitiveness, aggression, ambition, achievement striving, impatience, drivenness, need for control and a sense of urgency (Bluen et al., 1990; Edwards & Baglioni, 1991; Friedman & Rosenman, 1974). Type A personality can result in working long hours, constantly thinking of work and finding it difficult to disengage from work (Clark et al., 2016).
Narcissism	Narcissism can lead to workaholism in several ways. First, narcissists tend to become obsessed with work because they have high expectations of themselves as well as desiring power and success. Secondly, narcissists seek admiration and thus crave recognition and rewards (Killinger, 1991). They are therefore likely to invest heavily in their work (Raskin & Novacek, 1988). Third, narcissists believe they are special and are driven to climb the social ladder or rise to senior positions within an organisation's hierarchy (Andreassen et al., 2012b).
Perfectionism	Perfectionism has long been considered a major cause of workaholism (e.g., Spence & Robbins, 1992; Scott et al., 1997) and can result in workaholism in several ways. Perfectionists are highly motivated (Stoeber, Davis, & Townley, 2013) and value work and productivity more highly than leisure activities and friends (Scott et al., 1997). Perfectionists tend to set performance expectations for themselves that are unreasonably high, and not surprisingly tend to be dissatisfied with their performance levels (Flett & Hewitt, 2002). As a result, they tend to exert more effort and spend more time at work than non-perfectionists (Clark et al., 2016).

Table 2.4: Workaholism — Individual-level Antecedents (Continued)

Workaholism: Individual-level Antecedents	
Personality Traits	
Self-efficacy	Workaholism is more likely to occur among individuals whose self-efficacy work-related activities are higher than their self-efficacy in non-work activities. The reason is that working on tasks that one is competent at is more satisfying compared to working on tasks that one is not capable of doing so such individuals become dedicated to work activities rather than to non-work activities (Ng et al., 2007).
Self Esteem	Individuals with low levels of self-esteem are more likely to become workaholics than those with higher levels (Burke, 2004) because individuals with low levels of self-esteem tend to engage in addictive behaviours and are therefore more susceptible to becoming workaholics (Ng et al, 2007). Most people try to maintain a positive self-image (Dipboye, 1977) and avoid situations that decrease their self-esteem. Working excessively and being obsessed with work (e.g., constantly discussing work-related matters with colleagues to the exclusion of other topics) can meet esteem needs as it allows one to demonstrate one’s capabilities and can result in praise and recognition from work-related significant others (e.g., supervisors, senior managers) (Spence & Robbins, 1992; Ng et al., 2007).
Individual’s Values	Individuals who emphasise intrinsic work values tend to seek intellectual stimulation from their work, are ambitious and achievement oriented and want to be influential. Consequently, individuals who prioritise intrinsic work values over extrinsic work values are likely to be susceptible to workaholism (Liang & Chu, 1989).
Gender Differences	Workaholism is more prevalent among males than females (Snir & Harpaz, 2006) because social norms in industrialised societies still expect women to be the primary caregiver of a family and thus a large proportion of females work in part-time positions (Wharton & Blair-Loy, 2002).

2.6.3.2 *Organisational-level antecedents*

Organisations may purposely or inadvertently enable workaholic behaviours by creating workplaces that pressure employees to work hard (Holland, 2008). For instance, an organisation’s elite (i.e., leaders) can create cultures that foster and reward workaholic behaviours (Fassel, 1990). Alternatively, due to economic reasons, organisations may need to restructure and downsize. As a result, employees can find themselves having

increased workloads due to staff shortages because of redundancies that result in them having increased job responsibilities (Burke, 2001). Workaholic behaviours are frequently encouraged by organisations because working excessively is not only regarded as evidence that one is dedicated and committed to one's organisation (Burke, 2001) but also improves employee performance (Liang & Chu, 2009). In this section, the effects of several organisational factors on workaholism will be discussed.

Workaholism can be facilitated and maintained by an organisation's culture (Fassel, 1990). Some organisational cultures require employees to make sacrifices in other spheres of their lives if they seek career advancement (Ng et al., 2007). Indeed, it is rare for an organisation to discourage employees from starting work early and finishing late or from working during their discretionary time (e.g., nights and weekends) (Burke, 2001). Many organisations encourage starting work early, working through breaks and finishing late. It is not uncommon for organisations to encourage employees to attend breakfast meetings, business lunches, business dinners, after-work functions, and team-building retreats that can last for several days. All these activities make it difficult for employees to find time to recuperate or relax with their families and friends (Paluchowski & Hornowska, 2013).

Some work environments are more likely than others to foster workaholic behaviours. Organisations can encourage competition between individuals or teams, and this can lead to widespread workaholism across the organisation (Ng et al., 2007). Work environments that embody a strong masculine culture encourage workaholic behaviours because they indoctrinate employees to be extremely competitive, task-oriented and power-hungry. Furthermore, masculine organisational cultures are likely to focus on the ends rather than the means as they emphasise performance levels and use 'winner takes all' reward systems where only the star performer is rewarded. As a result, employees are forced to work excessively if they are to outperform their peers (Ng et al., 2007). Work environments in which employees feel pressured to constantly work hard and meet deadlines force employees to dedicate substantial amounts of energy and time and can result in them working or thinking about work incessantly, which are key features of workaholism (Johnstone & Johnston, 2005).

Organisational policies and practices can foster workaholic behaviours. Organisational practices such as telecommuting can foster workaholism. Workaholism is reinforced by

some organisations that emphasise the importance of performance evaluations (Piotrowski & Vodanovich, 2006). Employees who work extra hours are more likely to be noticed and receive favourable performance evaluations and consequently receive rewards (e.g., performance bonuses), recognition and promotion opportunities compared to employees who do not work extra hours (Mazzetti et al., 2014). Furthermore, some organisations indirectly discourage employees from taking their leave entitlements. Employees are reluctant to take time off because it might be perceived by senior managers and supervisors as a lack of commitment and thus adversely affect their performance evaluations. Consequently, many employees go to work when they are injured, ill or have a medical appointment (Reiss, 2002).

Organisational values are an important aspect of organisational culture and have been shown to be positively correlated with workaholism (Burke & Koxsal, 2002). The behaviour of organisational members is directly influenced by an organisation's values such that members act in ways that are consistent with the organisation's values to support the organisation's goals and objectives (Meglino, Ravlin, & Adkins, 1989). Organisations select and retain individuals who fit in with their cultures (Schneider, 1989). Organisations that embrace, rather than condone, workaholic behaviours are not only likely to select workaholic types but are also likely to foster workaholism by reinforcing workaholic behaviours (Ng et al., 2007). Additionally, individuals are attracted to organisations that suit their needs and values. Workaholics are thus likely to be attracted to organisations that demand employees to work excessively and which encourage and reward workaholic behaviours (Ng et al., 2007).

2.6.3.3 *Sociocultural-level antecedents*

One of the major factors that has led to an increase in time spent on work-related activities is technological advancements in communications (Brady, Vodanovich, & Rotunda, 2008). The use of portable computers, videoconferencing, telecommuting, email, mobile phones, and work-related websites facilitate workaholic behaviours (Burke, 2001, Shimazu et al., 2010). Most office workers use mobile technology (e.g., laptop computers, tablets, mobile phones) and contact their offices at least once per day whilst 33% of them access their voice mail daily to check for work-related issues while they are on vacation (Erase-Blunt, 2001). Disengaging from work has become increasingly difficult due to technological advancements that allow individuals to work from home or while travelling

(Jones et al., 2006; Van den Broeck et al., 2011). Apart from advanced technologies, other sociocultural-level antecedents such as an unfulfilling social or family life, vicarious learning, and societal values (i.e., mastery, masculinity) can induce workaholism. Table 2.5 summarises the sociocultural-level antecedents of workaholism.

Table 2.5: Workaholism — Sociocultural-level Antecedents

Workaholism: Sociocultural-level Antecedents	
Advanced Technologies	Advanced technologies have made it possible for employees to work outside of their workplaces and have changed what organisations expect of employees (Hewlett & Luce, 2006). For instance, a survey conducted among employees who occupied extreme jobs (i.e., top 6% of earners such as senior managers of large firms) in the U.S.A. found that 67% claimed it is a crucial job requirement and a critical success factor that they can always be reached by customers and colleagues (i.e., 24 hours a day, 7 days per week).
An Unfulfilling Social Life or Family Life	In some instances, the workplace provides a haven for individuals who have little to look forward to outside of their work activities as their social and family lives do not satisfy their psychological needs such as the need for affiliation (Taris et al., 2008). Individuals can avoid unpleasant non-work activities and environments (e.g., unhappy personal lives, marital estrangement) by immersing themselves in their work (Aziz & Zickar, 2006).
Vicarious Learning	According to Social Learning Theory (Bandura, 1963), individuals can learn cognitively by observing significant others such as managers who act as role models. They later imitate the behaviours they observed. Individuals who observe their significant others such as family members being obsessed with work and if these significant others endorse such behaviours, these individuals are likely to approach their work in a similar manner and thus become more susceptible to workaholism (Ng et al., 2007).
Societal Values: Mastery	Workaholism is more prevalent in societies that highly value mastery compared to societies that do not emphasise mastery (Snir & Harpaz, 2009). Mastery involves a cultural emphasis on getting ahead or success through self-assertion, ambition, independence, and competence (Schwartz, 1999).
Societal Values: Masculinity	Individuals in masculine societies value being assertive, competitive, dominant, and ambitious. They define success in terms of the acquisition of wealth and power (Hofstede & McCrae, 2004). Furthermore, there are distinct gender roles in masculine or patriarchal societies such that men have higher status than women. Additionally, women are traditionally expected to take care of the home and care for children, and women find it difficult to climb the corporate ladder (Hofstede, 2001).

As discussed above, there are various antecedents of workaholism in the existing literature, namely, the individual level (e.g., personality), the organisational level (e.g., organisational culture) and the sociocultural level (e.g., unfulfilling family life). However, little attention has been given to other antecedents such as identification, value congruence, work centrality and leadership. This study is a primary step to addressing those gaps by providing theoretical and conceptual arguments, and empirical support.

2.6.4 Consequences of Workaholism

Workaholism has been shown to be related to many harmful consequences not only for workaholics but also for their families and organisations (Caruso, 2006). For example, the consequences of workaholism include insomnia (Andreassen et al., 2011), stress, and health issues (Robinson, 2000c). As a result, workaholics experience a decrease in physiological and neuro-cognitive functioning that leads to increased errors and injuries (Nakata et al., 2000), increased health-care costs for their organisations (Vodanovich & Piotrowski, 2006), decreased self-reported job performance (Shimazu & Schaufeli, 2009), increased absenteeism (particularly from mental-health problems) (Matsudaira et al., 2013) and increased intention to quit (Burke & MacDermid, 1999). Furthermore, workaholics are not interested in activities that are not work-related. As a result, they spend little time with their families (Dahlgren, Kecklund, & Akerstedt, 2006) and often experience marital estrangement (Sussman, 2012). The consequences of workaholism can be classified according to the following categories: the workaholic, the workaholic's family, and the workaholic's organisation. In this section, various consequences of workaholism that were found in the literature will be discussed.

2.6.4.1 Consequences for the workaholic

There is extensive evidence that workaholism has a negative impact on the psychological wellbeing of workaholics. Compared to non-workaholics, workaholics have lower levels of job satisfaction (Andreassen et al., 2011), career satisfaction (Burke & MacDermid, 1999), life satisfaction (Aziz & Zickar, 2006), purpose in life (Bonebright, Clay, & Ankenmann, 2000), and mental health (Taris et al., 2005). Furthermore, workaholics have higher levels of stress (Spence & Robbins, 1992), negative affect (Burke & Matthiesen, 2004), job strain (Clark et al., 2016), anxiety, anger and depression (Nagy & Davis, 1985; Matsudaira et al., 2013), and burnout (Patel et al., 2012) compared to non-workaholics.

A fundamental reason why workaholics tend to have poor well-being is their susceptibility to experiencing sleep-related problems. Working long hours and being preoccupied with work make it difficult for workaholics to get enough sleep to recover from the high levels of effort they put into their work (Kubota et al., 2010). Workaholism has been shown to be related to sleeping problems such as insomnia (Andreassen et al., 2011), difficulty waking up, tiredness upon awakening and excessive daytime sleepiness at work (Kubota et al., 2010). Sleep deprivation has been found to be related to negative outcomes such as poor life quality, and health problems (e.g., physical and psychological) which can potentially contribute to absenteeism, decreased efficiency, stress, job dissatisfaction, and injuries or accidents at work (Kubota et al., 2000; Matsudaira et al., 2013). Furthermore, a lack of sleep creates its own problems as workaholics are generally too tired to get enough exercise and many of them overeat and drink alcohol or use medication to deal with the effects of sleep deprivation (Hewlett & Luce, 2006).

Sleeping problems appear to be due primarily to the cognitive component of workaholism (i.e., obsession with work) rather than to the behavioural component (i.e., working excessively). Specifically, difficulty waking up and tiredness upon awakening is more strongly related to obsession with work than to working excessively (Kubota et al., 2010). Andreassen et al.'s (2011) findings support the argument that sleep problems are caused primarily by the cognitive component of workaholism. Andreassen et al. (2011) used Spence and Robbins' (1992) workaholism triad to predict insomnia and found drivenness (i.e., the compulsion to work) is positively related to insomnia, work involvement (i.e., engaging in one's work activities) is not significantly related to insomnia, and work enjoyment is negatively related to insomnia.

Workaholics are likely to create additional job-related stress for themselves due to their psychological characteristics. Workaholics have an internal drive to work that evokes feelings of anxiety and guilt in them when they are not working (Clark et al., 2016). Furthermore, they tend to be perfectionists and thus place unnecessary pressure on themselves by setting unreasonably high standards and emphasising performing every task, regardless of its significance, perfectly (Porter, 1996). Finally, workaholics make their jobs more stressful because they find it difficult to get along with their colleagues (Mudrack & Naughton, 2001).

Numerous studies (e.g., Nagy & Davis, 1985; Clark et al., 2016; Patel et al., 2012; Taris

et al., 2010a) have reported a positive relationship between workaholism and burnout. There are several definitions of “burnout”, and Maslach’s (1982) definition is arguably the most influential (Demerouti et al., 2001; Schaufeli et al., 2008a). According to Maslach (1982), burnout is a syndrome comprising three aspects: emotional exhaustion (i.e., feeling unable to cope with one’s job demands), depersonalisation (i.e., adopting a cynical and detached view of those who receive one’s services) and reduced personal accomplishment (i.e., self-evaluation that one performs one’s job responsibilities ineffectively).

There are a few reasons why workaholism can lead to burnout. Work involves exerting considerable physical and psychological effort (Meijman & Mulder, 1998) the consequences of which are usually reversible by getting enough rest (Taris et al., 2010a). Individuals therefore need to recuperate from the time and effort they put into their work (Sonnentag et al., 2008). However, workaholics do not allow themselves enough recovery time and therefore must exert even more effort to perform at the same level the next working period. Continuation of this cycle makes it increasingly difficult for them to perform at the required levels and has long-term consequences such as physical and emotional exhaustion (Taris et al., 2010a). Consequently, one reason why workaholism results in burnout is that the excessive hours that workaholics spend working leaves them with insufficient time to recover from the effects of working (Bakker et al., 2013). Another reason is workaholics continue to feel the pressure from their work even when not working because they are unable to disengage from it (Giannini & Scabia, 2014). Finally, workaholics make their lives more stressful by choosing to work in occupations that are stressful and demanding (Harpaz & Snir, 2003; Aziz & Zickar, 2006). Burnout has been linked to various physical symptoms including acute infections, cardiovascular problems, and psychosomatic symptoms (Giannini & Scabia, 2014).

Working excessively increases one’s exposure to work demands and job-related stress (Dahlgren et al., 2006) which increases the likelihood of experiencing poor physical health (Taris et al., 2008). Workaholism contributes to various health issues including frequent pain, infections, cardiovascular problems and brain diseases (Chamberlin & Zhang, 2009; Matsudaira et al., 2013), and even death from overwork (Iwasaki et al., 2006; International Labor Organization, 2013a). Workaholics avoid taking time off work (Taris et al., 2008) partly because they do not enjoy activities that are not work-related (Scott et al., 1997) and partly because they are obsessed with their work. This results in

them working excessively and creates a chronic imbalance between recovery and time spent working (Snir & Zohar, 2008), and this, together with the increased job demands and job stress workaholics create results in health issues (Bonebright et al., 2000). Additionally, workaholics may simply feel they have too much work to do (i.e., they are too busy) to look after their health needs (Chamberlin & Zhang, 2009).

There are mixed findings on the relationship between workaholism and physical health. For example, McMillan and O'Driscoll (2004) found non-significant differences between workaholics and non-workaholics in terms of frequency of pain, vitality, role functioning, social functioning, psychological health, and general health. Similarly, Kanai et al. (1996) found workaholics did not report more subjective health complaints than did non-workaholics. Interestingly, Taris et al. (2008) found, after controlling for situational variables (i.e., job demand and job control) and demographic variables (i.e., age, gender, work experience and level of education), one component of workaholism (i.e., the inability to detach from work) is positively related to physical complaints whereas another component (i.e., working long hours) is not.

Most studies, however, have found a positive relationship between workaholism and physical health complaints. Specifically, compared to non-workaholics, workaholics experience more physical health issues (Chamberlin & Zhang, 2009) such as aches and pains (Spence & Robbins, 1992). Burke (2004) found workaholics have more psychosomatic symptoms and poorer physical health compared to non-workaholics. Andreassen et al. (2007) found the drivenness aspect of workaholism is positively related to subjective health complaints (e.g., neck pain, anxiety, headache, and stomach pain) whereas the work enjoyment aspect is negatively related. Schaufeli et al. (2009b) found both working excessively and working compulsively are negatively related to perceived health (i.e., feeling that one is in good health) while Patel et al.'s (2012) meta-analysis found workaholism is positively related to physical health complaints.

2.6.4.2 *Consequences for the workaholic's family*

Workaholism has consequences that extend beyond the workaholic as all members of a workaholic's family can be adversely affected by the behaviours of a workaholic (Brady et al., 2008). Workaholics prioritise work over interpersonal relationships (Robinson & Post, 1995; Chamberlin & Zhang, 2009), tend to have a negative view of their families

(Robinson & Post, 1997) and have little time for their families (Dahlgren et al., 2006). These factors and others result in disharmony and dysfunction in families of workaholics. In this section, the consequences of workaholism for the workaholic's family will be discussed.

Many spouses of workaholics describe living with a workaholic as a nightmare (Robinson, 1998b). There are various reasons why they might have such a bleak view of their marriages. Families of workaholics tend to suffer from depression (Kanai, 2009) because workaholics have high levels of work–family conflict (Brady et al., 2008) and low levels of family centrality (Snir & Harpaz, 2004). Workaholics thus tend to neglect their familial obligations, which results in their spouses performing most parenting duties (Snir & Harpaz, 2012). Spouses of workaholics thus resent their workaholic partners because they see themselves as carrying the physical and emotional burdens of the marriage (Snir & Harpaz, 2012). Workaholics tend to neglect their relationships with their spouses (Robinson et al., 2001) and prefer attending non-compulsory work-related activities that advance or complement their work over family activities (Scott et al., 1997; Clark et al., 2016). Workaholism thus results in spouses feeling lonely, unappreciated, neglected, manipulated and emotionally abandoned (Robinson et al., 2001), and ultimately leads to the breakdown of the family unit (Oates, 1971).

There are other reasons why spouses of workaholics are unhappy with their marriages. One reason is workaholism is an addiction that organisations and society encourage (Fassel & Schaeff, 1991; Chamberlin & Zhang, 2009). Workaholics therefore often receive material rewards and climb the corporate ladder because of their commitment to their work. These rewards allow their families to live, at the very least, in relative comfort and increase the workaholic's social status (Bonebright et al., 2000). As a result, spouses of workaholics tend to suffer from low self-esteem because they are less successful and thus less important than their workaholic partners (Robinson & Chase, 2000a). Another reason is that spouses of workaholics tend to feel guilty and regard themselves as ungrateful for wanting more from their partners (Robinson, 1998b). Furthermore, they tend to suffer in silence and internalise their marital dissatisfaction because they fear if they complain they will be regarded as ungrateful to their workaholic partners for the extreme effort and 'sacrifices' they make to provide their families with a comfortable lifestyle (Robinson et al., 2001). Finally, families of workaholics experience high levels of distress (Fassel, 2000) because workaholics tend to be unhappy individuals (Robinson, 1999) who often

bring their work-related emotional issues home (Schaufeli et al., 2008c). Living with someone who is temperamental and disinterested in family matters creates a lot of emotional problems for spouses of workaholics and places considerable strain on the marital relationship (Bakker, Demerouti, & Burke, 2009; Oates, 1971). Compared to spouses of non-workaholics, spouses of workaholics reported greater marital estrangement and less positive affect towards their partners (Robinson, Carroll, & Flowers, 2001).

Workaholics tend to have dysfunctional relationships with their children. Workaholics generally spend little time with their children, neglect their development and are essentially not emotionally involved with them (Robinson, 2000b). Consequently, workaholics are likely to be resented by their children for being emotionally absent or psychologically unavailable (Oates, 1971; Robinson, 2000b). Workaholics tend to demand high levels of achievement from their children, and time spent with their children usually involves checking their children's progress toward mastering some activity they have chosen for their children (e.g., playing the piano) (Robinson, 2000b).

Children of workaholics often experience physical and psychological problems (Carroll & Robinson, 2000; Robinson et al., 2001). Children of workaholics are often incapable of achieving the lofty standards set for them by their workaholic parent(s). As a result, they perceive themselves as incompetent, have low levels of self-acceptance, develop a high level of external locus of control and become approval seekers (Chamberlin & Zhang, 2009; Robinson, 1998a). Children of workaholic parents are more likely to become workaholics and report having more physical complaints than do children of non-workaholic parents (Chamberlin & Zhang, 2009). Children of workaholic fathers are more susceptible to suffering from psychological problems than are children of workaholic mothers (Robinson & Kelley, 1998). Compared to children of non-workaholic fathers, children of workaholic fathers have higher levels of anxiety and depression. However, children of workaholic mothers and non-workaholic mothers did not have different levels of anxiety or depression (Robinson & Kelley, 1998).

2.6.4.3 *Consequences for the workaholic's organisation*

Workaholics can be an asset, but it is more likely they will be a serious liability for their organisations (Robinson, 2000c). Although workaholics can help their organisations by

being extremely dedicated to their work, they are more likely than non-workaholics to engage in behaviours that harm their organisations (Galperin & Burke, 2006). Furthermore, the higher levels of stress-related health issues that workaholic experience reduce their work efficiency (Kubota et al., 2000). and the personality traits typical of workaholics (e.g., neuroticism, perfectionism, Type A) make it difficult for them to work effectively with others (Porter, 2001). In this section, various consequences of workaholism for organisations will be discussed.

Workaholics are generally not high performers even though they put a lot of effort into their work (Paluchowski & Hornowska, 2013). Due to their personality (e.g., their narcissism, neuroticism, perfectionism, rigidity), workaholics are less productive and efficient compared to non-workaholics. Workaholics make their own jobs more complicated and demanding than necessary by exceeding requirements and increasing their workload. Compared to non-workaholics, workaholics have higher levels of stress and lower levels of well-being (Robinson, 2000c). This results in them also having higher error rates (Matsudaira et al., 2013). Together with high stress and low well-being, workaholics have personality traits that compel them to continually re-check their efforts (Robinson, 2000c; Taris et al., 2005). Furthermore, they often fail to meet their deadlines because they have difficulty allocating appropriate amounts of time for the various tasks they must perform and waste time on unimportant aspects of their jobs (Součková et al., 2014).

Workaholics find it difficult to work harmoniously with others because their personality and obsession with work typically increase both intra-role conflict and inter-role conflict. Workaholics increase intra-role conflict by making their own jobs more complicated and demanding than necessary. This results in them being unable to perform all their roles effectively due to poor time management, which increases conflicts with colleagues and supervisors (Vodanovich & Piotrowski, 2006). Workaholics tend to be perfectionists and competitive and are not team players which increases inter-role conflicts (i.e., conflict with supervisors, colleagues and staff) (Paluchowski & Hornowska, 2013). Workaholics create extra work for their colleagues by not trusting them (Choi, 2013), refusing to delegate work to them, and being overly critical of them (Killinger, 2006; Kanai & Wakabayashi, 2001; Kravina et al., 2010). Furthermore, workaholic managers tend to micromanage their staff and continually check on how their staff are performing (Graves, Ruderman, & Ohlott, 2006). Consequently, supervisors, colleagues and staff of

workaholics feel resentment and anger toward them (Porter, 2001; Vodanovich & Piotrowski, 2006).

2.6.5 Summary (*Workaholism*)

Numerous definitions of workaholism can be found in the literature. A common theme among these definitions is that workaholism is an addictive behaviour that consists essentially of working excessively due to an inner drive to do so rather than because of external pressures. Whilst Oates (1971) explicitly conceptualised workaholism as being inherently negative in nature, others such as Machlowitz (1977) have suggested that workaholism also has positive aspects such as creativity and work enjoyment. Some scholars have described workaholism as the 21st century's "best-dressed" mental health issue (Robinson et al., 2001). However, some other scholars such as Machlowitz (1980) suggested that workaholism is a love of work rather than a disease, workaholics have a satisfying lifestyle and often enjoy work. Scott et al. (1997) held a similar view and specified that workaholics enjoy their unique lifestyles and work activities at the same time. Probably due to the difficulty in reaching a consensus in defining workaholism, this topic has been overlooked and downplayed in the literature (Robinson et al., 2001). Nevertheless, most scholars regard workaholism as being inherently negative in that it has serious negative consequences for the workaholic, the workaholic's family, and the workaholic's organisation.

Many antecedents of workaholism have been examined in the literature. These antecedents can be classified as being at the individual level (e.g., personality), the organisational level (e.g., organisational policies and practices) or the socio-cultural level (e.g., vicarious learning of workaholism at home). Understanding the antecedents of workaholism is critical as workaholism has been shown to be related to many harmful consequences not only for workaholics but also for their families and organisations (Caruso, 2006). The current study looks at the effects of moral transformational leadership style and how, through its psychological mechanisms (i.e., value congruence, identification), it eventually results in followers' workaholism. This study is undertaken because little attention has been given to the psychological mechanisms via which transformational leadership achieves its effects on followers, particularly their workaholism. The next section of this chapter provides a discussion of the literature on the psychological mechanisms of value congruence, identification, and work centrality.

2.7 Value Congruence

2.7.1 *Definition of Value and Value Congruence*

An abundant of definitions of “values” can be found in previous literature. Super (1980, p. 130) defines values as “an objective, either a psychological state, a relationship, or material condition, that one seeks to attain”. Rokeach (1980, p. 262; cited in Erkutlu & Chafra, 2016) defined values as “shared prescriptive or proscriptive beliefs about ideal modes of behaviour and end-states of existence that are activated by, yet transcend, object and situation”. Peters and Waterman (1982; cited in Amos & Weathington, 2008) developed values as consisting of seven components through their examination of some outstandingly performing U.S. organisations: i) goal achievement; ii) profit-orientation; iii) communication; iv) significance of details in implementation; v) innovation; vi) extraordinary service and quality; and importance of people as individuals. Hofstede (1984, p. 18) defines values as “a broad tendency to prefer certain states of affairs over others.” Values are perceived to have profound influence on individuals’ behaviour, emotions and cognitions (Meglino & Ravlin, 1998; Rokeach, 1973). Schwartz and Bilsky (1987, 1990; cited in Schwartz, 1992, p. 4) classify “values” as consisting of five features: “i) concepts or beliefs; ii) pertain to desirable end states or behaviours; iii) transcend specific situations; iv) guide selection or evaluation of behaviour and events; and v) are ordered by relative importance”. In addition, “values are perceived as latent constructs that refer to the way in which people evaluate activities or outcomes” (Roe & Ester, 1999, p. 3) and can apply at different levels (e.g., individuals, groups, and nations).

Individuals and organisations have value systems that determine their attitudes and behaviours. Values influence emotional responses to information and events and ultimately behaviour (Edwards & Cable, 2009). Value congruence occurs when the value system of an individual is consistent with the value system of another individual (e.g., person–leader) or an organisation (person–organisation) (Hoffman et al., 2011).

People tend to behave in ways that are not only consistent with their own ideologies but also with those of powerful superiors (Beyer, 1981). Values are important because they influence the way in which information and events are interpreted (Schwartz, 1992). Individuals are guided by their personal value systems when making decisions. Organisational value systems guide members on how to behave and how organisational

resources should be used through the provision of formal policies and informal norms (Edwards & Cable, 2009).

The theory of person–environment fit states that one likes an environment with features such as beliefs and values that are similar to or the same as their own (Kroeger, 1995). Likewise, in an organisational context, person–organisation fit is crucial to organisations because individuals are less likely to have positive behaviour and attitudes if they do not fit well with organisations where they work (Sekiguchi, 2004; Saks & Ashforth, 1997). Researchers found that values are perceived to be matching or congruent between employees and their colleagues and organisations if the values of employees are similar to those of their colleagues and organisations (Amos & Weathington, 2008).

Value congruence is perceived to be a significant and key aspect in a trustworthy relationship (Elving, 2005) because values congruence means one’s values are similar to those of one’s leader/organisation. According to Dirks and Ferrin (2002), value congruence refers to the shared or similar personal values between leaders and their subordinates. Leaders and subordinates are likely to build shared values as they work together to achieve a shared vision.

2.7.2 Follower–Leader Value Congruence

Extensive research has been devoted to understanding the importance of value congruence between followers and leaders or organisation such as in regard to follower–leader value congruence (Shamir, 1995; Hoffman et al., 2011), follower–organisation value congruence (Hoffman et al., 2011) and both follower–leader and follower–organisation value congruence (e.g., Shamir et al., 1993; Jung & Avolio, 2000).

In the leadership studies, value congruence explains the reason why followers are loyal and connected to their leaders (Conger, 1999; Shamir et al., 1993; Burns, 1978). Even though leaders do not change the values of followers directly, leaders can effectively connect organisational values to the followers’ values until they are matching and congruent (Klein & House, 1995). Transformational leadership motivates followers by articulating a favourable vision and emphasising the collective goals which are consistent with followers’ values; followers, in turn, perceive organisational goals as their own goals, and thereby they are willing to exert extra effort to achieve their shared goals (Bono & Judge, 2003; Shamir et al., 1993). Some scholars (Van Knippenberg et al., 2004; Shamir

et al., 1993) suggest that under transformational leadership, work is perceived by followers as manifesting underlying values. Followers are intrinsically motivated by those value-laden goals for several reasons. These goals are: i) a reflection of followers' values; ii) in line with followers' self-concepts; and iii) consistent with followers' moral standards. Avolio and Bass (1988) posited that followers internalise leaders' values and vision because transformational leaders communicate effectively and articulate a desirable vision. When followers' values are consistent with those of their leaders, followers are more willing to contribute to their organisations. This therefore leads to followers' increased effort and better performance (Klein & House, 1995). Shamir (1995) holds a similar view and discussed whether transformational leadership has positive effects on leader–follower value congruence if the leader's influential vision matches followers' values, in turn leading to followers' enhanced performance. In addition, Adkins, Ravlin and Meglino (1996) discussed how employees show higher degrees of satisfaction when their personal values are consistent with those of their colleagues.

Prior literature has shown the levels of value congruence between employees, leaders, and organisations show a positive relationship between degrees of value congruence and performance within organisations. Lord and Brown (2001) proposed that leadership behaviours must activate different value patterns (i.e., self-enhancement or self-transcendence) in followers in order to activate different levels of the self-concept or identities (i.e., independent, relational, or collective identities) in followers. Krishnan (2005) found transformational leadership results in both leader–follower value congruence and follower identification with the organisation. Hoffman et al. (2011) reported transformational leadership is positively related to follower perceptions of person–supervisor value congruence and person–organisation value congruence. Jung and Avolio (2000) reported transformational leadership is positively correlated with value congruence. The findings have found the levels of value congruence between employee and organisation is positively related to attitudes which lead to various organisational outcomes such as satisfaction and organisational commitment (Rosete, 2006; Adkins et al., 1996), affective commitment and normative commitment (Amos & Weathington, 2008), satisfaction with the organisation (Amos & Weathington, 2008), followers' performance (Adkins et al., 1996), organisational commitment (Astakhova, 2016; Amos & Weathington, 2008; Rosete, 2006; Chatman, 1991; Posner, 1992), and job satisfaction (Adkins et al., 1996; Amos & Weathington, 2008).

Moreover, Verquer, Beehr and Wagner's (2003) meta-analysis report on 21 studies supported the hypothesis that value congruence is positively correlated with job satisfaction. Meta-analysis was utilised to also test the relationship between value congruence and organisational commitment in general, and the findings show value congruence is positively correlated with organisational commitment for those studies that had included organisational commitment (Verquer et al., 2003). In addition, meta-analysis revealed a negative correlation between value congruence and followers' turnover intention; more specifically, the more followers' values match their organisations, the less their tendency to leave their organisations (Verquer et al., 2003).

Several studies tested the mediating effects of value congruence within organisational settings. Brown and Trevino (2006) found leader–follower value congruence mediates the relationship between transformational leadership and deviance behaviour. Hoffman et al. (2011) reported person–organisation value congruence positively mediates the relationship between transformational leadership and group-level effectiveness (Hoffman et al., 2011). Value congruence also positively mediates the relationship between transformational leadership and followers' performance (Jung & Avolio, 2000). Value congruence positively mediates the relationship between person–organisation fit and affective commitment (Astakhova, 2016).

There are several ways in which transformational leadership can influence followers to align their values with those of the leader. Transformational leaders are perceived by followers as possessing exceptional personal qualities that provide the basis for charisma (Trice & Beyer, 1986). Followers idolise and want to be like their transformational leaders because they regard the leaders as extraordinary due to the capabilities, convictions, self-confidence, dynamism, and unconventional behaviour (Yukl, 1998). Follower–leader value congruence can also occur when leaders provide an inspiring vision, demonstrate high levels of personal commitment to the vision and its values through self-sacrificial behaviour, and reward those who behave in ways that are consistent with the core values of the vision (Conger, Kanungo & Menon, 2000; Posner, 1992).

Person–leader value congruence has a strong impact on the leader–follower relationship. Shared values between the leader and followers improve the quality of the leader–follower relationship (Ashkanasy & O'Connor, 1997). Shared values provide a basis for trust (Edwards & Cable, 2009) as followers are better able to understand and predict the

leader's goals, behaviours and expectations (Astakhova, 2016). Leaders and followers who have shared values are less likely to experience conflict over decisions and can resolve conflicts more easily than those who have lower levels of shared values (Schneider, Goldstein, & Smith, 1995). Person–leader or leader–follower value congruence also fosters smoother communication (Meglino & Ravlin, 1998) and thus improves follower satisfaction and performance.

2.7.3 Follower–Organisation Value Congruence

Organisations are often reflections of their founders or their top management (Schneider et al., 1995). Numerous tactics are available to organisational elites to inform organisational members of the values those elites regard as important. This includes, for instance, developing vision statements and advocating motives that are alluring and politically correct, sponsoring charitable events or popular causes in the name of corporate social responsibility, maintaining traditions and rituals that glorify the organisation, expressing a concern for all members and appreciation for their efforts, espousing “shared” values, and creating common enemies (Ashforth & Mael, 1989; Alvesson & Willmott, 2002).

A compelling vision based on shared values can facilitate follower–organisation value congruence. Individuals feel a sense of pride in being associated with organisations that are driven by a compelling vision based on shared values (Shamir et al., 1993). Consequently, value congruence occurs as they will either perceive the organisations' values as aligned with their own (Hoffman et al., 2011) or adopt the values of their organisations.

Top management not only construct organisational culture and thus organisational identity but are also symbols of their organisational cultures as they often embody the beliefs and values of the organisation) (Ashforth & Mael, 1989). Organisational culture encompasses individual-level phenomena (e.g., roles) as well as group-level phenomena (e.g., ceremonies and rituals) and is generally regarded as consisting of shared beliefs, values, and assumptions that govern the sensemaking efforts and actions of organisational members (Harris, 1994). Consequently, organisational culture provides the organisation with legitimacy and gives meaning to the day-to-day tasks of organisational members. Members who align their values with those of the organisation (or whose values are

already aligned with the organisation) are therefore likely to find their work meaningful.

Person–organisation value congruence has benefits other than providing meaning to the work experience. Person–organisation value congruence increases the likelihood that the organisation will reward the individual. Organisational decision makers promote individuals whose personalities and values align with the attitudes, beliefs, and values of the decision makers, serving to increase the homogeneity of members (Kanter, 1977). This phenomenon has long been recognised. Barnard (1938) called it “homosocialisation”; Argyris (1957) called it the “hiring the right type” syndrome; Kanter (1977) called it the “homosocial reproduction system”; and Schneider et al. (1995) called it the “homogeneity hypothesis”.

Transformational leaders emphasise the organisation’s collective mission and values, thus facilitating follower–organisation value congruence. In those instances, however, where the values of a transformational leader are not consistent with those of the organisation (e.g., a dissident transformational leader), transformational leadership can be a strong force against follower–organisation value congruence and subsequently against follower commitment to the organisation and its goals (Shamir et al., 1993).

2.7.4 Summary (*Value Congruence*)

A significant amount of research has examined the importance of value congruence between followers and leaders or organisation in the literature. The previous studies tested the mediating effects of value congruence within organisational settings. They found the levels of value congruence between employee and organisation lead to various organisational outcomes. Yet, it was observed that the mediating effect of value congruence between transformational leadership and identification has never been considered in the previous studies. The current study addresses these gaps in the literature on the effect of transformational leadership style, and through this psychological mechanism (i.e., *value congruence*), whilst predicting workaholism among followers. The next section of this chapter provides a discussion on the mediating role of *identification*.

2.8 Identification

2.8.1 *Definition of Identification*

Scholars have paid close attention to identification processes in leadership studies (Cavazotte et al., 2013; Shamir et al., 1993; Kark et al., 2003; Lord & Hall, 2005). Personal identification with the leader is entrenched in Tajfel and Turner's (1979) Social Identity Theory. According to Social Identity Theory, an individual's identity is formed via identification or self-categorisation (Stets & Burke, 2000) and essentially refers to an individual identifying with significant others (e.g., parents or other role models such as leaders) (Kark et al., 2003).

There are various definitions of identification. Kark et al. (2003) conceptualise personal identification as individuals identifying with the leader, resulting in their defining themselves in accordance with their beliefs about the leader and integrate their beliefs into self-concept. Pratt (1998) characterises social identification as individuals identifying with the organisation, resulting in their defining themselves according to their beliefs about the organisation and integrating their beliefs into self-concept; organisational identity thereby becomes part of self-concept (i.e., their own identities).

Social identity theory proposes that individuals tend to classify themselves in relation to various social categories such as nation, religion, gender, and organisational membership (Tajfel & Turner, 1985). Social identification occurs for two reasons: i) it helps individuals define and locate themselves in societies by classifying themselves and others into different social categories; and ii) it enhances the individual's self-esteem (Stinglhamber et al., 2015).

2.8.2 *Personal Identification with the Leader*

Several studies have examined the relationship between transformational leadership and personal identification/social identification (Conger & Kanungo, 1998; Kark et al., 2003; Krishnan, 2005; Hobman et al., 2011). The research shows transformational leadership profoundly affects followers partly because followers identify with their leaders and the leaders' work groups and organisations (Yukl, 1998; Kark et al., 2003; Mohamad & Saad, 2016). Identifying with the leader and the leader's group influences the perceptions, attitudes, and behaviours of followers (Pratt, 1998) and thus has important consequences

not only for followers but also for the group/organisation. These consequences are due in part to the effects of transformational leadership on the self-concepts of followers (Shamir et al., 1993).

The theory of transformational leadership highlights personal identification with the leader as a significant mechanism through which transformational leaders influence followers. Such leadership achieves its effects on followers via referent power (Conger & Kanungo, 1998; Kark et al., 2003). Likewise, transformational leadership results in followers identifying with the leader (i.e., personal identification) by role modelling, and this is one reason why transformational leadership profoundly influences the attitudes, beliefs, and behaviour of followers (Kets de Vries, 1988a; Shamir et al., 1993; Ashforth & Mael, 1989; Conger & Kanungo, 1998; Arthur, 1993). This will be discussed in this section.

According to Kets de Vries (1988a), though a process of transference, followers replace childhood authority figures (e.g., parents who were highly admired and completely trusted) with the transformational leader and regress to early childhood states. The charismatic relationship resembles the early childhood relationships followers had with their parents, and therefore followers of transformational leaders depend on their leaders in the same way they depended in early childhood on their parents (Kets de Vries, 1988a). Personal identification can thus lead to submissive loyalty and unquestioning obedience being exhibited by followers (Howell, 1988). Followers of transformational leaders are primarily motivated by the desire to obtain recognition and approval from their leaders; thus, followers' self-esteem depends on how their leaders evaluate them (Conger & Kanungo, 1988). Furthermore, departure of the leader is likely to result in followers experiencing a crisis, intense feelings of loss, and disorientation (Shamir, 1991). Finally, the charismatic relationship involves followers perceiving their leaders as extraordinary and results in followers depending on the leader for guidance and inspiration (Yukl, 1998).

Followers identify with transformational leaders because the leader is perceived as charismatic (Kets de Vries, 1988a; Conger & Kanungo, 1998) and articulates a compelling vision based on carefully chosen values (Bryman, 1992). Followers attribute charisma to their leaders when they regard their leaders as extraordinarily capable persons who are willing to self-sacrifice to achieve a compelling collective vision based on shared

values. Consequently, transformational leaders rely on referent power (Kark et al., 2003) as they become role models for their followers who admire, respect, and trust them because of their exceptional qualities and vision, and because they “walk the talk” (Bass & Riggio, 2006). Followers can satisfy their unconscious needs by identifying with powerful characters (i.e., charismatic leaders). Through a process of projection, followers identify with transformational leaders because such identification enables them to satisfy their own desire for grandiosity and enhances their own self-esteem, and because they unconsciously hope that some of the leader’s extraordinary qualities will “rub off” on them (Kets de Vries, 1988b). Followers identifying with the leader is arguably the major reason for the profound effects of transformational leadership on followers’ attitudes, beliefs, and behaviour.

2.8.3 *Social Identification with the Organisation*

In the prior literature review, transformational leadership was found to effectively influence followers to identify with the organisation in several ways, mainly the effective creation and communication of a collective vision by transformational leaders, the effects of transformational leadership on followers’ self-concepts, and the organisational identity and organisational culture constructed by the leaders.

Transformational leadership was found to be positively related to collective identity (Conger et al., 2000), and to both personal identification and social identification (Shamir et al., 1993; Kark et al., 2003; Hobman et al., 2011). According to Shamir et al. (1993), transformational leaders are able to connect followers’ self-concepts to the collective mission and to the group by increasing the prominence of the collective identity in followers’ self-concepts. As a result, transformational leaders motivate their followers by making the achievement of the collective vision self-expressive rather than instrumental-calculative. In other words, followers willingly help to achieve the collective vision not for material or financial benefits but because the behaviours required to achieve the vision are symbolic and express their own ideals and values (i.e., who they are), and thus enhance their self-worth.

In addition, followers are willing to identify with the particular group/organisation because identifying with the group/organisation not only defines their self-concepts according to their perceptions of the group/organisation but also affects their self-esteem

because they regard the successes and failures of the group as personal successes and failures (Mael & Ashforth, 1992). Individuals tend to identify more closely with those individuals and groups to which they attribute positive qualities (Schneider, Hall, & Nygren, 1971; Tajfel, 1982). The reason for this is that in the same way that classification of others in relation to particular groups results in stereotypical perceptions of them, identification (i.e., self-classification) results in the attribution of stereotypical perceptions to oneself (Turner, 1984, cited in Ashforth & Mael, 1989). Identification is not an all-or-nothing phenomenon. The extent to which an individual identifies with a social category, or with another individual, is clearly a matter of degree (Ashforth & Mael, 1989).

Besides, organisational identification is a form of social identification and refers to the psychological relationship that develops between individuals and the organisations with which they identify. This relationship involves a sense of belongingness and oneness with the organisation whereby individuals define themselves in terms of the organisations with which they identify (Stinglhamber et al., 2015). As a result, organisational identification addresses followers' affiliation and esteem needs.

Organisational identity is a powerful term as it speaks to the very essence of what an organisation is and, in turn, addresses the question of "Who are we?" of employees/followers (Albert, Ashforth, & Dutton, 2000). Organisational leaders (e.g., transformational leaders) could profoundly influence followers as they not only construct organisational culture and thus organisational identity but are also symbols of their organisational cultures as they often embody the beliefs and values of the organisation) (Ashforth & Mael, 1989). Organisational identity performs important functions as it not only provides members with a sense of belonging to something special (Cheney, 1983) but also provides them with a framework for making sense of what they do (Ravasi & Schultz, 2006). Organisational identities meet basic human needs as they can provide individuals with personal meaning and enhance their self-esteem (Pratt, 1998).

2.8.4 Summary (Identification)

A significant amount of research literature has examined the importance of identification between followers and leaders or organisation. Previous studies have also tested the mediating effects of value congruence within organisational settings. They found the

levels of identification between employee and organisation lead to various organisational outcomes. Yet, the mediating effect of identification between transformational leadership and work centrality has never been considered in the previous studies. The current study addresses these gaps in the literature on the effect of transformational leadership style and through this psychological mechanism (i.e., identification) whilst predicting workaholism among followers. The next section of this chapter provides a discussion of the concept of *work centrality* which, this thesis's model posits, is a mediating variable that links followers' identification (with leader and/or organisation) and the negative consequences associated with follower workaholism through the effect of transformational leadership.

2.9 Work Centrality

The notion of work centrality derives from Max Weber's 1905 publication "The Protestant Ethic and the Spirit of Capitalism" (first published in English in the 1930s). It suggests that the capitalist system is built on religion and morality. The (Protestant) Reformation changed people's views towards work (i.e., values, including the spirit of hard-work and the desirability of making progress) (Weber, 1930; cited in Dubin, 1956). There is also a sense that individual effort in this life will be rewarded while indolence will not. Charity becomes "harder" (i.e., tougher): a division is made between the deserving and undeserving poor. There is less emphasis on collectivism and broad community mutual reliance and an undermining of the belief that 'endurance' of one's lot is a virtue. In later centuries it combines with Darwinism ("the survival of the fittest") to foster the increased competition that is so characteristic of capitalism. Weber portrays the combination of Protestant faith and work ethic by suggesting that the former encourages people to avoid leisure activities (e.g., pleasure, comfort) to avoid sins and make full use of time to accomplish personal discipline. The puritan value of asceticism has partially contributed to the rapid growth of capitalism, integration of the global economy, and industrialisation in North America and Western Europe, while a later, rather un-Puritan, emphasis on consumerism as 'good for the economy' and therefore good for people, has turbocharged a further expansion and entrenchment of capitalism. Weber suggests that the 'Protestant work ethic' influences many people's attitudes towards work. It, therefore, resulted in a considerable increase in people's engagement in work, and enterprises' engagement in trade, and an emphasis on wealth accumulating in investment as foundational to capitalism (Weber, 1930, cited Miller et al., 2002). The focus of the Protestant work ethic then shifts to a more individualised level (Miller et al., 2002).

Researchers come up with a proposition of “a need for achievement” as part of the personal Protestant work ethic and economic motivation as an antecedent (McClelland, Atkinson, Clark, & Lowell, 1953).

The purpose of this section is to provide a review of the literature on work centrality. The section consists of five parts. The first part, Section 2.9.1, outlines the various definitions of the work centrality constructs that can be found in the literature. The numerous antecedents of work centrality are discussed in Section 2.9.2, followed by a discussion of various consequences of work centrality in Section 2.9.3. Section 2.9.4 outlines various measures of work centrality, and Section 2.9.5 presents a conclusion.

2.9.1 *Definitions of Work Centrality*

Dubin (1956, p. 131) extends Weber’s concept while incorporating his own perception; he conceptualises work as the “central life interest” for adults in most societies, even though this notion has long been thus regarded by the vast majority of people, particularly in Western society (Paullay, Alliger, & Stone-Romero, 1994). Lodahl and Kejner (1965) adopt Dubin’s (1965) concept of ego-involvement from prior studies (i.e., employees feel they can make work-related decisions and assume that they make significant contributions to their organisations’ success (Wickert, 1951). Lodahl and Kejner’s (1965) work primarily focuses on one’s present job, and the researchers use the term “job involvement” as the definition of “work involvement” describes work in general (Warr, Cook, & Wall, 1979).

Existing literature presents inconsistent definitions and constructs of “job involvement” and “work centrality”. Kanungo (1982, p. 342) uses the terms “work involvement” or “involvement with work” to define work centrality (i.e., he refers to the value a person places on work in a person’s life in general and distinguishes it from involvement in one’s job). Work centrality is defined as a normative belief about the value of work in one’s life (Kanungo, 1982; Uçanok, 2009); however, Kanungo is the first scholar to highlight the difference between “job involvement” and “work involvement”. Kanungo re-defined job involvement as when one psychologically identifies with one’s job instead of with work in general. Kanungo developed a ten-item measure for work involvement. Two of the sample items were designed to elicit indications of the importance of work to the person more generally and their expectations of how it should be viewed: “work should be

considered central to life; life is worth living only when people get absorbed in work” (Arvey, Happaz, & Lao, 2004, p. 410). In addition, Kanungo (1982) suggests work involvement contains performance, self-esteem and contingency which means the personal self-image is influenced by levels of performance at work (Paullay et al., 1994). Kanungo’s work involvement measure was the only instrument that measured work centrality at the time (Paullay et al., 1994).

England and Misumi (1986, p. 402) define work centrality as “the degree of general importance that working has in the life of an individual at any given point in time”. The empirical studies of respondents from Japan and the U.S.A. report that work is regarded as one of the most significant aspects of life. More than half of the respondents from Japan and one-third of respondents from the U.S.A. perceive work as equal to or more important than any other aspects of their lives (England & Misumi, 1986). The study found that, based on 7-point Likert scale, 88% of American and 93% of Japanese respondents indicated that even if they have inherited an abundance of money or won a lottery which ensured they could live comfortably for the rest of their lives without working, they would remain working. Work is notably seen as a vital part of people’s lives.

While Paullay et al. (1994) define work centrality as the level of importance ascribed to work in one’s life. Paullay et al. (1994) distinguish between the concepts of work centrality and job involvement and propose these two terms are two different concepts. Specifically, “work centrality” is conceptualised as the belief one has as to the degree of importance of work has in one’s life, whereas job/work involvement is defined as “the degree to which one is cognitively preoccupied with, engaged in and concerned with one’s present job” (Paullay et al., 1994, p. 224).

According to Hirschfeld and Feild (2000), individuals who regard work as their central life interest tend to strongly identify with work and perceive work as a significant part of their lives. Work centrality results in people identifying with work and subsequently investing more time and energy in building relationships with work-related leaders and eventually becoming more engaged with work. The concept of work as a central life interest originated from Weber’s Protestant work ethic theory. Ultimately, work centrality comprises the normative beliefs in the value and the level of importance that one places on work in one’s life. “Work centrality does not encompass psychological engagement in the work role. Work centrality can be regarded as the positive antipode of work

alienation” (Hirschfeld & Feild, 2000, p. 790).

An international research team in “The Meaning of Work” (MOW) project described work centrality as the degree of general importance an individual places on work at any given point in time (MOW-International Research Team, 1987, p. 81). The MOW-International Research Team (1987) characterised work centrality in two main categories: i) *relative* importance of working in one’s life role: the study requested participants to rank the importance of work and other life roles (e.g., family, leisure, religion, community, and leisure); and ii) *absolute* work centrality which emphasises the importance and meaning of work to individuals: an absolute or scaled measure of work centrality was provided (e.g., how important work is ranked in the participant’s life aspects).

In the early 1980s, the MOW-International Research Team (1987) conducted comparative studies in eight different industrialised countries. These empirical studies indicated that work ranked as the most important life aspect for respondents from Japan and Yugoslavia. It was rated as the second most important life aspect (after family) for respondents from the U.S.A., Netherlands, Israel, Germany, Britain, and Belgium. Interestingly, of all the respondents across the eight countries, 86.1% agreed that even if they did not have any financial necessity to work, they would continue to do so. Britain had the lowest rate, but 68.9% of the respondents still indicated they would remain working with no financial need to do so. These responses demonstrated the importance people place on work and the extent to which work has been regarded as a central part of people’s lives (Francesco & Gold, 2006). Work has become one of the most crucial and foundational aspects of people’s lives in modern society. Table 2.6 provides several definitions of work centrality that can be found in the literature.

Table 2.6: Definitions of Work Centrality

	Definitions
Work	Work as central life interest (Dubin, 1956, p.131).
Work-Role Centrality	The relative dominance of work-related contents in the individual's mental processes, as reflected in responses to questions concerning the degree of concern, knowledge, and interest invested in the work role, relative to other activities (Mannheim, 1975, p. 81).
Work Involvement	The degree to which a person wants to be engaged in work (Warr et al., 1979, p. 133).
Work Involvement	A normative belief about the value of work in one's life (Kanungo, 1982, p. 342).
Work Centrality	The degree of general importance that working has in the life of an individual at any given point in time (England & Misumi, 1986, p. 402).
Work Centrality	The degree of general importance that working has in the life of an individual at any given point in time (MOW, 1987, p. 81).
Work Centrality	The belief one has as to the degree of importance one places on work in one's life (Paullay et al., 1994, p. 224).

Source: Adapted from Kostek (2012)

“Work centrality”, “work-role centrality” and “work involvement” are the terms used to depict the level of importance of work one places in life. Work centrality, however, differs from ideas such as work alienation, overcommitment, and workaholism (Bal & Kooji, 2011, p. 499) in that individuals with high work centrality reported that even if they had inherited an abundance of money or won a lottery (England & Misumi, 1986) or were entitled to retirement which could ensure them to live comfortably for the rest of their lives, they would still continue to work (Arvey et al., 2004). Work centrality is conceptualised by scholars in various ways. Work centrality is perceived as a normative belief about the value of work in one’s life (Kanungo, 1982, p. 342), a significant part of the work ethic (Miller et al., 2002), satisfying one’s intrinsic and extrinsic needs (MOW, 1987), understanding the meaning of work (MOW, 1987), meeting one’s work satisfaction and organisational commitment (Mannheim, 1993; Schmidt & Lee, 2008), and the degree of importance one places on work in one’s life (Paullay et al., 1994, p. 224). Additionally, other scholars define work centrality by looking at behavioural factors such as the number of hours one participates in work activities (Harpaz, 1997; Kostek, 2012).

There is confusion in the literature between work centrality as a value and the number of hours one works per week. People work long hours for various reasons: some work long hours for financial reasons while others do so because work makes their lives meaningful. In other words, people work long hours for either economic or psychological causes. An adult’s relationship with their parents provides an analogy. Some adults might have a close relationship with their parents for various reasons. For instance, some adults might have a close emotional relationship to their parents but be unable to spend much time with them due to geographical separation. In contrast, some others who are not emotionally close to their parents might spend lots of time with their parents because they are financially dependent on their parents, even relying on them for accommodation.

Despite disagreements among scholars regarding the definition of work centrality, there is an underlying theme of work centrality that is consistent with the definitions provided by most of the scholars, that is, “the importance that one places on work in one’s life”. The current study focuses on the effect of transformational leadership and the importance of the psychological process of value congruence in shaping how followers identify with their leaders and organisations; and how, in the process of establishing attitudes and behaviours, followers perceive and place work as their central life interest.

2.9.2 *Antecedents of Work Centrality*

Work centrality is a multilayered phenomenon that is triggered by various factors. Researchers suggested the explanation for work centrality consists of both extrinsic and intrinsic aspects. The extrinsic aspect is perceived as work as a requirement for financial security and to satisfy other needs. On the other hand, the intrinsic aspect is regarded as work as an essential part of people's lives because work can satisfy their social-psychological needs (e.g., self-esteem, self-development, self-identification, sense of achievement) (Arvey et al., 2004).

Various antecedents for work centrality have been proposed in the literature. For instance, a personal-demographic factor such as occupation (e.g., engineers, teachers) that requires knowledge and skills can in a way satisfy people's intrinsic needs (e.g., self-development, challenges) and can thereby serve to foster work centrality (MOW, 1987; Rose, 2003). The economic factor (e.g., living costs) (Luthans & Doh, 2012) that requires people to work long hours to meet their extrinsic needs (e.g., financial security, being the breadwinner) can also encourage work centrality. This section provides a review of the literature on antecedents of work centrality including personal-demographic, personal-psychological and societal-level antecedents.

2.9.2.1 *Personal-demographic Level*

Scholars have examined various antecedents of work centrality. This section discusses personal-demographic antecedents such as gender, age, occupation, education, and seniority. Table 2.7 provides various personal-demographic level antecedents of work centrality that can be found in the literature.

Table 2.7: Work Centrality: Personal-demographic Level

Work Centrality: Personal-demographic Level	
Gender	<p>Mixed findings have been reported regarding the relationship between work centrality and gender differences in the previous studies. Some studies have reported no relationship between work centrality and gender differences whereas other studies have found working mothers are as work-centered as their male co-workers regardless of their dual role and prior socialisation (Mannheim & Schiffrin, 1984). However, most studies have found males, in general, to have a higher-level of work centrality than do females (Mannheim et al.,1997; MOW, 1987; Harpaz & Fu, 1997; Kostek, 2012).</p> <p>The lottery winning study findings suggest that females are more likely to quit their jobs than males after winning the lottery, demonstrating males have higher work centrality than females (Kaplan, 1987; cited in Arvey et al., 2004).</p> <p>Loence (1987) has proposed two models (“gender model” and “job model”) to explain the relationship between gender and work centrality. The gender model claimed that males are brought up to believe that they undertake the social role to be the “breadwinners” in their families and build their careers in the workplaces, whereas females are raised to take on family-oriented roles (i.e., looking after the household and their families). The job model study demonstrated that females tend to display a relatively lower level of work involvement, mainly due to the social structure of a male-dominated work environment (Mannheim,1993).</p>
Parenthood	<p>Males with children exhibited a much higher level of work centrality than males without children (e.g., fathers worked much longer hours per week than childless males). In contrast, females with children exhibited a much lower level of work centrality than childless females (e.g., mothers worked fewer hours per week than childless females). Mothers tend to devote more time to prioritising their children and families than do fathers (Luthans & Doh, 2012).</p>
Age	<p>Age, in general, is positively correlated with work centrality and organisational commitment. The evidence suggests that older employees tend to be more committed to work roles and more satisfied with work. Consequently, they tend to have a higher level of work centrality compared to younger employees (Mannheim et al., 1997). Other studies suggest that people in their middle age with more responsibilities usually require more stable income (Gould & Webel, 1983). Work thus becomes part of their identities and an essential part of their lives (Kostek, 2012). However, some other studies (England & Misumi, 1986; Sharabi & Harpaz, 2007) suggest that as the retirement age approaches, the level of work centrality is likely to decrease, and employees tend to slow down their careers at this stage of life.</p>

Table 2.7: Work Centrality: Personal-demographic Level (continued)

Work Centrality: Personal-demographic Level	
Education	<p>Many studies on work centrality in previous literature found a positive correlation between education and work centrality (MOW, 1987; Mannheim, 1993). Access to educational systems provides people with more knowledge and skills required for complicated jobs and abilities for various aspects of their lives. In turn, people with better skills and expertise are more likely to obtain more highly rewarding careers and therefore are likely to see their work as a central part of their lives. Apart from its skills and knowledge acquisition, education is perceived as cultural capital that can help people to further their career development. As a result, high levels of education allow people to access higher level positions at work as well as greater economic and social rewards. Thus, people with higher education are more likely to have more important roles in the workforce and perceive their jobs as a central part of their lives (Parboteeah & Cullen 2003). Conversely, educational level has been found in some studies to be negatively correlated with work centrality in Israel, Japan, and the U.S.A. (e.g., Harpaz & Fu, 1997). However, education, in general, has been found to be positively correlated with work centrality.</p>
Occupation	<p>Occupations and job categories are key factors for work centrality (Kwon & Schafer, 2012), since professional jobs are more likely to satisfy individuals' intrinsic needs (e.g., job satisfaction, self-development, new challenges, a sense of autonomy) (Rose, 2003). As a result, work becomes a central life interest for professionals. Individuals with high-status jobs (e.g., professionals, managers) tend to perceive work as a highly important part of their lives and identities (Harpaz & Meshoulam, 2004) as high-status occupations satisfy one's psychological needs, especially if an individual identifies with their work, which thus reinforces their work centrality. Kwon and Schafer (2012) concluded that individuals who are managers, professionals, and white-collar employees are more likely to perceive work as a central part of their lives than those who are manual workers (e.g., laborers, farmers).</p>

2.9.2.2 *Psychological Level*

Job satisfaction

The notion of satisfaction stems from Maslow's Hierarchy of Needs Theory of Human Motivation, (1970, cited in Kremer-Hayon & Goldstein, 1990). According to Maslow, high order needs — self-actualisation, fulfilment of needs (e.g., achieve one's potential, facilitate self-development, and provide feedback and a sense of accomplishment) — are fundamental for satisfaction. Vrooms (1964, cited in Kremer-Hayon & Goldstein, 1990)

defines the elements of satisfaction as the degree to which an individual's satisfaction rests upon the positive feedback and rewards, they have obtained. Many people have dedicated years in education and training to qualify for particular jobs, especially those in tertiary employment (e.g., doctor, engineer, dentist), thus job satisfaction is expected to be derived from work (Kremer-Hayon & Goldstein, 1990).

MOW (1987, p. 112) categorises six functions of work outcomes which include:

“i) the function of income producing (e.g., work provides a needed income); ii) the function of time-occupying (e.g., work keeps one occupied); iii) the function of status and prestige producing (e.g., work provides one with status); iv) the function of interpersonal contacts (e.g., work allows one to have interesting contacts with others); v) the function of societal-service (e.g., work is a way to serve society); vi) the function of intrinsic interest or satisfaction (e.g., work is satisfying and interesting)”.

The relationship between work centrality and job satisfaction has been controversial as some researchers proposed that job satisfaction can cause work centrality by acting as an antecedent. In contrast, others argued that the relationship between work centrality and job satisfaction is reciprocal (Mannheim et al., 1997). Mannheim et al.'s (1997) study indicates that based on statistical and theoretical viewpoints, job satisfaction could result in work centrality. Because positive feedback on work outcomes can generate an individual's readiness and passion for devoting mental energy to their work role, work centrality is consequently likely to be increased. In other words, individuals with high levels of work centrality tend to devote effort, time, and passion to work, and thus a sense of gratification is more likely to stem from work (Mannheim et al., 1997).

Few other studies have found work centrality to be positively correlated with job attitudes (e.g., job satisfaction, organisational commitment) (Kremer-Hayon & Goldstein, 1990). Scholars claimed that individuals who perceive work as “valued work” (e.g., interesting work, required for income) are more likely attach more value to the work role and devote more time and effort to work (Bal & Kooij, 2011).

Values

Work values are the primary determinant of work centrality (Uçanok, 2008). Values guide the behaviour of individuals (Ryan, 2002), and work values are primarily based on one's

values system.

Theorists and researchers propose many definitions for the notion of work values. Most of the definitions are consistent with the idea that work values provide explicit goals which people attempt to achieve at work (Uçanok, 2008). Hirschfeld and Feild (2000, p. 790) define “work centrality as normative beliefs based on the value and the importance of working in one’s life. Individuals with different work values and goals are believed to result in differences in the importance of working that one can attribute”. The study reported that individuals who value working more tend to have a greater attachment to work, perform better and have higher levels of commitment to their organisations than those who value work less (Uçanok, 2008).

Work values can directly influence work expectations because it affects one’s readiness to contribute to one’s work role (e.g., extrinsic rewards: promotion, pay-rise; intrinsic motivation: self-growth, interest). Ros, Schwartz and Surkiss (1999) have identified three types of work values that are similar to fundamental high-order human values: i) extrinsic work values (e.g., job security, income); ii) intrinsic work values (e.g., growth, autonomy, creativity) and iii) social or interpersonal work values (e.g., contributing to community/society, where work is perceived as a network to build social relations). Work outcomes can, therefore, be valued for extrinsic, intrinsic, or social reasons. Intrinsically valued work outcomes included meaningful work, whereas extrinsically valued work outcomes included needed income. Both intrinsically and extrinsically valued work outcomes have been shown to be positively related to work centrality (Orgambídez-Ramos et al., 2013). Studies have found that valued work outcomes are positively related to work centrality. Individuals who perceive work as having extrinsic value (e.g., providing needed income, or interesting) tend to be more attached to the work role in their life domain, and as this is so, they are more likely to devote time and effort to work (Nord et al., 1990). Likewise, individuals who perceive work as possessing intrinsic work value (e.g., accomplishment, autonomy) have found work more likely to become central to their life (MOW, 1987; Nord et al., 1990; Orgambídez-Ramos et al., (2013).

The meaning in a particular society of being attached to working is regarded as being deeply rooted in its socio-economic system and value system. It is well known that the value system has a significant impact on one’s behaviour and attitude (Misumi & Yamori, 1991). It is universally recognised that the Japanese attach a high value to working. That

is because Japanese work ethics were established from an agricultural background over a thousand years ago. Work is not only perceived as a job but as an “enterprise community” where they integrate social, working, and recreational events. Conversely, in other societies such as western countries, work is often seen as a separate domain of life, such that social, working and recreational activities are independent events. The study of Misumi and Yamori (1991) reported that Japanese values highly “*vita activa*” which is ascribed to the traditional Japanese work value and ethic. An eight-country survey showed that the Japanese ranked the highest for work centrality (Misumi & Yamori, 1991).

2.9.3 Consequences of Work Centrality

The mixed findings on the consequences of work centrality may be due to the different conceptualisations and the resultant measures of work centrality that have been used in different studies. This section will discuss various consequences of work centrality.

2.9.3.1 Individual Level

Working hours

Numerous studies have demonstrated that individuals who regard work as an important part of their lives are more willing to invest long hours in work (e.g., do extra work, overtime (paid or unpaid)) as work is the centre of their lives. They become involved in their jobs, perceive work as part of their self-image, enjoy the process of work, and obtain absolute satisfaction from the work tasks that they complete (Vroom, 1962). Snir and Harpaz’s (2002) study investigated the relationship between work-oriented and leisure-oriented employees in relation to their perception of the characteristics of work and its meaning. The findings indicate that leisure-oriented employees perceive absolute work importance as less important than do those who were work-oriented employees. Specifically, those who value “work” less than “leisure” tend to have decreased “absolute work importance”. Additionally, the finding also indicates that work-oriented employees are more inclined to work longer hours than leisure-oriented employees per week. According to Quintanilla and Wilpert’s (1991) study on German samples over a six-year period, as work centrality decreases, the importance of leisure increases; however, this might be due to the reduction of working hours during this period.

The previous research suggests that individuals with a higher level of work centrality also attach greater meaning to work. As a result, they are more inclined to devote more time

and effort to establish a long-term and mutual relationship with the organisation and work-related significant others (Bal & Kooij, 2011; Diefendorff et al., 2002). In line with other studies, Sharabi and Harpaz (2010) report that employees who have higher work centrality are more likely to work longer hours, and be more involved in and committed to work, and are more likely to achieve higher work performance.

2.9.3.2 Organisational Level

Organisational performance

Work, in general, is regarded as one's central life role in the industrialised and post-industrialised world. Work and work outcomes are seen as a central part of one's life because work can satisfy one's basic physical needs due to its provision of income as well as fulfill other intangible needs such as self-image, and identification (MOW, 1987; Sharabi & Harpaz, 2010).

Many studies have indicated that high work centrality is positively correlated with several organisational performance and work outcomes (e.g., high employee performance). Sharabi and Harpaz (2010) reported that employees who have higher work centrality are more likely to work longer hours, and be more involved in and committed to work, and are likely to have higher work performance, consequently leading to promotion in the organisation. The evidence from the study by Diefendorff et al. (2002) demonstrates that high work centrality in individuals leads to their higher job performance. Likewise, Mannheim et al. (1997) earlier proposed that individuals with high work centrality tend to have higher work performance. Individuals with high levels of work centrality have strong self-identity and work performance because placing work at the centre of one's life in a way can reflect one's ability. The findings are consistent with the claim that individuals with high work centrality (i.e., who identify with work and are involved with their work role attitudinally and cognitively) have a higher possibility of generating positive work outcomes, and enhanced job performance and commitment to the organisation.

Organisational commitment

Meyer and Allen (1991) characterised organisational commitment as consisting of three dimensions: i) affective commitment (e.g., individuals who are emotionally attached to, identify with and are involved in their organisations) (Meyer, Allen, & Smith, 1993); ii)

continuance commitment (e.g., individuals remain in the organisation due to the cost of leaving it); iii) normative commitment (e.g., individuals who feel obliged to stay in the organisation that employs them).

Meyer et al. (1993) defined “organisational commitment” as a psychological state that explains the connection between the employees and organisations that might affect the employees’ decision whether to remain working for their employers. Meyer et al. (1993) described “affective commitment” as employees who are emotionally attached to, involved with, and identify with the organisation for which they currently work. Several studies (Brooke et al., 1988; De Stefano, 2012) revealed that individuals with high level of work centrality are likely to result in organisational affective commitment. The studies also demonstrated that the more important employees regard work among the aspects of their life, the stronger their wish is to remain in the organisation that hired them.

Organisational commitment was defined in Porter and Smith’s unpublished manuscript as being indicated by “...i) a strong desire to remain a member of the particular organization; ii) a willingness to exert high levels of effort on behalf of the organization; and iii) a definite belief in and acceptance of the values and goals of the organization” (Porter & Smith, 1970, p. 2). Dubin et al., (1975) also reported that individuals who are job-oriented and perceive work as a central life interest are more likely to have a high level of commitment to the organisations that employ them. In contrast, those who are not job-oriented do not perceive work as a central life interest and tend to have a low level of commitment to their organisations.

The findings of a few studies have indicated that organisational commitment is one of the significant consequences of work centrality. Individuals who regard work as a central life interest tend to value organisations as a platform for them to exhibit their interest in the work they do. According to the work-role attachment theory, an individual who is committed to working is more likely to be committed to the organisation (Adams et al., 2002) as they might perceive their work events and their association/attachment with the organisation as a significant part of their self-identification (Carter & Cook, 1995). Individuals who strongly value work are more likely to generate an affective relationship with the organisation, eventually becoming emotionally attached to the organisation, and develop a sense of commitment, known as “affective commitment”. Several studies (Mannheim et al., 1997; Schmidt & Lee, 2008; Adams et al., 2002) proved organisational

commitment to be one of the outcomes of work centrality.

Witt, Patti and Farmer (2002) also have found that work centrality is positively related to organisational commitment. Many findings of the studies previously outlined in this discussion have highlighted that individuals with a higher work centrality tend to enjoy working (e.g., feel a sense of satisfaction) and develop a positive relationship with the organisation (e.g., organisational commitment), and consequently devote themselves to their jobs (e.g., high job performance). Individuals who are emotionally attached to work and regard work as a central part of their life domain are inclined to use their skills and knowledge to improve their work performance. Also, individuals who value work tend to be more involved with their jobs, reach their full potential to perform and ultimately benefit the organisations (MOW, 1987; Uçanok, 2008).

Job satisfaction

As discussed earlier in this chapter, the relationship between work centrality and job satisfaction has been controversial. Some researchers state that job satisfaction can cause work centrality, acting as an antecedent; whereas others suggest that the relationship between work centrality and job satisfaction is reciprocal (Mannheim et al., 1997), that is, job satisfaction is one of the consequences of work centrality.

Mortimer and Lorence (1989) examined the relationship between job satisfaction and work centrality and the causal relationship between these two variables. Their findings indicate that job satisfaction has a direct positive correlation with work centrality. The study revealed that job satisfaction partially determines one's prominent hierarchy identities, which means if job satisfaction enhances one's identities (e.g., work-identity, self-identity), it will eventually increase one's levels of work centrality.

Kanungo (1982) reported that work centrality is positively correlated with various work outcomes (e.g., job satisfaction), as individuals with high levels of work centrality are inclined to focus on work and, therefore, obtain satisfaction and pleasure from it. Despite satisfaction derived from work, work centrality and the meaning of work are strongly associated. Researchers discussed that individuals who get more involved with their work are more likely to link their self-image with their work. Eventually, they tend to be ego-involved with the work they do and more likely to obtain satisfaction from the work tasks that they complete (Vroom, 1962).

Work centrality can lead to many consequences, mostly positive consequences which can be found in the literature, such as an enhanced job performance, job satisfaction and commitment to the organisation. There is a gap in the literature, however, in that an adverse consequence such as workaholism has not been previously considered or examined. This current study will test this proposition empirically.

2.9.4 Measures of Work Centrality

The previous literature has shown that multiple measures have been developed to identify work centrality. Each of the measures specifies different characteristics of work centrality. Some of them are more popular and applied more extensively than others. This section will discuss all the main measures proposed in the literature and clarify some of the ambiguities that exist among them regarding job involvement and work involvement, and work centrality.

Dubin's (1956) Central Life Interest

Dubin (1956) conceptualises the notion of work as “central life interest”, which has been widely used in various studies. Some 40 items were developed initially to test the importance of work compared to other aspects of people’s lives (e.g., family, leisure). In 1963, Dubin’s questionnaire was revised, reduced from 40 items to 32 items. Dubin’s (1956) measurement concentrates on evaluating whether the job and the workplace are a central life interest. In addition, central life interest measurement focuses on assessing one’s central life interest by evaluating different types of behaviours and testing which life area one would prefer to focus on and in which setting one wants to perform the activities rather than examining attitudes and beliefs in relation to work importance in general (Kostek, 2012). More specifically, the questionnaire was designed to cover individuals’ behaviours in organisations, informal personal relationships, technological environment, and everyday life experience in general. The three alternative settings (i.e., job-related, non-job related, and unfocused setting) are randomly selected throughout the survey (Dubin et al., 1975). Paullay et al., (1994) criticised Dubin’s work on central life interest for only capturing a superficial perception of the centrality or importance of work in one’s life. However, inconsistency was found between central life interest measurement and the definition of the construct in Dublin’s work. For instance, the items were used to assess in which settings (i.e., job-related, non-job-related, and no locations preference) respondents prefer to perform their behaviours that can be performed in any

place. Consequently, the instrument seems to focus on the present job (Paullay et al., 1994).

Lodahl and Kejner's (1965) Job Involvement

Lodahl and Kejner (1965) developed the construct of “job involvement” by adopting Dubin’s work on central life interest and prior studies on ego-involvement (Lewis, 1944; Wickert, 1951). It has been one of the most popular and widely used measures (Diefendorff et al., 2002). Their measure consists of 40 items based on Likert scale analysis (ranging from 1 = “strongly agree” to 4 = “strongly disagree”). However, Lodahl and Kejner’s (1965) measure is criticised because it consists of job-related attitude (e.g., ‘I live, eat and breathe my job’) and work-related attitude (e.g., “I would probably keep working even if I did not need money”) (Kanungo, 1982). Kanungo (1982) was the first scholar to highlight that the confusion of Lodahl and Kejner’s (1965) study, which used both “work” and “job” in the scales. Kanungo (1982) argued that people might view these two terms as two separate things. Other scholars (e.g., Brown, 1996; Paullay et al., 1994) have also criticised Lodahl and Kejner’s (1965) measure for being conceptually flawed because it mixes up work centrality and job involvement. An individual can report a low work centrality (i.e., work is not the most important thing in their life) and still be highly involved in their job, thinking of job-related issues even if they are away from work (Diefendorff et al., 2002).

Mannheim's (1975) work role centrality

Mannheim (1975) developed a measure of work role centrality, which mostly adopted the study of Dublin (1956) and that of Lodahl and Kejner (1965). The measure comprises eight items on a 3-point Likert scale. Mannheim (1975) attempts to measure work-related ego-identification, interest, time allocation, and concern. Some examples of items are as follows: respondents’ ego identification with the work role; the extent to which matters related to work are of concern to the respondents relative to other matters; and respondents’ relative preoccupation with work-related matters after working hours (Mannheim, 1975; Mannheim 1983).

Kanungo's (1982) Work Involvement

Kanungo (1982) used work involvement or involvement with work to explain work centrality (Uçanok, 2009). Kanungo was the first scholar to highlight the difference between job involvement and work involvement. He developed a work involvement

(referring to work centrality) measure, which consists of a 10-item measure on a six-point scale (ranging from 1= “definitely agree” to 6 = “definitely disagree”). Some of the typical item examples of Kanungo’s conceptualisation are “the most important things that happen in life involve work” and “Life is worth living only when people get absorbed in work”.

Kanungo’s (1982) construct of work involvement appears to highlight the idea that being involved with work in general and being involved with one’s current job are two separate concepts. Therefore, Kanungo’s (1982) measures turned out to be the only instrument for work centrality at that time. However, his measures for job involvement were criticised by other scholars, as Kanungo (1982) perceived job involvement as one of the components of job satisfaction, stating that job involvement and job satisfaction came under the same concept but were different manifestations. However, Mathieu and Farr’s (1991) confirmatory factor analysis results indicate these two constructs suffer from discriminant validity issues. Paullay et al., (1994) discussed job involvement and job satisfaction as two different constructs. For instance, a person can be highly involved with their job and still be dissatisfied with their job.

MOW’s (1987) The Meaning of Working

An international research team developed “the meaning of working” (MOW, 1987) project to explain the meaning of working for individuals in industrialised countries. The study specified various reasons that account for the importance of work (e.g., extrinsic reasons: financial need; intrinsic reasons: a sense of satisfaction, recognition, sense of identity). The duration of the study was over six years with eight countries involved to gain a deep understanding of the meaning of working within various cultural backgrounds (Kostek, 2012). The measure consists of two combined questionnaires with a standardised scale. The researchers used two measurement procedures. The first measurement procedure focused on *the relative importance of working* in one’s life role. The study requested participants to rank the importance of work and other life roles (i.e., family, leisure, religion, and community). The second measurement procedure focused on *absolute work centrality*, which emphasised the importance and meaning of work to individuals, with an absolute or scaled measure of work centrality provided (e.g., “how important work is rated in your life aspects”) (MOW, 1987; Sharabi & Harpaz, 2010). The combined two indicators (i.e., relative and absolute work centrality) generated an excellent work centrality measure for each individual even though the two indicators were not highly associated (MOW, 1987).

Paullay et al.'s (1994) Work Centrality

Paullay et al.'s (1994) study was developed in an effort to distinguish the ambiguities among work centrality, work ethics, and job involvement. A total of 313 human service workers were examined in a psychiatric hospital. The total questionnaire consisted of 43 items (12 items for work centrality, 13 items for the role of job involvement, 14 items for job involvement setting, and 4 items for Protestant work ethic) evaluated on a 6-point Likert scale (ranging from 1 = "strongly disagree" to 6 = "strongly agree"). Work centrality comprised a 12-item scale, with 5 items taken from Kanungo's work involvement measure. Work centrality items reflect the definition of Paullay et al. (1994, p. 224) which conceptualised work centrality as "the belief one has [as] to the degree of importance of work positioned in one's life".

A confirmatory factor analysis was conducted by Paullay et al., (1994), and the finding was in line with their hypotheses and supported work centrality and job involvement as two different constructs. Paullay et al. (1994) distinguished the two. Some items of Paullay et al.'s work centrality are "my work is a big part of who I am", "work should be considered a central part of life" which are focused on the centrality of work rather than anything else in one's life.

The current study adopts Paullay et al.'s (1994) measure as it not only distinguishes the ambiguities among work centrality, work ethics, and job involvement but also focuses on two important concepts (e.g., work involvement, importance of work in one's life) that the current study explores.

2.9.5 Summary (Work Centrality)

Numerous definitions of work centrality can be found in the literature. Despite the disagreements among scholars regarding how to define work centrality, there is an underlying theme that is consistent among the definitions provided by most of the scholars, namely, "the importance that is placed on work in one's life". The most widely used scales of work centrality (i.e., Kanungo, 1982; Paullay et al., 1994; England & Misumi, 1986; MOW, 1987) all regard work centrality as involving work as central to one's life.

Various antecedents of work centrality have been considered in the existing literature — personal-demographic antecedents such as gender, age, occupation, education, and

seniority; and psychological level antecedents such as job satisfaction and values. The current study aims to explore transformational leadership, value congruence (i.e., follower–leader, follower–organisation) and identification (i.e., personal identification with the leader, social identification with the organisation) as antecedents of work centrality.

Work centrality can lead to many consequences, generally positive consequences which can be found in the literature, such as an enhanced job performance, job satisfaction, and commitment to the organisation. However, there is a gap in the literature in that an adverse consequence such as workaholism has not previously been examined. This study aims to test this proposition. The next chapter provides a detailed discussion of the hypothesis development.

2.10 Conclusion

This chapter has reviewed the key extant literature on each construct (i.e., transformational leadership, workaholism, value congruence, identification, and work centrality) of the conceptual model to build a theoretical foundation for the thesis.

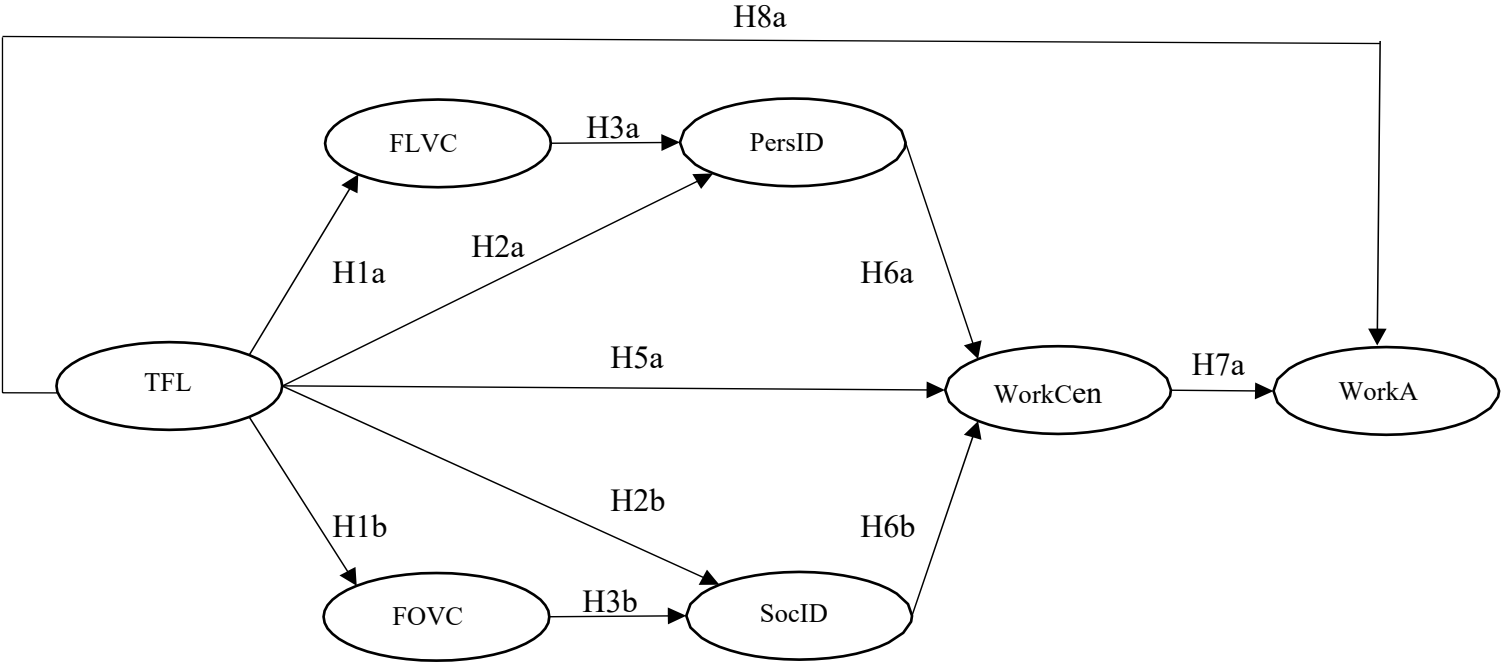
The current model proposes that transformational leadership increases value congruence with the leader and the organisation, which then increases identification with the leader and the organisation, which then increases work centrality and ultimately leads to an adverse outcome — follower workaholism. The specific hypotheses development will be presented and discussed in the next chapter.

CHAPTER 3. HYPOTHESIS DEVELOPMENT

3.1 Introduction

The purpose of this chapter is to propose a conceptual framework and develop the rationale for the hypotheses to address the research questions of the thesis. This chapter consists of five major sections, and each section contains the discussion of the rationale for the development of the proposed hypotheses therein. A total of 20 hypotheses have been developed to address the research questions and the gaps in the literature that were reviewed and discussed in Chapter 1. More specifically, the five major hypotheses are listed and discussed as follows: (1) transformational leadership is likely to result in workaholism among followers in various ways; (2) followers are willing to align their values with the leader and leader's group/organisation as a result of the effect of transformational leadership; (3) transformational leadership causes followers to personally identify with their leaders and socially identify with the leader's group/organisation; (4) psychological mechanisms (e.g., person–leader value congruence, person–organisation value congruence) positively affect/mediate the relationship between transformational leadership and both the leaders and the organisations, respectively; and (5) work centrality is proposed as an additional psychological mechanism through which transformational leadership may trigger certain responses due to followers' psychological needs and subsequently result in workaholism among followers. The hypotheses have been combined to create the research model that is depicted in Figure 3.1. There are 11 hypotheses that are postulated to be in a direct relationship; the remaining 9 are indirect and difficult to include without making the diagram needlessly complicated. These will, however, also be covered in the text.

Figure 3.1: The Proposed Conceptual Model: Transformational Leadership — Workaholism



TFL = Transformational Leadership, FLVC = Follower-Leader Value Congruence, FOVC = Follower-Organisation Value Congruence, PersID = Personal Identification, SocID = Social Identification, WorkCen = Work Centrality, and WorkA = Workaholism.

3.2 Transformational, Value Congruence and Identification

This section discusses why and how (i) transformational leadership is related to value congruence (e.g., person–leader, person–organisation); (ii) transformational leadership is related to identification (i.e., personal identification and social identification) (iii) both types of value congruence are positively related to both types of identification and (iv) value congruence (i.e., person–leader and person–organisation) positively mediates the relationship between transformational leadership and two types of identification (i.e., personal identification with the leader and social identification with the organisation).

3.2.1 Transformational Leadership and Follower–Leader Value Congruence.

Burns (1978, p. 19) stated, “The genius of leadership lies in the manner in which leaders see and act on their own and their followers’ values”. Values are important because they influence the way in which information and events are interpreted (Schwartz, 1992). Values are perceived as being profoundly influential on individuals’ behaviour, emotions, and cognitions (Meglino & Ravlin, 1998; Rokeach, 1973). Individuals are guided by their personal value systems when making decisions (Edwards & Cable, 2009).

Value congruence occurs when the value system of one individual is consistent with the value system of another individual (e.g., person–leader) or organisation (person–organisation) (Hoffman et al., 2011). Value congruence refers to shared or similar personal values between leaders and their followers. Leaders and followers are likely to build shared values as they work together to achieve a shared vision. Value congruence is a major factor underpinning the leadership process as individuals and organisations are guided by value systems that determine their attitudes and behaviours (Dirks & Ferrin, 2002).

The existing literature reveals a positive relationship between transformational leadership and value congruence. Jung and Avolio (2000) report transformational leadership is positively associated with value congruence. Jung and Avolio argue that transformational leaders are charismatic who communicate effectively and articulate a compelling vision that motivates their followers to achieve the shared vision or goals. Leaders’ endeavour to ensure followers align their vision with that of the leader leads to a higher level of follower–leader value congruence. Hoffman et al. (2011) report that person–organisation value congruence positively mediates the relationship between transformational

leadership and group-level effectiveness. Hoffman et al. (2011) argue followers of transformational leader desire to align their values with an attractive leader and wish to maintain a high-quality relationship with their leader. Also, followers yearn to emulate the behaviours and attitudes of a leader who is highly confident and genuinely cares for the well-being of their followers and because such leaders are highly committed and proud (Dionne et al., 2004). Emulating such leaders enables followers to foster a perception that their personal values match those of their leaders (Hoffman et al., 2011), and their own self-esteem is boosted by their increased identification with the leader they hold in high esteem. Van Knippenberg et al.'s (2004) research and Shamir et al.'s (1993) study have shown that under transformational leadership, followers perceive work as comprising underlying positive values. Followers are intrinsically motivated by value-laden goals that: i) reflect their values, ii) align with their self-concepts and, iii) are consistent with their own moral standards. Shamir (1995) similarly holds that transformational leadership has positive effects on leader–follower value congruence. The influence of a leader's vision is especially powerful when it matches the followers' values. Additionally, Adkins et al. (1996) reported that employees show a higher degree of satisfaction when their values are consistent with those of their colleagues. Person–leader value congruence thus has a substantial impact on the leader–follower relationship.

Follower–leader value congruence can be a two-way influence process because i) followers align their values with the leaders because of leaders' personal characteristics, qualities, vision, attitudes, and behaviours; ii) transformational leaders shape followers' values to align with their own by empowering followers, expressing confidence in followers, and conveying the importance of the shared values. This section discusses follower–leader value congruence two-way process.

In leadership studies, value congruence explains the reason why followers are loyal and connected to their leaders (Conger, 1999; Shamir et al., 1993; Burns, 1978). Even though leaders do not change the values of followers directly, leaders can effectively connect organisational values to the followers' values to the point that they match and are congruent (Klein & House, 1995). Transformational leaders emphasise the importance of certain values (e.g., striving for excellence, innovation, dedication to the vision) and by demonstrating their ability to “walk the talk” (Bass & Riggio, 2006). Followers adopt these values because they admire and want to be like their leaders. Consequently, followers internalise the leader's values, and follower–leader value congruence occurs or increases

(Shamir et al., 1993).

Transformational leaders shape their followers' values to align with their own by engaging the followers in working together towards a common vision and building a set of shared core values (Dirks & Ferrin, 2002). Shared values between the leader and followers improve the quality of the leader–follower relationship (Ashkanasy & O'Connor, 1997). Shared values further provide a basis for trust (Edwards & Cable, 2009) as followers are better able to understand and predict the leader's goals, behaviours and expectations (Astakhova, 2016) and are, therefore, better able to meet those expectations, further increasing the possibility of positive feedback. Leaders and followers with shared values are less likely to experience conflict over decisions and can resolve conflicts easily (Schneider, Goldstein, & Smith, 1995). Person–leader or leader–follower value congruence also fosters smoother communication (Meglino & Ravlin, 1998).

Transformational leaders can facilitate follower–leader value congruence by expressing confidence in the followers' ability to achieve demanding goals, which empowers followers by increasing their self-confidence (i.e., self-efficacy beliefs). Transformational leaders also convey the values of the collective vision which enhances their followers' sense of group membership as part of their self-concept. Followers are consequently more likely to perceive group membership in a positive light, believing the group can operate effectively and achieve its shared goals (i.e., collective-efficacy beliefs) (Conger & Kanungo, 1998).

Thus far, how the leader seeks to achieve alignment with the follower by shaping the follower's values has been described. Next, consideration will be given to how the followers align their values with those of the transformational leader.

There are several circumstances where and ways in which this can occur. Followers align their values with those of leaders they regard as highly capable and successful (Weiss, 1978; Krishnan, 2005). Transformational leadership accordingly involves the leader building an image of being competent and successful (House, 1976). Followers desire to emulate the behaviours and attitudes of their leaders who are highly confident committed, and genuinely care for the well-being of their followers (Dionne et al., 2004). Emulating such leaders fosters a perception that followers' personal values match those of their leaders (Hoffman et al., 2011).

Followers tend to behave in ways that are not only consistent with their own personal ideologies but also with the ideologies of a powerful superior (Beyer, 1981). Followers may perceive transformational leaders as possessing exceptional personal qualities, which not only provide the basis for charisma but also inspire followers (Trice & Beyer, 1986). Followers may idolise and want to be like their transformational leaders because they regard the leaders as extraordinary due to their (perceived or actual) capabilities, convictions, self-confidence, dynamism, and unconventional behaviour (Yukl, 1998). Follower–leader value congruence can also occur when leaders provide an inspiring vision, demonstrate high levels of personal commitment to the vision and its values through self-sacrificial behaviour, and reward those who behave in ways that are consistent with the core values of the vision (Conger, Kanungo & Menon, 2000; Posner, 1992).

Based on the previous literature and preceding discussion, the following hypothesis is proposed:

Hypothesis 1a: Transformational leadership has a positive relationship with follower–leader value congruence.

3.2.2 Transformational Leadership and Follower–Organisation Value Congruence.

Person–leader value congruence has been discussed in the earlier section, and this section focuses on how transformational leadership fosters person–organisation value congruence among followers. Organisational value systems guide members through the provision of formal policies and informal norms regarding how to behave and how organisational resources should be allocated (Edwards & Cable, 2009). Value congruence is perceived as a significant and key indicator of a trustworthy relationship (Elving, 2005). Value congruence occurs when the value system of an individual is consistent with the value system of another individual (e.g., person–leader) or an organisation (person–organisation) (Hoffman et al., 2011). Shamir et al. (1993, p. 584) observed: “[To] the extent that ... values are congruent with the goals and values of the organisation, transformational leadership is likely to provide a strong link between organisational goals and member commitment to such goals”.

The theory of person–environment fit states that people like an environment comprising features of beliefs and values the same or similar to their own (Kroegeer, 1995). Values are

perceived to be matching or congruent between employees, their colleagues, and their organisations if the values of employees are similar to those of their colleagues and organisations (Amos & Weathington, 2008). Likewise, in an organisational context, person–organisation fit is important to organisations because individuals are more likely to demonstrate positive behaviours and attitude if they fit well with their organisations (Sekiguchi, 2004; Saks & Ashforth, 1997).

Transformational leadership could facilitate follower–organisation value congruence as many tactics are available to organisational elites (e.g., transformational leaders) for informing organisational members (e.g., followers) of the values they regard as important. For instance, developing vision statements and advocating motives that are alluring and politically correct, sponsoring charitable events or popular causes in the name of corporate social responsibility, maintaining traditions and rituals that glorify the organisation, expressing a concern for all members and appreciation for their efforts, espousing “shared” values, and creating common enemies (Ashforth & Mael, 1989; Alvesson & Willmott, 2002) can all serve to increase follower–organisation value congruence.

Transformational leadership can influence followers to align their values with the organisation, as top management (e.g., transformational leaders) not only construct organisational culture and thus organisational identity but the leaders themselves are symbols of the organisational culture (Ashforth & Mael, 1989) as they are often seen to embody the beliefs and values of the organisation (Ashforth & Mael, 1989). Organisational culture encompasses individual-level phenomena (e.g., roles) as well as group-level phenomena (e.g., ceremonies and rituals) and is generally regarded as consisting of shared beliefs, values, and assumptions that govern the sensemaking efforts and actions of organisational members (Harris, 1994). The shared cognitions legitimise the organisation and give meaning to the day-to-day tasks of organisational members (Harris, 1994). The research suggests that members/followers who align their values with those of the organisation are thereby more likely to be satisfied with their jobs, identify with their organisations, and maintain their employment relationship (Edward & Cable, 2009). Person–organisation value congruence has benefits other than providing meaning to the work experience. It also increases the likelihood that the organisation will reward the individual. Organisational decision makers promote individuals whose personalities and values align with the attitudes, beliefs, and values of the decision makers. This serves to increase the homogeneity of members (Kanter, 1977) and is a phenomenon long

recognised by a wide range of researchers. Barnard (1938) called it “homosocialisation”, and Kanter (1977) the “homosocial reproduction system”, while Schneider et al. (1995) referred to it the “homogeneity hypothesis”. Transformational leaders’ emphasis on the organisation’s collective mission and values fosters follower–organisation value congruence. A compelling vision based on shared values can also facilitate follower–organisation value congruence. Followers feel a sense of pride in being associated with organisations that are driven by a compelling vision based on shared values (Shamir et al., 1993). Consequently, value congruence occurs as followers either perceive the organisations’ values as aligned with their own (Hoffman et al., 2011) or adopt the values of their organisations. Where, however, the values of a transformational leader are not consistent with those of the organisation (e.g., a dissident transformational leader) and remain so, transformational leadership can be a strong force against follower–organisation value congruence and subsequently against follower commitment to the organisation and its goals (Shamir et al., 1993).

Followers are willing to internalise the values of the organisation because a transformational leader motivates followers by articulating the compelling vision, emphasising the collective goals which are consistent with followers’ values. Transformational leaders instil a sense of collective pride in followers as members of their organisation. As a result, followers see value alignment with the large organisation rather than just individual leaders (Hoffman et al., 2011) such that followers perceive follower–organisation value congruence as a process of being part of something bigger than themselves (Podsakoff & MacKenzie, 1997; Hoffman et al., 2011). Additionally, followers perceive organisational goals as their own goals and are therefore more likely to be engaged in work to facilitate group productivity (Hoffman et al., 2011) and willing to exert extra effort to achieve their shared goals (Bono & Judge, 2003; Shamir et al., 1993). When followers’ values are consistent with those of their leaders, followers are more likely to contribute to their organisations, resulting in increased effort and performance (Klein & House, 1995).

Based on the preceding discussion, the following hypothesis is proposed:

Hypothesis 1b: Transformational leadership has a positive relationship with follower–organisation value congruence.

3.2.3 Transformational Leadership and Identification

3.2.3.1 Transformational Leadership and Personal Identification with the Leader

Identification occurs because an individual "...wants to establish or maintain a self-defining relationship to another person or group" (Kelman, 1958, p. 53). Individuals who identify with a referent person or group incorporate the person's or group's norms and values into their self-concepts (i.e., who they are) (Tajfel & Turner, 1985). Personal identification occurs when individuals identify with the leader, resulting in their defining themselves in accordance with their beliefs about the leader (Kark et al., 2003). This section provides the theoretical justification and an explication of the hypothesis on how transformational leadership could result in followers identifying with the leader that will be tested later in Chapter 5.

Pratt (1998) suggests that transformational leadership stimulates followers to identify personally with the leader by i) arousing the self-concept of the followers in the acknowledgment that their values are similar to those of their leader; ii) influencing followers to change their values to match or be similar to their leader's values (Kark et al., 2003).

This thesis proposes that followers are willing to identify with transformational leader for several reasons. Followers admire and identify with the transformational leader because they regard the leader as extraordinarily gifted and charismatic (Shamir, 1995). Followers are willing to identify with the transformational leader as a result of idealised influence or charisma (e.g., being seen as possessing remarkable capabilities, perseverance and self-sacrifice) and inspirational motivation (e.g., articulating a compelling vision based on shared values) (Bass & Riggio, 2006). Consequently, transformational leaders become role models for their followers who admire, respect, and trust them because of their exceptional qualities and vision, and because they "walk the talk" (Bass & Riggio, 2006), that is, they exemplify their vision and values in their deeds, by what they do, rather than produce just "mere words".

Role modelling is another main aspect by which transformational/charismatic leadership can effectively influence followers (Shamir et al., 1993). Leaders become a symbol or representative character that shapes how followers define themselves and find meaning and direction in their lives. Followers emulate their leaders by vicarious learning (Shamir

et al., 1993). “Vicarious learning occurs when the relevant messages are inferred by followers from observation of leaders’ behavior, lifestyle, emotional reactions, values, aspirations, preferences, and the like” (Shamir et al., 1993, p. 584). Hence transformational leadership can effectively influence followers’ activities and self-concepts by those followers identifying with a leader through the leader’s role modelling (Kets de Vries, 1988a; Shamir et al., 1993; Ashforth & Mael, 1989; Conger & Kanungo, 1998).

3.2.3.2 Transformational Leadership and Social Identification with the Organisation

An explication of how transformational leadership could result in followers personally identifying with the leader has been discussed. Next, consideration will be given to the way in which transformational leaders influence their followers through those followers socially identifying with their organisations.

Social identification occurs when individuals identify with particular group/s, thus resulting in them defining themselves in accordance with their beliefs about the group(s) (Pratt, 1988). Organisational identification is a form of social identification and refers to the psychological relationship that develops between individuals and the organisations with which they identify. This relationship involves a sense of belongingness and oneness with the organisation whereby individuals define themselves in terms of the organisations with which they identify (Stinglhamber et al., 2015). As a result, organisational identification addresses followers’ affiliation and esteem needs.

Organisational identity is a powerful term as it speaks to the very essence of what an organisation is and addresses the question of “Who are we?” (Albert et al., 2000). Organisational identity refers to organisational members’ shared beliefs about the central attributes of the organisation that distinguish it from other organisations and that are perceived as transcending objective changes in the organisation’s environments (Albert & Whetten, 1985, cited in Whetten, 2006). That is, organisational identity refers to features of an organisation that are central, enduring, and distinctive (Whetten, 2006).

Organisational elites (i.e., leaders, managers) can benefit substantially when organisational members embrace the organisation’s identity. Members who identify with the organisation internalise the organisation’s values and interests, and thus are

intrinsically motivated to do things that benefit the organisation, such as working longer hours than is formally required and engaging in extra-role behaviours (Van Dick, Grojean, Christ, & Wieseke, 2006).

In reviewing the prior literature, transformational/charismatic leadership was found to be positively related to collective identity (Conger et al., 2000) and to both personal and social identification (Shamir et al., 1993; Kark et al., 2003; Hobman et al., 2011). Kark et al., (2003) found that identification with the leader mediates the relationship between transformational leadership and follower dependence on the leader, whilst social identification with the work unit mediates the relationship between transformational leadership and follower empowerment. Hobman et al. (2011) reported that identification with the leader mediates the relationship between transformational leadership and social identification. Cavazotte, Moreno and Bernardo (2013) found that self-efficacy mediates the relationship between transformational leadership and task performance, whereas identification with the leader mediates the relationship between transformational leadership and helping behaviour.

Followers' willingness to identify with the particular group/organisation defines their self-concepts according to their perceptions of the group/organisation. The group's successes and failures then also affect their self-esteem because they regard the group's successes and failures as their own personal successes and failures (Mael & Ashforth, 1992). Individuals tend to identify more closely with those individuals and groups to which they attribute positive qualities (Schneider, Hall, & Nygren, 1971; Tajfel, 1982). The reason for this is that, in the same way that classification of others in relation to particular groups results in stereotypical perceptions of them, identification (i.e., self-classification) results in the attribution of stereotypical perceptions to oneself (Turner, 1984, cited in Ashforth & Mael, 1989). Identification is not an "all-or-nothing" phenomenon, however; the extent to which an individual identifies with a social category, or with another individual, is a matter of degree (Ashforth & Mael, 1989).

Transformational leadership could facilitate followers' social identification with organisation by articulating a compelling vision. One of the defining features of transformational leadership is the leader's compelling vision for the organisation (Awamleh & Gardner, 1999; Rafferty & Griffin, 2004). The vision serves several purposes, including the creation of a valued organisational identity that members will

endorse and incorporate into their self-concepts (Ashforth & Mael, 1989). Transformational leaders can change the self-concepts of followers not only because they have extraordinary personal characteristics but also because they create a collective identity that followers find attractive. Articulating an irresistible vision for the organisation based on carefully chosen values compels followers to make the leader's, and hence the organisation's, ideology their own (Bryman, 1992). A shared vision helps followers to make sense of how their individual tasks contribute to collective goals and the organisation's vision thereby evoking social identification (Mumford & Strange, 2002, cited in Wang & Howell, 2012).

Based on the previous literature, the preceding discussion and the findings of previous studies, the following hypotheses are proposed:

Hypothesis 2a: Transformational leadership is positively related to follower personal identification with the leader.

Hypothesis 2b: Transformational leadership is positively related to social identification with the organisation.

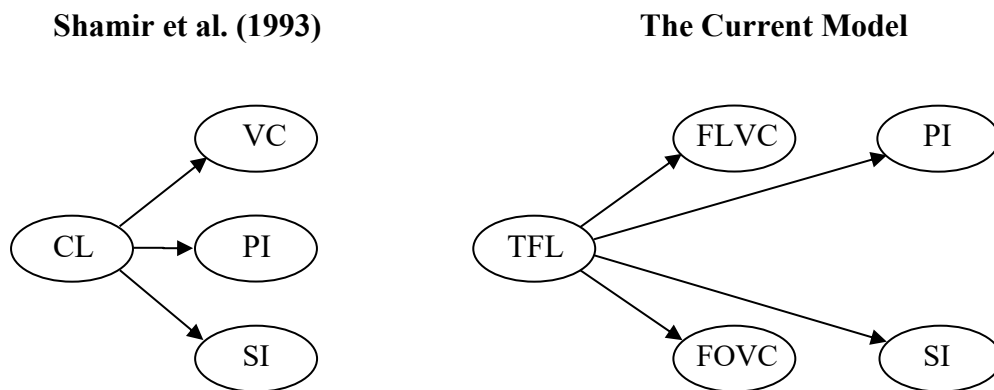
3.2.4 Transformational Leadership, Value Congruence, and Identification

This section discusses i) How the psychological mechanisms of person–leader and/or person–organisation value congruence are positively associated with personal identification with the leader and/ or social identification with organization, respectively; ii) How value congruence can positively mediate/affect the relationship between transformational leadership and both personal identification with the leaders and social identification the organisation.

Previous studies have tested Shamir et al.'s (1993) propositions for the effects of transformational leadership on one or two of the mediators (e.g., value congruence, identification) proposed by Shamir et al. (1993). Hoffman et al. (2011) reported person–organisation value congruence positively mediates the relationship between transformational leadership and group-level effectiveness. Value congruence also positively mediates the relationship between transformational leadership and followers' performance (Jung & Avolio, 2000). Values positively mediate the relationship between person–organisation fit and affective commitment (Astakhova, 2016).

Yet, until now, sequential mediating hypotheses for the relationship between transformational leadership and two types of identification (i.e., personal identification with leader and social identification with the organisation) have not been subject to empirical examination. The current model extends Shamir et al.'s (1993) model and provides a more detailed explanation of the mediating mechanisms. Specifically, this study proposes person–leader value congruence positively mediates the relationship between transformational leadership and personal identification. This study also proposes that person–organisation value congruence positively mediates the relationship between transformational leadership and social identification. This is depicted in Figure 3.2.

Figure 3.2: Proposed conceptualisation of the relationship between value congruence and identification



CL = Charismatic Leadership, VC = Value Congruence, PI = Personal Identification, SI = Social Identification, TFL = Transformational Leadership, FLVC = Follower Leader Value Congruence, FOVC = Follower Organisation Value Congruence

Followers can identify with transformational leaders for several reasons. For example, followers might identify with the leader because the leader is extraordinary. Identifying with such a leader can enhance one's self-esteem (Shamir et al., 1998).

Value congruence is another reason why transformational leadership can influence followers to identify with their leaders. As discussed, transformational leaders emphasise the importance of certain values (e.g., striving for excellence, innovation, dedication to the vision) and “walk the talk” (Bass & Riggio, 2006). Transformational leaders through their words (e.g., articulating a positive future based on shared values) and actions (e.g., unselfish or self-sacrificing behaviours) are seen by their followers as extraordinary because of their abilities and because they embody values and traits that are highly regarded. As a result, transformational leaders become role models for their followers and followers shape their beliefs, feelings, and behaviour to identify/match those of their

leaders. (Shamir et al., 1993). Moreover, transformational leaders are able to connect followers' self-concepts to the collective mission and to the group by increasing the prominence of the collective identity in followers' self-concepts. As a result, transformational leaders motivate their followers by making the achievement of the collective vision self-expressive rather than instrumental-calculative. In other words, followers willingly help to achieve the collective vision not for material or financial benefits but because the behaviours required to achieve the vision are symbolic and express their ideals and values (i.e., "who they are"), and thus enhance their self-worth.

Followers of transformational leadership are willing to incorporate the leader's/organisation's values into their self-concepts are thus likely to identify with the leader as well as with the organisation (Shamir et al., 1993), and because transformational leaders articulate an irresistible vision for the organisation based on carefully chosen values, this compels followers to make the leader's, and hence the organisation's, ideology their own (Bryman, 1992).

Thus, the current study proposes that followers who internalise their values to the leader are likely to identify with the leader because they see their self-concepts as similar to those of the leader. The leader thus becomes self-defining for followers. That is, what the leader stands for is what they stand for. In a similar vein, followers whose values are similar to those of their organisations are likely to identify with their organisations because it makes them feel they are part of something bigger than themselves (Hoffman et al., 2011; Podsakoff & MacKenzie, 1997). The organisation's identity thus becomes part of their self-concepts (i.e., "who they are").

Besides, it is unlikely that followers who reject the leader's values will identify with the leader. Follower-leader value congruence is thus an important requirement for personal identification with the leader. Follower-organisation value congruence is an important pre-condition for social identification. Specifically, followers are unlikely to identify with organisations that they perceive as having unacceptable/undesirable values. Followers who internalise the organisation's values are likely to incorporate these values into their self-concepts and thus are likely to identify with the organisation. On the basis of the previous literature and the preceding discussion, the following hypotheses H3a, H3b, H4a and H4b are proposed:

Hypothesis 3a: Follower–leader value congruence is positively related to personal identification with the leader.

Hypothesis 3b: Follower–organisation value congruence is positively related to social identification with the organisation.

Hypothesis 4a: Follower–leader value congruence mediates the relationship between transformational leadership and personal identification with the leader.

Hypothesis 4b: Follower–organisation value congruence mediates the relationship between transformational leadership and social identification with the organisation.

3.3 Transformational Leadership, Identification, and Work Centrality

This section discusses why and how (i) transformational leadership is positively related to work centrality, (ii) both types of identification (e.g., personal identification, social identification) are positively related to work centrality, and (iii) both types of identification (i.e., personal identification, social identification) positively mediate the relationship between transformational leadership and work centrality.

3.3.1 Transformational Leadership and Work Centrality

England and Misumi (1986) introduced the term “work centrality”, defining it as “...the degree of general importance that working has in the life of an individual at any given point in time” (p. 402). A high level of work centrality indicates that one attaches a great deal of importance to work in one’s life (Diefendorff et al., 2002), strongly identifies with one’s work (Bal & Kooij, 2011), and believes that work is to be engaged in for its own sake (Hattrup, Ghorpade, & Lackritz, 2007). Work centrality therefore influences how one behaves at the workplace and outside the workplace (Alvesson, Ashcraft, & Thomas, 2008) as it affects the importance or emphasis placed on other aspects of life (such as family, leisure activities).

There are several reasons why work can become the central part of one’s life. Work can become central part of a person’s life for instrumental reasons. For example, income from work can provide financial security and satisfy material needs (Aziz et al., 2013). Work can also become a central part of a person’s life for intrinsic reasons. Work can satisfy socio-psychological needs such as esteem and belongingness through rewarding

interpersonal interactions with co-workers. Besides, work can be fulfilling if it becomes a form of self-expression such that the work identity becomes central to a person and their identity (May, Gilson, & Harter, 2004). Several studies (e.g., Witt et al., 2002; Ucanok & Karabati, 2013) have shown affective commitment to the organisation is positively related to work centrality.

Work identity is a major part of the self-concept for most individuals (Arvey, Harpaz, & Liao, 1996; Walsh & Gordon, 2008). Many individuals identify with and are identified by the work they do (Gini, 1998). Work identity is likely to become a central part of the self-concept when individuals identify with their leaders and organisations. Close ties to the leader and organisation can satisfy certain psychological needs (e.g., belongingness, esteem, and social embeddedness), which can result in individuals identifying with their work role. Work then becomes more meaningful and intrinsically satisfying, ultimately increasing the salience of one's work identity. As a result, the centrality of work in one's life increases.

In the leadership literature, transformational leadership has been examined extensively with various organisational outcomes. However, it seems the interplay between transformational leadership and work centrality among followers has not been examined in prior studies. This study is a preliminary step to address the gap between the role of transformational leadership and work centrality in the literature by providing theoretical and conceptual arguments, and empirical support.

This study argues that transformational leadership can profoundly influence followers in placing work as the central part of their lives in many ways. First, transformational leaders are often perceived by the followers as their role models due to leaders' extraordinary behaviours and characteristics. Leaders are seen as having astonishing abilities (e.g., highly determined, perseverant). Leaders are risk takers, consistent, and someone who can be relied upon to demonstrate high levels of ethical and moral standards. Transformational leaders themselves perceive work as central part of their lives; followers imitate and identify with their leaders; and they want to be like their leaders as they trust, respect, and admire their leaders (Bass, 1998). Therefore, work becomes the dominant part of the followers' lives too.

Secondly, transformational leaders inspire and motivate their followers by providing a

vision and a promising future. They state their expectations of followers and convince the followers that all the effort, and the pain of challenge and change are worthwhile (Daft & Noe, 2001). When transformational leaders display their commitment to fulfilling the shared vision and objectives, followers also display enthusiasm, optimism, and commitment to achieving those shared goals (Bass, 1998). One of the major aspects of transformational leadership is the shared vision that transforms the organisation to being better which inspires the followers to perform beyond expectations to achieve the shared dreams (Daft & Noe, 2001). Commitment to the shared vision inspires followers to perform beyond expectation and eventually makes work the central part of their lives.

Thirdly, transformational leaders encourage innovation and creativity; they constantly challenge the status quo, question assumptions and encourage their followers to come up with new approaches to doing their work or solving problems. Transformational leaders tend not to blame their followers if the followers' ideas are different from theirs (Bass, 1998) nor do they publicly criticise their followers for errors. Instead, leaders involve their followers in problem solving and decision-making processes. Transformational leaders encourage followers to think "outside the box" (creatively) and try new ways, which leads to followers' willingness to contribute their inventive ideas to the vision (Dubrin et al. 2006). Being involved in decision making and problem solving and encouraged to be innovative and creative makes followers feel they are an important part of their organisations. They are thereby likely to perceive work as the central part of their lives.

Additionally, transformational leaders tend to care about their followers. Such leaders are willing to learn and pay attention to each of their followers' needs (both lower order needs: e.g., safety; and higher order needs: e.g., self-esteem, self-actualisation) and provide individualised consideration to each follower to satisfy their needs. Transformational leaders work to satisfy followers' lower order needs such as working conditions, salary and high order needs such as personal growth and development (Daft & Noe, 2001). Leaders accept personal differences and help to satisfy followers' different needs (e.g., some followers may need more encouragement; others may need better structured work or autonomy) (Bass, 1998). Bass (1998) offers insight into how this is achieved: "Transformational leaders encourage two-way communication and management by walk around" (p. 6). Leaders perceive followers as individuals rather than as followers; they remember their followers' concerns through personal interaction (e.g., previous conversations) and delegate work-related tasks to develop their followers and monitor

followers' efforts until they feel comfortable with what they are doing and no longer need to be supported and directed (Bass, 1998). When transformational leadership provides individualised consideration to satisfy followers' personal needs, such individuals are more likely go beyond the formal requirements of their work duties and do their best to perform well, and ultimately to place work as the dominant part of their lives.

Transformational leadership involves motivating followers to commit to the leader's vision. Commitment to the vision makes work a central part of followers' lives because work makes their lives more meaningful (Bono & Judge, 2003; Shamir et al., 1993).

Based on the preceding discussion, the following hypothesis is proposed:

Hypothesis 5a: Transformational leadership is positively related to work centrality among followers.

3.3.2 Transformational Leadership, Identification, and Work Centrality

The current study hypothesises that transformational leadership has a direct relationship with work centrality. In addition, both types of identification (i.e., personal identification, social identification) have a direct relationship with work centrality. Besides, the current study is also proposing the mediating effect of identification (i.e., personal identification, social identification), specifically, that the relationship between transformational leadership and work centrality is mediated by personal identification and social identification, respectively, as transformational leadership profoundly affects followers, partly because followers identify with their leaders and the leaders' work groups/organisations (Yukl, 1998; Kark et al., 2003; Mohamad & Saad, 2016).

Research (e.g., Shamir, Zakay, Brainin, & Popper, 2000) suggests that followers who identify with the leader and leader's group/organisation as a result of the leadership they receive are more willing to contribute to group objectives. This is plausibly due to social identification resulting in follower feelings of belongingness and loyalty to the group/organisation (Ashforth & Mael, 1989).

According to Conger and Kanungo (1998), transformational leaders influence followers primarily through referent power (i.e., the ability to influence people because they admire and respect the leader) which results in followers wanting to be like the leader. According to Kets de Vries (1988a), followers can satisfy their unconscious needs by identifying

with powerful characters (i.e., transformational leaders). Through a process of projection, followers identify with transformational leaders because identification enables them to satisfy their own desire for grandiosity and identification enhances their own self-esteem, and because they unconsciously hope that some of the leader's admirable qualities will "rub off" on them.

Individuals who identify with a particular group not only define their self-concepts according to their perceptions of the group but also have their self-esteem affected by the group because they regard the successes and failures of the group as personal successes and failures (Mael & Ashforth, 1992). Individuals who identify with a referent person (i.e., leader) or group (i.e., organisation) incorporate that person's or group's norms and values into their self-concepts (Tajfel & Turner, 1985), and they are, therefore, likely to perceive work identity as the central part of who they are (i.e., self-concept). Work identity becomes central to the person and their identity (May, Gilson, & Harter, 2004). When followers identify with the leader and the group due to certain perceived leader/group values, they are more susceptible to significant psychological and social forces, and thus this increases the likelihood their personal commitment being enhanced (Salancik, 1977; Shamir et al., 1993).

The current study argues that when followers identify with the leader and the group with certain values, they are more susceptible to significant psychological and social forces which increase the likelihood of enhanced work centrality and a willingness to perceive and place work as the dominant part of their lives. This is because identification with the leader and with the organisation satisfy followers' affiliation esteem and belongingness needs. When followers' psychological needs (e.g., affiliation, esteem, belongingness) are fulfilled, the likelihood of placing work as the important part in the followers' life domain increases. Additionally, followers who identify with the leader and with the leader's organisation are likely to incorporate these work-related identities into their self-concepts. As a result, work eventually becomes an important part of who followers "are", and thus work is likely to become a central part of their lives (Shamir et al., 1993). Identification (i.e., personal identification, social identification and work identity) in a way reinforces the effects of transformational leadership to achieve its effects on followers, and followers subsequently perceive/place work as the dominant part of their lives.

On the basis of the preceding discussion, the following hypotheses are proposed:

Hypothesis 5b: Personal identification with the leader mediates the relationship between transformational leadership and work centrality.

Hypothesis 5c: Social identification with the organisation mediates the relationship between transformational leadership and work centrality.

Hypothesis 6a: Personal identification with the leader is positively related to follower work centrality.

Hypothesis 6b: Social identification with the organisation is positively related to follower work centrality.

3.3.3 Mediating Effect of Identification

Based on the discussion in Section 3.2.3, follower–leader value congruence is assumed to have a direct and positive effect on personal identification with the leader; similarly, follower–organisation value congruence is assumed to have a direct and positive effect on followers’ social identification with the organisation. In addition, this study also proposes the mediating effect of personal identification and social identification. Specifically, the study proposes that the relationship between value congruence (e.g., follower–leader value congruence, follower–organisation value congruence) and work centrality is mediated by identification (personal identification with the leader, social identification with the organisation, respectively). Because identification is a fundamental stimulus for followers, partly because individuals who identify with a referent person (e.g., leader) or group incorporate the person’s or group’s norms and values into their self-concepts (Tajfel & Turner, 1985) and shift their focus from self-interests to collective interests (Shamir et al., 1993). Identification is also one of the main factors that drives followers to place work as the dominant part of their lives.

Substantial attention has been given to identification in the leadership theory and leadership development area (Cavazotte, Moreno, & Bernardo, 2013; Day & Harrison, 2007; Lord & Hall, 2005). Social identification occurs when individuals identify with particular groups, thus resulting in their defining themselves in accordance with their beliefs about the group(s) (Pratt, 1988). Individuals tend to identify more closely with individuals and groups to whom they attribute positive qualities (Schneider, Hall, & Nygren, 1971; Tajfel, 1982). In the same way that classifications of others to particular

groups results in stereotypical perceptions of them, identification (i.e., self-classification) results in the attribution of stereotypical perceptions to oneself (Turner, 1984, cited in Ashforth & Mael, 1989). Identification is not, however, an all-or-nothing phenomenon. The extent to which an individual identifies with a social category, or with another individual, is a matter of degree (Ashforth & Mael, 1989).

Several scholars in the previous literature have proposed that identification with the leader mediates the relationship between transformational leadership and follower dependence on the leader, whilst social identification with the work unit mediates the relationship between transformational leadership and follower empowerment (Kark et al., 2003). Identification with the leader also mediates the relationship between transformational leadership and social identification (Hobman et al., 2011), and it mediates the relationship between transformational leadership and helping behaviour (Cavazotte, Moreno, & Bernardo, 2013). However, the mediating effect of identification (e.g., personal identification, social identification) on the relationship between value congruence (e.g., follower–leader value congruence, follower–organisation value congruence) and work centrality have not been subjected to empirical examination. This study is the first study to examine the mediating effect of identification on the relationship between the value congruence and work centrality in the literature.

It is reasonable to assume that individuals who identify with the leader and leader's group/organisation are likely to enjoy their work more than those who do not identify with the leader and their organisations, as those who identify with the leader and organisations are more likely to develop a positive relationship with the leader and organisation and, as a result, devote more time, emotion, and effort to their jobs (MOW, 1987; Uçanok, 2008). They are thereby more inclined to perceive work as playing a significant part in their lives.

In addition, it is evident that personal identification with the leader can lead to submissive loyalty and unquestioning obedience of that leader by the followers (Howell, 1988). Followers of transformational leaders are primarily motivated by a desire to obtain recognition and approval from their leaders and thus their self-esteem depends on how their leaders evaluate them (Conger & Kanungo, 1988). Followers who identify with the leader and organisation are intrinsically motivated to do things that benefit the organisation, such as working longer hours than is formally required and engaging in

extra-role behaviours (Van Dick et al., 2006).

Additionally, identification with the leader and leader's group/organisation helps to build close ties to the leader and organisation which can satisfy followers' certain psychological needs (e.g., belongingness, esteem, and social embeddedness), which can also result in individuals finding work fulfilling, such that they are more likely to become emotionally attached to work. Work then becomes more meaningful and intrinsically satisfying, ultimately increasing the salience of one's work identity and that work thereby becomes more likely to be placed as central to their lives. Consequently, this study posits that followers' identification with the leader and their organisation strengthens the positive relationship between value congruence and followers' centrality of work.

On the basis of the preceding discussion, the following hypotheses are proposed:

H6c: Personal identification with the leader mediates the relationship between follower–leader value congruence and work centrality.

H6d: Social identification with the organisation mediates the relationship between follower–organisation value congruence and work centrality.

3.4 Identification, Work Centrality, and Workaholism

3.4.1 Identification, Work Centrality, and Workaholism

The previous literature examined the relationship between work centrality and various organisational outcomes (Mannheim, et al., 1997; Schmidt & Lee, 2008; Adams, et al., 2002; Witt et al., 2002). However, no literature, to the author's knowledge, investigated the relationship between identification (e.g., personal, social) and workaholism via the mediating effect of work centrality. This study suggests that work centrality may be an additional psychological mechanism through which personal identification with the leader and social identification with the organisation can be triggered by followers' motivational needs and subsequently result in workaholism among followers.

A defining element of transformational leadership is the articulation of a compelling vision (Bass, 1985), which was reported by Podsakoff, MacKenzie and Bommer (1996) to be the only leader behaviour that influences the organisational commitment of followers. Transformational leadership therefore involves discursive control — that is, the leader

relies on articulating a compelling vision (e.g., espoused values and stories) to persuade followers to identify with both the leader's vision and the organisation's goals. Transformational leadership involves motivating followers to commit to the leader's vision. Commitment to the vision makes work a central part of followers' lives because work makes their lives more meaningful (Bono & Judge, 2003; Shamir et al., 1993). When followers have high levels of work centrality, they are more susceptible to workaholism because work can become a central part of one's life for intrinsic reasons as work can satisfy socio-psychological needs (e.g., esteem and belongingness) through rewarding interpersonal interactions with co-workers; and work can be fulfilling if it becomes a form of self-expression such that the work identity becomes central to person and their identity (May, Gilson, & Harter, 2004). Work can also become the central part of followers' lives for instrumental reasons (e.g., financial security and satisfaction of material needs) (Aziz et al., 2013).

The research shows individuals who regard work as a central life interest tend to value their organisations as a platform for them to exhibit their interest in the work they do (Adams et al., 2002). According to the work-role attachment theory, an individual who is committed to working is more likely to be committed to the organisation as they might perceive their work events and their association/attachment with the organisation as a significant part of their self-identification (Carter & Cook, 1995). Individuals who strongly value work are more likely to generate an affective relationship with the organisation, eventually become emotionally attached to the organisation and develop a sense of commitment, known as affective commitment.

Such individuals are, therefore, more likely to work long hours, and be more involved in and more committed to work (Sharabi & Harpaz, 2010). They are more likely to go beyond the formal requirements of work duties and perform to the best of their abilities. When work becomes more than a source of income, work is likely to be central to one's life. Followers who feel that they are defined by their work — and that their psychological needs (e.g., belongingness, achievement, meaning) are met by their work — are likely to work long hours. Such individuals find it difficult to disengage from their work and thereby are more susceptible to workaholism.

This study proposes that individuals who identify with the leader and their organisation are more susceptible to workaholism, especially when the followers have a high level of

work centrality. Specifically, the strength of the positive relationship between identification with the leader/organisations and workaholism increases as follower work centrality increases.

On the basis of the preceding discussion, the following hypotheses are proposed:

H7a: Work centrality is positively related to workaholism among followers.

H7b: Work centrality mediates the relationship between personal identification with the leader and workaholism.

H7c: Work centrality mediates the relationship between social identification with the organisation and workaholism.

3.5 Transformational Leadership, Work Centrality, and Workaholism

This section discusses ‘why and how’ in relation to the following four statements: (i) transformational leadership is positively related to work centrality (which was discussed in Section 3.2.1); (ii) transformational leadership is positively related to workaholism; (iii) work centrality is positively related to workaholism which was discussed earlier; and (iv) work centrality positively mediates the relationship between transformational leadership and workaholism.

3.5.1 Transformational Leadership and Workaholism

Transformational leadership motivates followers to perform beyond their initial expectations (Bass, 1998). Followers performing beyond their initial expectations are usually presented in a positive light. Followers are portrayed as happily engaged in the pursuit of the goals set by an extraordinary leader. There remains the possibility, however, that performing beyond one’s initial expectations is due to workaholism.

There are several well-established follower-related outcomes of transformational leadership that could result in workaholism among followers. These outcomes include internalisation of the leader’s values, identifying with both the leader and the organisation; commitment to both the leader and the organisation; and increased effort to meet the high expectations of transformational leaders.

Followers who internalise the values of transformational leaders are arguably more

susceptible to workaholism. Transformational leaders articulate their values and a compelling collective vision that followers internalise and enthusiastically embrace (Wang et al., 2005). In pursuit of the vision and other valued collective goals, followers place collective interests above their personal interests and are therefore likely to engage in self-sacrificial behaviours (Shamir et al., 1993). People enact behaviours not only for instrumental-calculative reasons but also because engaging in specific behaviours can be self-expressive (i.e., they express their feelings, values, and self-concept) (Shamir et al., 1993). Self-sacrificial behaviour from followers demonstrates their commitment to the vision and collective goals, as well as increasing their feelings of self-worth (Wang et al., 2005). Followers can self-sacrifice by working long hours to the detriment of their health and family/social life, not only for the good of the organisation but also because it fulfils their esteem needs. Unfortunately, working long hours to the detriment of one's health and family/social life is one of the defining elements of workaholism (Harpaz & Snir, 2003).

Transformational leadership could facilitate workaholism among followers as it changes the self-concepts of followers. Followers admire and identify with transformational leaders because they regard the leaders as extraordinarily gifted and charismatic (Shamir, 1995). Identification occurs because an individual "...wants to establish or maintain a self-defining relationship to another person or group" (Kelman, 1958, p. 53). Individuals who identify with a referent person or group incorporate the person's or group's norms and values into their self-concepts (Tajfel & Turner, 1985). Consequently, followers who identify with their leaders and organisations are likely to go "above and beyond" (i.e., exceed workplace expectations or demands) to please their leaders and organisations because they seek recognition and approval from their leaders. Followers can gain recognition and approval from their leaders and organisations by devoting themselves to their work. In support of this argument is the finding that followers' identification with the group is positively related to their willingness to contribute to group objectives (Shamir et al., 2000). Additionally, transformational leadership has consistently been found to have a strong, positive relationship with follower organisational citizenship behaviour (OCB) (Piccolo & Colquitt, 2006). Devotion to one's work allows followers to demonstrate their loyalty and commitment to the leader, the leader's vision, and the leader's organisation. Obsession with one's work, however, is a cornerstone of workaholism.

Transformational leaders influence their followers to perform at high levels and this can facilitate workaholism. A defining feature of transformational leadership is setting high expectations for followers and expressing confidence in their ability to meet these expectations (Bass, 1985; Podsakoff, MacKenzie, & Bommer, 1996). Followers of transformational leaders are likely to do their utmost to meet their leaders' expectations because their self-esteem and self-worth stem partly, if not largely, from their work due to their strong identification with both the leader and the organisation. Consequently, followers are likely to put in a lot of extra effort and time to meet their leaders' lofty expectations.

Followers can exert extra effort through increased levels of contextual performance, and this can facilitate workaholism. "Contextual performance" (i.e., extra-role performance, OCB) refers to voluntarily doing discretionary tasks (e.g., working late to help a team member) that are outside of one's formal job requirements and benefit the organisation (e.g., Wang et al., 2011). Followers can demonstrate their commitment to the leader and the organisation through high levels of contextual performance — several meta-analytic reviews have found strong and consistent correlations between transformational leadership and OCB across various organisations (Piccolo & Colquitt, 2006). Increasing contextual performance will increase followers' workloads and the amount of time they would need to spend working, thereby facilitating workaholism.

Transformational leadership increases the sense of purpose and meaningfulness of work and thus may facilitate workaholism. Transformational leaders can make work more intrinsically motivating because they change the values and self-concepts of followers. Consequently, everyday tasks are regarded by followers as self-defining and seen in the context of a collective vision (Zhu, Avolio, & Walumbwa, 2009). Thus, followers are likely to be motivated to do their best and they would exert more effort and spend more time working.

Followers of transformational leaders are susceptible to workaholism because transformational leadership increases the likelihood of them basing their self-concepts (i.e., personal and social identities, self-esteem, self-worth) on their work.

Followers of transformational leaders are thus likely to experience symptoms of workaholism when not working. Specifically, such followers are likely to experience

anxiety, shame and/or guilt if they do not work to their maximum capacity because work satisfies their needs for belongingness, esteem, and worth. Experiencing anxiety, shame and/or guilt when not working are indicators of workaholism (Aziz et al., 2013).

Based on the rationale provided, the following hypothesis is proposed:

H8a: Transformational leadership is positively related to workaholism among followers.

3.5.2 Mediating Effect of Work Centrality

The hypothesis presented above (Section 3.5.1) suggests that transformational leadership may result in workaholism among followers. This study is also proposing another aspect of the possible underlying psychological mechanism that allows transformational leadership to have such an additional impact on their followers. This may be attributable to both the behaviours of the transformational leadership and the perceived importance of work among followers. As a result, work centrality is proposed to be an additional psychological mechanism through which transformational leadership can motivate followers, subsequently resulting in workaholism among followers. Specifically, work centrality is treated as mediator of the relationship between transformational leadership and workaholism.

Many findings from previous studies highlight individuals with high work centrality tend to enjoy working (e.g., feel sense of satisfaction), are more likely to develop a positive relationship with the organisation (e.g., organisation commitment), and devote more time and effort to their jobs (e.g., high job performance) (MOW, 1987). Individuals who are emotionally attached to work are more inclined to use their skills and knowledge to perform better at work (MOW, 1987; Uçanok, 2008). The current study suggests that transformational leadership is more likely to result in workaholism among followers who have a high level of work centrality because work centrality is a key stimulus that drives followers to “go the extra mile”, devote time and effort to work and regard work as playing the central part in their lives. In line with this, this study presumes that the strength of the positive relationship between transformational leadership and workaholism increases as follower work centrality increases.

On the basis of the preceding discussion, the following hypothesis is proposed:

H8b: Work centrality mediates the relationship between transformational leadership and

workaholism.

3.6 Conclusion

The rationale for hypotheses has been presented to address the research questions for the current study and gaps in the literature including: i) transformational leadership is likely to result in workaholism among followers in various ways; and ii) with particular psychological mechanisms (e.g., self-concept, value congruence, identification), followers are likely to be more susceptible to workaholism; and iii) work centrality is proposed to be another psychological mechanism through which transformational leadership could motivate followers and lead to workaholism. In short, the model proposes that transformational leadership increases follower value congruence with the leader and the organisation, which then increases follower identification with the leader and the organisation, which in turn increases work centrality and ultimately leads to workaholism. Those hypotheses that have been proposed and will be tested later in Chapter 5. The research methodology for the current study is presented and discussed in the next chapter.

CHAPTER 4. RESEARCH METHODOLOGY

4.1 Introduction

This chapter discusses the research methodology employed in this study. A cross-sectional design and positivist approach using the hypothetico-deductive model is adopted in this research as it is the most effective approach to answer the research questions. This chapter consists of nine major sections, each addressing a different aspect of research methodology. The first aspect to be discussed is the research paradigm (Section 4.2). The remaining sections provide, in the following order, discussions of research design (Section 4.3), quantitative research method (Section 4.4), data analysis (Section 4.5), mediating analysis (Section 4.6), common method bias (Section 4.7), ethical considerations (Section 4.8), and conclusion (Section 4.9).

4.2 Research Paradigm

Research paradigm/philosophy is important as it not only offers a specific direction for processes in a research design (Abdulkareem, Ismaila, & Jumare, 2018) but also provides a framework for academic research (Proctor, 2005). Guba and Lincoln (1994, p.105) define research paradigm as “the basic belief system or worldview that guides the investigator, not only in choices of method but in an ontologically and epistemologically fundamental way”.

Research can be approached from different philosophical perspectives. Variations in research perspectives influence the research design. There are several paradigms in academic research, however, positivist and interpretivist paradigms are seen as the bipolar and the most common philosophical views about knowledge that inform the research design (Saunders & Lewis, 2012). There is a fundamental difference between interpretivism, and positivism. Interpretivists emphasise understanding rather than explaining human behaviour. Interpretivism involves inductive reasoning and developing theory based on the data that are collected. In contrast, positivist research relies on deductive reasoning as it starts with a theoretical position and then tests the proposition using empirical evidence (Cavana, Delaware, & Sekaran, 2001).

According to interpretivism, or constructionism, there are different versions of social reality, including organisations, because social phenomena and their meanings are

socially constructed, interpreted, enacted, and maintained through discourse (i.e., written and spoken communication) between individuals (Ford, 1999). That is, social reality is not objective as it depends on an individual's values and opinions (Bryman, 2016), and people from different cultural, social, and political contexts, with different life stories and experiences, subjectively see and experience the world in very different ways. Interpretivism thus argues that the social actors' point of view is critical because social phenomena are given meaning by these actors, and therefore the focus of interpretivism is on understanding how people make sense of their social realities (Neuman, 2014).

Researchers who adopt an interpretivist perspective of reality rely on qualitative research methods. Qualitative studies normally involve different analytical methods including examining conversations (i.e., conversation analysis) and documents (i.e., content analysis) to identify themes and any patterns that may exist among the themes that emerge (Wodak & Meyer, 2009). The findings from discourse analysis form the basis of "Grounded Theory". That is, a theory of a phenomenon is derived from the analysis of data such that the theory is developed from the data (Charmaz, 2000).

The positivist approach to research assumes reality is objective and governed by an underlying system of order or natural laws that can be discovered (Neuman, 2014). According to positivism, knowledge should be based on facts that are observable, objective, and scientific. Positivism argues that research should be based on a structured methodology that produces value-free and precise quantifiable observations of knowable facts. Positivism is therefore based on the scientific method, which is used in the natural sciences (Bryman, 2016). According to interpretivism, it is not appropriate to use scientific method to study social phenomena because social phenomena are not objective phenomena as how they are perceived depends on the individual's subjective viewpoint (Bryman & Bell, 2011).

To a certain degree, the research paradigm is selected based on the appropriate methodology that addresses the research problem and the preference of the researcher. A positivist approach using the hypothetico-deductive model is adopted in this research for a couple of reasons. First, a positivist approach is chosen because the purpose of this research is to test a theoretical model. The positivist approach involves the use of a quantitative methodology — questionnaires are used to quantify latent/unobservable variables (e.g., identification) and statistical analyses are conducted to test hypotheses

(Sekaran, 2003). In addition, most of the previous similar studies have used a hypothetico-deductive model (quantitative approach) to allow constructs to be measured objectively. Thus, a positivist approach is selected for this study.

4.3 Research Design

After the research approach has been selected, it is necessary to specify the methods and procedures that are to be used to collect and analyse the data (Zikmund, 2003). The research design refers to the directions or plan that will be followed when conducting a study. There are essentially three types of research design: exploratory, descriptive, and causal (Hair et al., 2011a).

Exploratory research designs are used when the researcher knows little about the research problem and because they are often used in qualitative research (Collis & Hussey, 2009). The purpose of exploratory research is to discover new relationships or ideas rather than to test specific hypotheses. Exploratory research on a topic/problem can be conducted in various ways including undertaking a literature review, using focus groups or in-depth interviews with key informants, and analysing a case study (Hair et al., 2011a).

Descriptive research designs are used when the researcher wants to identify and obtain information on a specific problem that exists or test specific hypotheses (Collis & Hussey, 2009). Descriptive studies are highly structured as their purpose is to measure specific variables related to a specific problem or in the case of descriptive/explanatory studies to test hypotheses. A cross-sectional descriptive design involves measuring all the variables at a single point in time (Wilson, 2010). The advantage of cross-sectional data is that they allow examination of relationships between variables and are relatively easy to collect. However, it is not possible to prove causal relationships between variables using cross-sectional data (Bryman & Bell, 2011). A longitudinal descriptive design involves measuring variables using the same sample multiple times to see how they vary over time (Hair et al., 2011a). Longitudinal designs are not common in business research due to the costs involved and high sample attrition rates. Although cross-sectional and longitudinal designs are similar in terms of reliability and validity, longitudinal designs are better for making causal inferences because they can provide the researcher with insights into the time order of variables (Bryman & Bell, 2011). With longitudinal designs, however, the representativeness of the final sample is questionable because of non-response bias as

there might be systematic differences between participants who completed all stages of data collection and those who did not.

The most suitable design for establishing cause-and-effect relationships between variables is the experiment (Wilson, 2010). Experiments allow the researcher to manipulate variables to see if they result in changes in other variables. However, experiments conducted in real-life situations are problematic because of extraneous variables that are outside the researcher's control (Zikmund, 2003).

Another aspect of research design is the unit or level of analysis. There are numerous possible units/levels analysis. The level of analysis needs to be specified because research objectives and hypotheses usually focus on a specific "level", whether individuals, groups, organisations, or societies. It is important to specify the level of analysis as it affects the factors being assessed (Cavana et al., 2001). For instance, if the analysis is at an individual level, that means only attributes that are associated with the individual level are taken into account (e.g., attitude, personality). The level of analysis also can affect the type of data that is collected and the measurement of the study (Bryman & Bell, 2011). Perusal of related literature reveals that the examination of transformational leadership is generally conducted at the individual level; indeed, value congruence research has been exclusively conducted at the individual level (Hoffman et al., 2011). Transformational leadership is proposed to capture value congruence, and identification and workaholism between the follower-leader and the follower-organisation relationships in the current study. This needs to specify the transformational leadership process at the individual level while examining the outcomes. The measurement of the constructs and items in the current study have, therefore, been formulated and examined at the individual level.

A cross-sectional descriptive (i.e., explanatory) research design has been selected for use in this study. The reason for having chosen this research design was that collecting cross-sectional data requires considerably less time than does collecting longitudinal data (Denscombe, 2010). In addition, cross-sectional studies are well suited to identifying relationships at a point in time. The focus of cross-sectional designs is to test the relationship between variables (i.e., how they relate to one another) measured at a single point in time whereas longitudinal studies regard the passage of time as an important factor. The current study will examine the relationship between variables (e.g., the relationship between transformational leadership and workaholism among followers) at a

single point rather than focusing on the passage of time. Therefore, a cross-sectional research design is preferred as it is more suitable for the current study.

While there are many ways that data can be classified, two common ways to distinguish data are as primary data and secondary data (Collis & Hussey, 2009). Primary data are data that the researcher collects using methods such as questionnaires and interviews. A key feature of primary research is that it addresses a specific phenomenon, rather than data being collected for a different purpose that is then applied to this phenomenon (i.e., secondary). In contrast, secondary data are pre-existing data that others have collected, such as company reports or government censuses that the researcher can access. Hence, the collection of primary data was regarded as a better option for the current study as is designed to directly address research questions for the study.

4.4 Quantitative Research Method

This study adopts a positivist research paradigm that involves phenomena that can be measured and identified. Therefore, data collected via a survey questionnaire will be subjected to statistical analyses. This section discusses research approach selected, sampling criteria for the study, the data collection method selected, and the validity and reliability of the adopted measures. It also outlines the levels of measurement, rating scales, and the questionnaire design adopted.

4.4.1 *Research Approach*

As discussed in Section 4.2, positivism and interpretivism are two philosophical views about knowledge that inform the research design (Saunders & Lewis, 2012). Interpretivism (qualitative approach) involves inductive reasoning and developing theory based on observing phenomena and formulating the relationship and propositions. Positivist research (quantitative approach) relies on deductive reasoning and complements qualitative research by testing the proposition using empirical evidence (Cavana et al., 2001). Qualitative (interpretivist) and quantitative (positivist) approaches can be complementary to each other as demonstrated in Table 4.1.

Table 4.1: Inductive and Deductive Reasoning

Inductive Reasoning			
1. Observe Phenomenon	2. Analyse Patterns and Themes	3. Formulate Relationships	4. Develop Theory
Deductive Reasoning			
1. Develop Theory	2. Formulate Hypotheses	3. Collect and Analyse Data	4. Accept/Reject Hypotheses

Source: Cavana, Delaware, & Sekaran (2001)

A hypothetico-deductive model or scientific method (quantitative research approach) is a structured, multi-step process that is used in many fields of research to validate observations and test theories (Sekaran & Bougie, 2013). The steps are as follows: the first step is to define the research problem or purpose of the research. The second step is to learn about the research problem by reading pre-existing information or theories that are relevant to the research problem. The third step is to develop some theoretically based hypotheses, which are expectations of what the empirical data uncover (e.g., transformational leadership is positively correlated to work centrality). The fourth step is to develop a method for collecting data that is precise and replicable, and that can be used to test the hypotheses. The fifth step is to analyse the data. The sixth step is to interpret the findings and to determine if the hypotheses are supported. The final step is to identify what has been learnt and to modify existing knowledge/theory if appropriate (Sekaran & Bougie, 2013). The current study follows the aforementioned steps to validate constructs and test the theories.

A quantitative research approach (a positivist approach) using the hypothetico-deductive model is adopted in this research. A quantitative research approach is chosen because the purpose of this research is to test a theoretical model. More importantly, most of the previous empirical studies that have examined either the relationship between transformational leadership and value congruence or the relationship between transformational leadership and identification have used a hypothetico-deductive model (quantitative approach) to allow those constructs to be measured objectively.

Based on the literature in Chapter 2 and Chapter 3, most of the studies that are relevant to the current study have adopted a quantitative research approach. Table 4.2 provides some examples in the existing literature that used a quantitative research design. These studies

demonstrate that the variables addressed in the current study are well-established, well-refined and well-operationalised by earlier quantitative studies. The current study accordingly follows the previous studies and adopts a quantitative research approach.

Table 4.2: Relevant Previous Studies Using a Quantitative Research Approach

Article	Author/s (date)	Journal
“Opening the black box: An experimental investigation of the mediating effects of trust and value congruence on transformational and transactional leadership”	Jung & Avolio (2000)	Journal of Organizational Behavior
“Person-organization value congruence: How transformational leaders influence work group effectiveness”	Hoffman et al. (2011)	Academy of Management Journal
“Charismatic leadership in organizations: Perceived behavioral attributes and their measurement”	Conger & Kanungo (1994)	Journal of Organizational Behavior
“The two faces of transformational leadership: Empowerment and dependency”	Kark, Shamir & Chen (2003)	Journal of Applied Psychology
“A multilevel study of transformational leadership, identification, and follower outcomes”	Wang & Howell (2012)	The Leadership Quarterly
“Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structural distance”	Avolio et al. (2004)	Journal of Organizational Behavior
“Socialized charismatic leadership, values congruence, and deviance in work groups”	Brown & Trevino (2006)	Journal of Applied Psychology

4.4.2 *Sampling*

Several sampling eligibility criteria have been taken into consideration to make data more generalisable. First, the sample of the current study consists entirely of full-time, white-collar professionals because the previous studies suggested that such employees are regarded as representative of the typical workaholic profile (Aziz & Cunningham, 2008; Porter, 2001). According to prior research, white-collar professionals tend to work in demanding jobs that have multiple responsibilities. Many of the duties involved in such jobs are generally not restricted to set times or places, so there are essentially no restrictions on where they perform their duties (i.e., at work, at home, during vacations) nor on how much time they dedicate to their jobs (Spence & Robbins, 1992). Full-time, white-collar employees, especially those in unstructured work environments, are more likely to be workaholics than blue-collar employees who work in highly structured and controlled environments (Kanai & Wakabayashi, 2001). Hence the selection of full-time, white-collar professionals for this study.

In addition, one of the criteria for participation in the current study is that participants need to be able to work outside of the workplace. The reason for this criterion is that the prior research suggested that workplaces that do not set times or places for their employees may be more likely to foster workaholism ((Kanai & Wakabayashi, 2001) as that allows employees to work at home, on the train, waiting for a friend, or during vacations. Also, the participants need to have worked with their current immediate supervisor for at least 12 months to be eligible to participate because such a period would allow follower and leader to have established their relationships. Furthermore, the participants had to come from various industries including construction, education, engineering, finance, health, IT, media, the pharmaceutical industry, and telecommunications to ensure greater generalisability as results from research conducted with a sample obtained from a diverse population is more generalisable to the broader population than one conducted with a more limited industry-specific sample.

A combination of purposive and self-selection sampling was used in this study. Purposive sampling was used because the study focused on full-time, white-collar employees. The reason for having chosen these two employment-related demographic variables was because research has shown that such employees are arguably likely to be more susceptible to workaholism compared to part-time or blue-collar employees.

Hence, this study will look at the effect of transformational leadership and workaholism among full-time, white-collar professionals. Table 4.3 provides the sampling criteria selected for this study with details discussed in this section.

Table 4.3: Sampling Criteria for Transformational Leadership — Workaholism among White-collar Professionals (Developed by Author)

Sampling Eligibility Criteria
1. White-collar professionals
2. Employed on a full-time basis
3. Participants can work outside of the workplace
4. Worked with current immediate supervisor for at least 12 months.

The population for a study refers to all elements (e.g., individuals, businesses) that are appropriate for a particular study (Bryman & Bell, 2011). It is not always feasible to include all elements of a population, so the researcher must rely on data collected from a subset or sample of the population (Sekaran & Bougie, 2013). There are various methods that can be used to select a sample, and these can be classified into two categories, probability and non-probability.

With probability sampling, each element in the population has a known probability or chance of selection whereas with non-probability sampling the probability of an element in the population being selected is not known (Zikmund, 2003). A complete list of all members of a population (i.e., a sampling frame) is required to use probability sampling. If the sampling frame is incomplete, then the sample is not representative of the population, and this limits the generalisability of the findings to the population (Saunders et al., 2009). A sampling frame is not required for non-probability sampling (Sekaran, 2003). Probability sampling methods are typically used in quantitative research and include various forms of random sampling, such as simple, systematic, and stratified random sampling (Hair et al., 2011a).

There are advantages and disadvantages associated with the use of probability sampling methods. The main advantage is that the findings obtained from the sample are generalisable to the population because the sampling method is less likely to be biased (Bryman & Bell, 2011). The main disadvantage is that establishing a sampling frame

requires a lot of effort from the researcher and can be very costly (Bryman & Bell, 2011).

There are several types of non-probability sampling methods including convenience sampling, judgemental or purposive sampling, snowballing, and self-selection (Bryman & Bell, 2011). Convenience sampling involves selecting members of a population who are conveniently available to the researcher, thus saving the researcher considerable time, effort, and cost (Sekaran, 2003). Purposive or judgemental sampling involves the researcher making judgements regarding the selection of cases. With purposive sampling, the researcher targets individuals or organisations who meet specific eligibility criteria (e.g., managerial level, industry) that are relevant to the research objectives (Zikmund, 2003). In other words, purposive sampling seeks theoretical transferability, not generalisability. A researcher is likely to rely on snowball sampling when it is difficult to access elements in a population that meet specific eligibility criteria relevant to the research objectives, such as priests or founders of family businesses. Its first stage involves using convenience sampling to obtain an initial group of participants and then asking these participants to refer the researcher to others who meet the eligibility criteria. This process is repeated until the desired sample size is obtained (Sekaran & Bougie, 2013). Finally, self-selection sampling occurs when a researcher invites people (e.g., employees of a particular organisation) to participate in a study and then those who are interested take part in the study (Saunders et al., 2009).

Non-probability sampling methods have advantages and disadvantages. The main advantage of using non-probability sampling methods is the reduced time, effort and costs required to obtain a sample. Furthermore, it is sometimes the only way for a researcher to obtain a meaningful sample (Sekaran & Bougie, 2013). Their main disadvantage is that they produce limited generalisability because not all members of the population have an equal chance of being selected (Hair et al., 2011a).

Although the findings of probability sampling method that can be more generalisable, it requires substantial resources, such as time and funds, to establish a census for a population before embarking on sampling. Additionally, it is considered less efficient than non-probability sampling. Non-probability sampling is regarded as more practical, efficient, and economical even though less generalisable (Zikmund et al. 2010). The selection of sampling approach depends on various factors such as research questions, research problems, and project resources. For instance, the current study focuses on

white-collar, full-time employees, thus, non-probability sampling involving purposive sampling was selected to achieve relatively rapid access to a suitable research population sample.

Non-probability sampling was used to recruit participants for the current study because a complete sampling frame was not available and thus random sampling was impossible. A combination of convenience, purposive, and self-selection sampling was used. Convenience sampling was used with invitations sent to various organisations asking them for permission for their employees to complete an online questionnaire. Purposive sampling was used because the study focused on full-time, white-collar employees who had been in their current jobs for at least twelve months. This approach was consistent with previous research (e.g., Spence & Robbins, 1992; Aziz & Cunningham, 2008). Self-selection was also involved. Invitations were sent to various participants to complete an online questionnaire. Participation was voluntary and thus data were obtained for those employees who chose to participate.

The ten times sample size rule of thumb was initially proposed by Barclay, Higgins and Thompson (1995). According to the ten times guideline, a minimum sample size needs to be “ten times the largest number of structural paths directed at a particular construct in the structural model” (Hair et al. 2014b, p. 20). Therefore, a minimum sample size of 110 observations is sought to meet the minimum sample size requirement for this study.

A perusal of previous similar studies revealed that a sample of approximately 500 ($n=500$) is generally used. This is reflected in the sample size for Hoffman et al.’s (2011) study “Personal-organization value congruence: How transformational leaders influence work group effectiveness” ($n=560$), Kark et al.’s (2003) study “The two faces of transformational leadership: Empowerment and dependency” ($n=888$), and Avolio et al.’s (2004) study “Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structural distance” ($n=520$). The sample size for the current study reached 576, larger than minimum required size and similar in size to those in the previous studies, in order to produce meaningful findings.

The ten times rule of thumb could be misleading as it only provides a rough guideline for the minimum required sample size, it “does not take into account effect size, reliability, the number of indicators, and other factors known to affect power” (Hair et al., 2012, p.

8), and other factors such as the data characteristics and the sample size against the model background (Hair et al., 2014b). The evidence shows that 9% of the estimated models in Hair et al.'s study did not meet the recommended 10 times rule of thumb for sample size. Indeed, they were an average of 45.18% below the recommended sample size (Hair et al., 2012). Nevertheless, it works for most models. In their survey, almost 83% of models published before 2000, rising to over 93% in more recent years, complied with the rough guide (Hair et al., 2012). Apart from the ten times guideline, researchers are advised to take statistical power and effect size into consideration. Accordingly, this study will conduct the statistical power using G*Power to ensure the adequate power of the data analysis which is recommended by Hair et al. (2014b).

4.4.3 Data-Collection Methods

This section discusses the overall approach used to collect the data for the current study. A positivist approach using the hypothetico-deductive model comprising seven variables has been adopted, with a self-report electronic questionnaire used to collect the primary and quantitative data, and statistical analysis undertaken.

Questionnaires are one of the most important measurement instruments that statisticians use to measure and describe phenomena (Brancato et al., 2006). This being so, a questionnaire was the method selected for data collection in the current study, particularly given the added advantage of lower projected research outlays than would have been the case with interviews. Questionnaires are a popular method of obtaining large amounts of primary data, and while they can bias data due to nonresponse error, they are more efficient than interviews or observation in terms of cost and effort (Wilson, 2010).

There are different methods of collecting data from a questionnaire including: participants being provided with hard copies that they self-administer, the researcher (or their assistant) administering the questionnaire in person or over the phone, and participants being provided with a link to an electronic version of the questionnaire (Collis & Hussey, 2009).

A self-administered, electronic questionnaire was selected to collect data in the current study. Electronic questionnaires involve the researcher providing potential participants a hyperlink to the questionnaire on the internet, usually via an email or an invitation letter (Zikmund, 2003). This allows the researcher to access individuals across the globe.

Participants can complete the questionnaire at a time and place that is convenient for them, and they are not required to physically return the completed questionnaire to the researcher (Sekaran & Bougie, 2013). An electronic questionnaire is relatively easy and inexpensive to set up, although the same degree of effort and care required to formulate their wording remains as does the possible need for a pilot study to refine content and ease of use. Nevertheless, data are recorded automatically, and this not only saves the researcher time but also eliminates data-entry errors (Benfield & Szelmo, 2006). Finally, the researcher cannot influence the responses of participants, and thus there is no researcher effect such as acquiescence bias. However, electronic questionnaires have several disadvantages. Due to the lack of contact with the researcher, participants are unable to consult the researcher if they are unclear about any question and nor can the researcher develop rapport with participants. The researcher cannot determine who completed the questionnaire if it is conducted on the basis of participant anonymity from the outset rather than on the guarantee of use of data being later de-identified. Finally, not everyone knows how to use or has access to a computer, and this might result in a biased sample (Saunders et al., 2009).

There are several reasons for having chosen the self-administered, electronic questionnaire data-collection method including the ease of setting up the questionnaire and responses being entered automatically into a spreadsheet thereby saving time and costs as well as removing data-entry errors. The self-administrated electronic questionnaire is widely used by leadership scholars (e.g., Hoffman et al., 2011; Hobman et al., 2011), thereby further commending it for use in this study. It is also chosen because a large number of potential participants could be accessed by asking senior management (e.g., CEOs, HR managers) of large firms if they would send an invitation email to their employees via company email lists. A relatively simple questionnaire was subsequently compiled and has been pilot tested, so the lack of contact with participants should not be too problematic. The study targeted white-collar employees. With such employees generally having access to and aware of how to use computers and the Internet, and given budgetary and time constraints, a self-administered electronic questionnaire seemed the instrument best suited to the task.

4.4.4 *Measures: Validity and Reliability*

When doing quantitative research using surveys/scales, it is essential that the scale is

established as a valid measure of the construct and that it is reliably so across varied contexts. “Measures are critical in research because ... they can accurately represent the research concept that ...is being studied and ...are instrumental in the selection of the appropriate multivariate method of analysis” (Hair et al., 2014a, p. 29). Reliability and validity are “the most important most fundamental features” of any good research instrument (and good research) (Mohajan, 2017, p. 59). The following sections contain a discussion of the reliability and validity measures which will be used to assess constructs in the proposed model.

The current study investigated i) internal consistency, ii) convergent validity, and iii) discriminant validity to ensure all constructs in the proposed model were valid and reliable before hypothesis testing. The reliability criterion (Cronbach’s alpha) and convergent and discriminant validity were selected to avoid/reduce the threats to consistency, validity, and reliability of the study as they are deemed to be the most critical measures and are most likely to impact the study. Table 4.4 has summarised the assessment criteria for the reflective measurement model. A detailed discussion of those assessment criteria is presented in this section.

Table 4.4: Summary of Criteria to Assess the Reflective Measurement Model

Criterion	Cut-off Threshold
Internal consistency	Composite reliability needs to be higher than 0.70 (Bernstein & Nunnally, 1994; Vinzi, Trinchera, & Amato, 2010).
	Nunnally (1967, p. 226) suggested that the “minimum level of Cronbach’s alpha of 0.5 to 0.6 for preliminary research, 0.7 or higher for strategic management research, 0.8 for basic research and 0.9 to 0.95 for applied research”.
Convergent validity	The average variance extracted (AVE) should be 0.50 or higher (Fornell & Larcker, 1981).
Discriminant validity	The AVE of a construct must be greater than the squared correlations between it and all the other constructs in the model (Fornell & Larcker, 1981; Yoon, 2009).
	Cross loadings: the indicators of the outer loadings on the associated latent construct need to be greater than their correlation with the other latent construct in the model (Chin,1998).

Validity

A measure of a construct is essentially an attempt at operationalising the construct so it can be quantified (Saunders et al., 2009). The validity of a measure refers to the extent to which a measure is actually measuring the concept it is supposed to be measuring, and thus is concerned with the soundness and accuracy of a measure (Saunders & Lewis, 2012). There are different types of validity, and these can be classified into three categories: i) logical validity (i.e., face validity and content validity); ii) criterion-related validity (i.e., concurrent validity and predictive validity); and iii) congruent or construct validity (i.e., convergent validity and discriminant validity) (Sekaran & Bougie, 2013).

Face validity and content validity are non-statistical types of validity that are based on an understanding of the concept being measured (Anastasi & Urbina, 1997). Face validity indicates that the items in a measure, on the face of it, appear to measure the concept. Content validity ensures that the items in a measure adequately represent the various dimensions and elements of the concept (Bryman & Bell, 2011).

Criterion validity is established when a measure performs as expected in relation to other variables that are identified as meaningful criteria (Hair et al., 2011a). Concurrent validity refers to the ability of a measure to differentiate between individuals who are known to be different in terms of the concept being measured. For example, a measure of workaholism should be able to distinguish between people who have been identified as “social loafers” and those who have been identified as being obsessed with their work. Concurrent validity can also be established when a measure is strongly correlated to a criterion when both measures are administered concurrently. Predictive validity differs from concurrent validity in that the two measures are administered at different times. That is, the measure for the criterion is administered after the measure in question has been administered.

Construct validity indicates that the results obtained from a measure are consistent with the theories around which the measure is designed (Sekaran & Bougie, 2013). That is, the construct being measured should relate to the constructs it is theoretically supposed to be related to and not related to constructs it is theoretically supposed to be unrelated to (Cavana et al., 2001). Concurrent validity is established when a measure is highly correlated to another measure of the same construct. Discriminant validity is established when a measure is not correlated to measures of constructs that it is not expected to be

correlated to be, based on theory (Sekaran & Bougie, 2013).

The current study examined convergent validity and discriminant validity to ensure all constructs in the proposed model were validated before hypothesis testing. Convergent validity refers to the items of a variable with a shared amount of variance (Hair, 2006). Average variance extracted (AVE) is utilised to assess the convergent validity of the items used to measure a construct (Götz, Liehr-Gobbers & Krafft, 2010). The AVE represents the proportion of variance in the items used to measure a construct that is explained by the construct. In other words, the AVE represents the average squared loadings obtained from a principal component analysis and between a construct and its items (Vinzi et al., 2010). The AVE needs to exceed 0.5 for acceptable convergent validity, as this indicates that more than half of the variance in the items is explained by the construct (Fornell & Larcker, 1981).

Likewise, discriminant validity can be assessed in various ways. AVE, squared correlation, and crossing-loadings are widely used by scholars and have, therefore, been selected in the current study. According to Hair et al. (2014b, p. 619) “discriminant validity is the extent to which a construct is truly distinct from other constructs. Thus, high discriminant validity provides evidence that a construct is unique and captures some phenomena other measures do not”. Discriminant validity is established when a measure is not correlated to measures of constructs that it is not expected to be correlated to, based on theory (Sekaran & Bougie, 2013). The AVE and the squared correlations between constructs are used to assess the discriminant validity of the measures (Fornell & Larcker, 1981). For acceptable discriminant validity, the AVE of a construct must be greater than the squared correlations between it and all the other constructs in the model (Fornell & Larcker, 1981; Yoon, 2009). Moreover, cross-loadings are an additional approach used to check discriminant validity. If the indicators of the outer loadings on the associated latent construct are greater than their correlation with the other latent constructs in the model, discriminant validity is established (Chin, 1998). AVE, squared correlation, and crossing-loadings have been selected to assess discriminant validity in the current research.

Reliability

Reliability refers to the stability and consistency of a measure across time and across the various items in the measure (Sekaran & Bougie, 2013). Peter (1979, p. 6) defined

reliability as “the degree to which measures are free from errors and therefore yield consistent results”. Hair et al., (2014a, p. 123) described reliability as “an assessment of the degree of consistency between multiple measurement of a variable”. The stability of a measure can be assessed using two different methods: i) test-retest. That is, administer the measure twice to a group of individuals and evaluate the correlation between the two sets of scores. A strong correlation coefficient indicates satisfactory test-retest reliability; and ii) parallel forms. That is, create two shorter versions or forms of the questionnaire by dividing the items in the questionnaire and then administer the two versions at the same time to the same group of individuals. A strong correlation between the scores obtained from the two versions of the questionnaire indicates satisfactory parallel-forms reliability.

Internal consistency/reliability refers to the consistency of responses to items in a measure. If a measure has internal consistency/reliability, respondents’ answers to the various items in a measure are consistent. The items would therefore “hang together as a set” (Sekaran & Bougie, 2013, p. 229) and be highly correlated. There are various methods of testing internal consistency reliability, and the most common method is Cronbach’s alpha (Chin, 2010), which is employed in the current study. Cronbach’s alpha ranges from zero to one. A higher value of Cronbach’s alpha indicates better internal consistency and greater degree of reliability. Nunnally (1967, p. 226) suggests a “minimum level of coefficient alpha of 0.5 to 0.6 for preliminary research, 0.7 or higher for strategic management research, 0.8 for basic research and 0.9 to 0.95 for applied research”. In addition, composite reliability (CR) can also be used to assess internal reliability (Vinzi, et al., 2010). The advantage of using CR is that, unlike Cronbach’s alpha, it is not influenced by the number of items in a measure, and it is based on item loadings obtained from analysis of the structural or outer model (Barosso, Carrion, & Roldan, 2010). The value of CR should be greater than 0.7 to indicate a satisfactory internal reliability (Bernstein & Nunnally, 1994; Vinzi et al., 2010). This study assessed the internal reliability by using both Cronbach’s alpha and CR to ensure the stability and consistency of the various items in the measure.

4.4.5 Levels of Measurement

Not all variables can be measured using the same measurement scale. For example, the same measurement scale cannot be used to measure occupation and job satisfaction. There

are four different levels of measurement or measurement scales: nominal, ordinal, interval, and ratio. These four scales provide different amounts of information about a variable with ratio scales providing the most information, followed by interval scales, then ordinal scales, with nominal scales providing the least information (Collis & Hussey, 2009).

The first level of measurement is the nominal scale. A nominal measurement scale is best suited for measuring categorical variables (i.e., variables that consist of categories) (Hair et al., 2011a). Examples of categorical variables include gender (e.g., male or female), employment status (e.g., full-time, or part-time) and nationality (e.g., Australian, Chinese, or Russian). The numbers used in a nominal scale are essentially labels because the numbers themselves can be chosen arbitrarily and have no meaning in the sense that mathematical operations (e.g., addition or multiplication) cannot be performed on them. For instance, gender (i.e., male or female) can be measured using any two numbers (e.g., 1 for male and 2 for female) (Saunders et al., 2009).

The second level of measurement is the ordinal scale. An ordinal measurement scale is one in which the numbers represent rankings (Hair et al., 2011a). For example, a Likert scale is ordinal data. Also, the outcomes of most types of races are ordinal data (e.g., first, second and third in a car race). Ordinal data can be treated as nominal data, but they contain more information than nominal data because they reveal which competitor finished the race the quickest (i.e., first), the second quickest (i.e., second) and so on. As with nominal data, it makes no sense to perform arithmetic functions on ordinal data. A shortcoming of ordinal data is that differences between rankings other than rank are not known without other information being supplied and may be inconsistent. For example, the difference between the first and second rankings can be smaller or greater than the difference between the second and third rankings (Saunders et al., 2009) (whether this applies to time taken by various competitors in a race or students' scores on a test).

The third level of measurement is the interval scale. Whilst nominal and ordinal scales are discrete scales, interval scales are continuous (Hair et al., 2011b). For example, in a nominal scale for gender using 1 and 2, there are only two possible outcomes (i.e., there is no 1.1 and 1.6). Besides being continuous, interval scales have three other important properties: i) a specific difference in value or interval between two points on an interval scale represents an actual amount of the property being measured by the scale and is the

same across the entire scale; ii) they have positive and negative values; and iii) the zero is arbitrary (Sekaran & Bougie, 2013). The Fahrenheit scale is an example of an interval scale.

The fourth and highest level of measurement is the ratio scale (Hair et al., 2011a). Ratio scales are like interval scales as they are continuous, and a specific difference in value or interval between two points on an interval scale represents an actual amount of the property being measured by the scale and is the same across the entire scale. The main difference between ratio and interval scales is ratio scales have an absolute zero, which means ratio scales do not have negative values. This allows different points on the scale to be compared in terms of ratios or proportions (Zikmund, 2003). An example of a ratio scale is height.

Researchers sometimes need to choose which type of scale to use to measure a variable. It is generally best to choose the highest level of measurement possible because you can reduce but not increase the level of measurement after data collection. That is, you can change interval and ratio data to nominal or ratio data but not vice versa. The reason is that you can reduce but not increase the amount of information obtained from a questionnaire (Saunders et al., 2009; Sekaran & Bougie, 2013). For example, if age is measured as a ratio scale (i.e., in years), it can be transformed to age groups (e.g., 20–30 years, 31–40 years) if required but not vice versa.

In this study, nominal scale was used to measure the gender and employment status of the participants. In addition, ordinal scale (five-point Likert scale) was applied, including a frequency response format for transformational leadership and workaholism, and an agreement response format was used for value congruence, identification, and work centrality.

4.4.6 Rating scales

Quantitative research involving latent constructs (e.g., attitudes such as trust in the leader or attributes such as characteristics of the leader) requires participants to rate various statements related to the constructs. There are several different types of rating scales that are used in business research with the most common being the dichotomous scale, category scale, semantic differential and numerical scales, and the Likert scale (Saunders et al., 2009).

Different variables often require the use of different types of rating scales. Dichotomous scales are used to elicit a “Yes” or “No” response: For example, “Are you a member of your union?” Category scales provide several responses from which participants must choose only one: For example, “What is your highest level of education?” Dichotomous and category scales are nominal scales. Semantic differential scales are bipolar scales that measure attitudes and attributes. These scales involve placing extreme responses at each pole separated by a semantic space. Participants indicate their rating by marking a location in the semantic space. A semantic differential scale can be used to measure, for example, attitudes toward a product: “exciting - - - - - boring”, where the dashes between the two extreme responses are the semantic space. When the semantic space consists of a set of numbers (e.g., 1 to 5), the semantic differential scale is known as a numerical scale. Semantic differential and numerical scales are regarded as interval scales (Hair et al., 2011a; Sekaran & Bougie, 2013).

The Likert scale is a special type of itemised rating scale that is used to determine the extent to which individuals agree or disagree with statements or items used to measure a variable. A statement used to measure work centrality might be, for example, “The most important things in my life have to do with my work”. Respondents are typically asked to indicate their opinion of the statement using a five-point scale (i.e., strongly disagree, disagree, neither agree or disagree, agree, and strongly agree). In some instances, researchers use seven-point and even nine-point Likert scales. However, there is evidence that using more than five points does not increase the reliability of the ratings (Sekaran & Bougie, 2013).

A five-point Likert scale was used in this research when measuring the variables in the current model for several reasons. First, the Likert scale is the most common rating scale used in business research. Secondly, Likert scales are especially useful when a variable is measured using a multiple-item instrument. Responses to each item can be analysed separately, and it is also possible to sum individuals’ responses across the items to create a composite score for the variable. Thirdly, all the measures for the variables in the conceptual model consist of multiple items, and composite scores for the variables are created by averaging across relevant items. Most importantly, the five-point Likert scale was validated (e.g., validity and reliability) and used extensively in the literature. For instance, leadership scholars in top-tier journals consistently use five-point Likert scales to measure “transformational leadership” in their articles (e.g., Jung & Avolio (2000);

Kark et al. (2003); Antonakis, Avolio & Sivasubramaniam (2003); and Avolio et al. (2004)). Hence, based on the practice in previous studies, a five-point Likert scale was selected for the current study to generate the best possible results. Table 4.5 provides the rating scales for each measure.

Table 4.5: Rating Scales for Each Measure

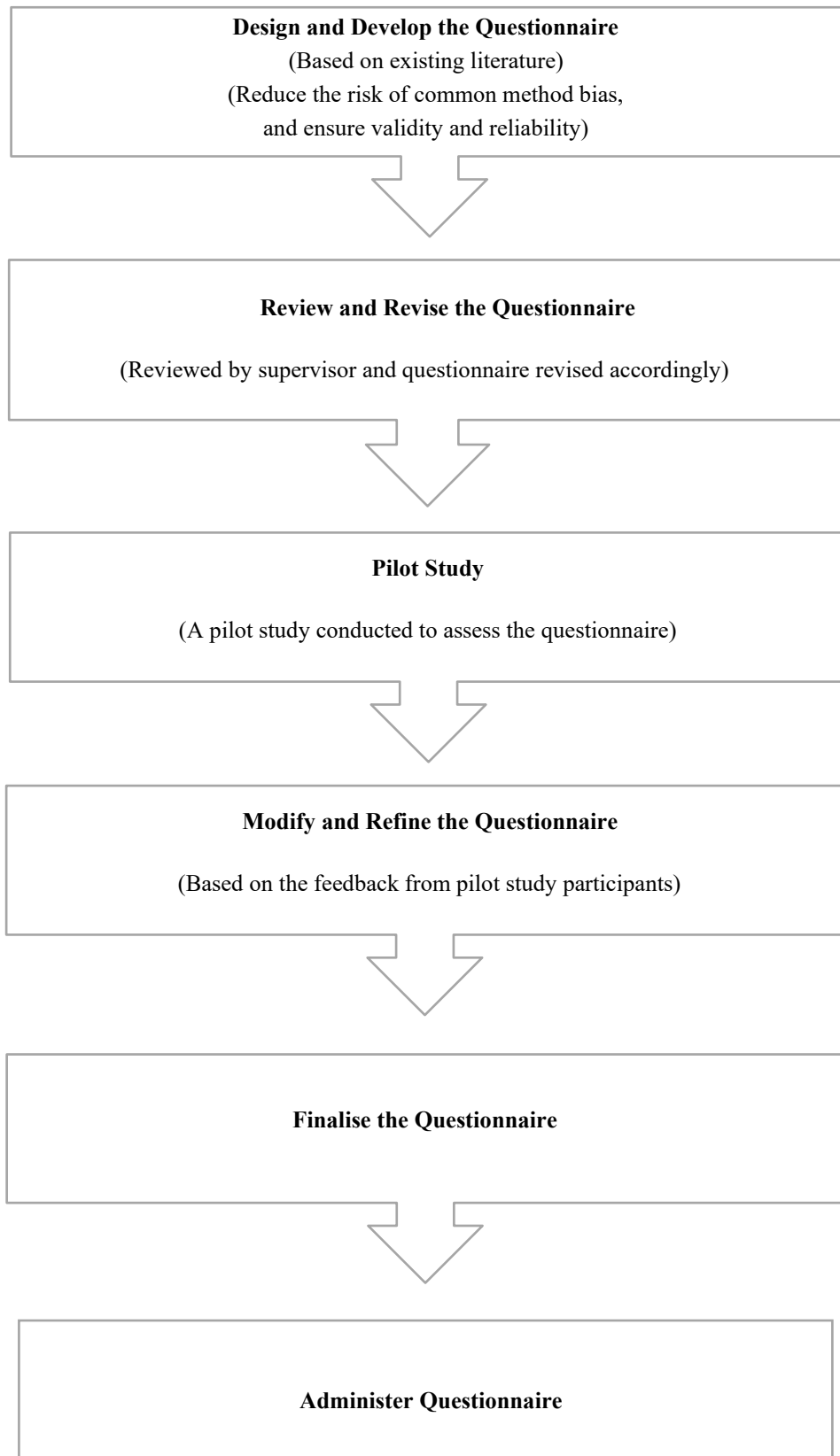
Construct	Original rating scale	Rating scale used in this study
Transformational Leadership	Five-point Likert scale: (i) not at all; (ii) once in a while; (iii) sometimes; (iv) fairly often; and (v) frequently, if not always (Bass & Avolio, 1997)	As original
Follower–Leader Value Congruence	Five-point Likert scale: (i) strongly disagree; (ii) disagree; (iii) neither disagree nor agree; (iv) agree; and (v) strongly agree	As original
Follower–Organisation Value Congruence	Five-point Likert scale: (i) strongly disagree; (ii) disagree; (iii) neither disagree nor agree; (iv) agree; and (v) strongly agree	As original
Personal Identification	Five-point Likert scale: (i) strongly disagree; (ii) disagree; (iii) neither disagree nor agree; (iv) agree; and (v) strongly agree	As original
Social Identification	Five-point Likert scale: (i) strongly disagree; (ii) disagree; (iii) neither disagree nor agree; (iv) agree; and (v) strongly agree	As original
Work Centrality	Five-point Likert scale: (i) strongly disagree; (ii) disagree; (iii) neither disagree nor agree; (iv) agree; and (v) strongly agree	As original
Workaholism	Five-point Likert scale: (i) never; (ii) rarely; (iii) sometimes; (iv) usually, and (v) always	As original

Note: these rating scales for each measure were not adapted for the study but used verbatim.

4.4.7 Questionnaire Design

The questionnaire was designed for seven variables in the transformational leadership – workaholism model. These comprise “transformational leadership”, “follower–leader value congruence”, “follower–organisation value congruence”, “personal identification”, “social identification”, “work centrality” and “workaholism” (see Table 4.5). This section discusses the procedure of questionnaire design which is organised as depicted in Figure 4.1 (below). After reviewing the existing literature and identifying and developing the constructs (for use in the proposed model) which had been validated in the prior research, a questionnaire was designed in accordance with Bryman & Bell’s (2011) principle of ensuring its clarity to avoid the risk of common method bias (CMB) due to common method variance (CMV), that is, variance attributable to the instrument used rather than by what the instrument is attempting to measure. After the principal supervisor had reviewed the draft, it was revised in accordance with comments received. A pilot study was conducted to further assess the questionnaire’s ease of comprehension, with participants identifying any matters giving them concern. The questionnaire was then modified and refined based on the comments from respondents and the questionnaire finalised (please see Appendix 3 for the questionnaire details).

Figure 4.1: Summary of the Questionnaire Design Procedure



Prior to designing the questionnaire, a literature review had been conducted to identify the constructs in the proposed model and ensure the constructs had been validated to achieve satisfactory internal reliability, consistency, and validity in previous studies. All the constructs have been validated and the details are presented below.

The conceptual model consists of one independent variable (i.e., transformational leadership (TFL)), five mediator variables (i.e., follower–leader value congruence (FLVC), follower–organisation value congruence (FOVC), personal identification (PersID), social identification (SocID) and work centrality (WorkCen), and one dependent variable (i.e., workaholism (WorkA)). An independent variable is a variable whose value does not depend on another variable. A mediator variable is a variable through which the independent variable influences the dependent variable. Finally, a dependent variable does not influence other variables in the model, and its value depends on the other variables in the model. In reviewing the prior literature, the reliability and validity for the variables in the conceptual model have been validated. The results of the Cronbach alpha for each measure of the prior studies are as follows:

Transformational Leadership

The Multifactor Leadership Questionnaire (MLQ), developed by Bass and Avolio (1997), measures five components of transformational leadership: idealised influence — attributes, idealised influence — behaviours, inspirational motivation, intellectual stimulation, and individualised consideration. The MLQ has been used extensively in leadership studies and is deemed the most well-validated scale for transformational leadership (Conger, 1999, Jung & Avolio, 2000). For instance, Hoffman et al. (2011) report the group level coefficient alpha reliabilities are: idealised influence = 0.73, inspirational motivation = 0.64, intellectual stimulation = 0.77 and intellectual stimulation = 0.80. In addition, the Cronbach alpha of 20 items in both Avolio et al. (2004) and Krishnan’s (2005) studies was reported to be 0.87.¹

As the hypotheses in this thesis deal with transformational leader rather than charismatic leadership (Conger & Kanungo, 1994), MLQ (as a TFL measure) has thus been selected for the current study. It is evident Bass and Avolio’s (1997) MLQ is a well- established and well-validated measure. The items that are used to measure transformational

¹ The results of Cronbach alpha for the current study are presented in Table 5.5 and Table 5.6.

leadership are provided in Table 4.6 (below), and Appendix 1 provides the details of any adaptations that have been made to the original items.

Transformational leadership is a multi-dimensional construct. The current study assessed reliability, convergent validity, and dimensionality of the items with EFA to ensure each single item contributes significantly to each construct and overall measure. It also assessed each construct with all the items in a model to ensure the scale reliability and consistency of the various items in the measure with both EFA and CFA.

However, in the hypotheses testing, transformational leadership is treated as a single construct incorporating five dimensions rather than each dimension being tested individually because the hypotheses for the current study build on a collection of traits/characteristics, behaviours, and other attributes associated with transformational leadership. In other words, transformational leadership acts as an overarching construct and cannot be distilled at the level of parts of transformational leadership. For this reason, testing hypotheses involves testing them against the overarching construct rather than its components' parts, as a single dimension cannot fully reflect the effects of transformational leadership on followers. In addition, some similar studies in the top-tier journals have also tested the transformational leadership as a single construct including Jung and Avolio's (2000) "Opening the black box: an experimental investigation of the mediating effects of trust and value congruence on transformational and transactional leadership", Wang and Howell's (2012) "A multilevel study of transformational leadership, identification, and follower outcomes" and Kark et al.'s (2003) "The two faces of transformational leadership: Empowerment and dependency".

Table 4.6: Items Used to Measure Transformational Leadership (TFL)

Dimension	Code	Item
Idealised influence: attributes	iibh1	My immediate supervisor talks about his/her most important values and beliefs
	iibh2	My immediate supervisor specifies the importance of having a strong sense of purpose
	iibh3	My immediate supervisor considers the moral and ethical consequences of decisions
	iibh4	My immediate supervisor emphasises the importance of having a collective sense of mission
Idealised influence: behaviour	iiat1	My immediate supervisor instils pride in me for being associated with him/her
	iiat2	My immediate supervisor goes beyond his/her self-interest for the good of the group
	iiat3	My immediate supervisor acts in ways that builds my respect
	iiat4	My immediate supervisor displays a sense of power and confidence
Intellectual stimulation	instim1	My immediate supervisor re-examines ways of doing things to see if they are
	instim2	My immediate supervisor gets me to look at problems from many different angles
	instim3	My immediate supervisor suggests new ways of looking at how to complete assignments
	instim4	My immediate supervisor seeks differing perspectives when solving problems
Inspirational motivation	inspire1	My immediate supervisor talks enthusiastically about what needs to be accomplished
	inspire2	My immediate supervisor talks about a great vision of the future
	inspire3	My immediate supervisor expresses confidence that goals will be achieved
	inspire4	My immediate supervisor talks optimistically about the future
Individualised consideration	consid1	My immediate supervisor spends time teaching and coaching
	consid2	My immediate supervisor considers me as having different needs, abilities, and aspirations from others
	consid3	My immediate supervisor helps me to develop my strengths
	consid4	My immediate supervisor treats me as an individual rather than as a member of a group

Source: Adapted from Bass and Avolio (1997)

Follower–leader value congruence and follower–organisation value congruence

The measures of follower–leader value congruence (FLVC) and follower–organisation value congruence (FOVC) were developed by Cable and DeRue (2002) and adapted by Hoffman et al. (2011). The items for both types of value congruence are identical except they target the immediate supervisor or the organisation, respectively. Hoffman et al. (2011) reported the measure was valid and reliable, for instance, the individual level and group level coefficient alpha reliabilities for FLVC are 0.93 and 0.67, respectively, and 0.93 and 0.80 for FOVC, respectively. Also, Astakhova (2016) reported reliability for FLVC/fit as 0.97 and 0.98 in the U.S.A. and Japan, respectively, and for FOVC/fit as 0.96 and 0.95 in the U.S.A. and Japan, respectively.

The items that used to measure FLVC and FOVC (five items each) are presented in Table 4.7 and Table 4.8, respectively.

Table 4.7: Items Used to Measure Follower–Leader Value Congruence (FLVC)

Code	Item
flvc1	My personal values match my supervisor’s values
flvc2	My supervisor and I value the same things in life
flvc3	My supervisor’s values fit well with the things I value
flvc4	I agree with the values of my supervisor
flvc5	My supervisor and I have the same values

Source: Hoffman et al. (2011)

Table 4.8: Items Used to Measure Follower–Organisation Value Congruence (FOVC)

Code	Item
fovc1	My personal values match my organisation’s values
fovc2	My organisation and I value the same things in life
fovc3	My organisation’s values fit well with the things I value
fovc4	I agree with the values of my organisation
fovc5	My organisation and I have the same values

Source: Hoffman et al. (2011)

Personal Identification and Social Identification

The measures of personal identification (PersID) and social identification (SocID) were

developed by Mael and Ashforth (1992), Shamir et al. (1998) and Kark et al. (2003). The items for both PersID and SocID are identical except that PersID targets the immediate supervisor while SocID targets the organisation. Kark et al. (2003) reported a satisfactory reliability, with Cronbach's alpha for personal identification = 0.96 and social identification = 0.80. Their study also conducted confirmatory factor analyses and provided a satisfactory validity.

The items that are used to measure personal identification and social identification are provided in Table 4.9 and Table 4.10, respectively.

Table 4.9: Items Used to Measure Personal Identification (PersID)

Code	Item
persid1	I strongly identify with my supervisor
persid2	I view the success of my supervisor as my own success
persid3	I am proud of my supervisor
persid4	When someone criticises my supervisor, it feels like a personal insult
persid5	I am very interested in what others think of my supervisor

Source: Kark et al. (2003)

Table 4.10: Items Used to Measure Social Identification (SocID)

Code	Item
socid1	I strongly identify with my organisation
socid2	I view the success of my organisation as my own success
socid3	I am proud of my organisation
socid4	When someone criticises my organisation, it feels like a personal insult
socid5	I am very interested in what others think of my organisation

Source: Kark et al. (2003)

Work Centrality

Paullay et al.'s (1994) study was an attempt to distinguish the ambiguities among work centrality, work ethics, and job involvement. Paullay et al.'s (1994) measure will be used for the current study. Adequate reliability of the measure of work centrality was reported in the following studies: Cronbach's alpha for work centrality = 0.80 in both Paullay et al.'s (1994) and Diefendorff et al.'s (2002) studies, and one of 0.93 in Carr, Boyar and Gregory's (2008) study. The 8 items that are used to measure work centrality are provided

in Table 4.11.

Table 4.11: Items Used to Measure Work Centrality (WorkCen)

Code	Item
workcen1	The major satisfaction in my life comes from my work
workcen2	The most important things that happen to me involve my work
workcen3	I have few other activities more important than my work
workcen4	Work should be considered a central part of life
workcen5	I would probably keep working even if I didn't need the money
workcen6	My work is a big part of who I am
workcen7	Few things in life are more important to me than my work
workcen8	Overall, I consider work to be very central to my existence

Source: Paullay et al. (1994)

Workaholism

Andreassen et al. (2012a) developed the Bergen Work Addiction Scale, which is a measure of workaholism (WorkA) that is based on the seven core symptoms found in traditional drug addictions, namely, salience, tolerance, mood modification, relapse, withdrawal, conflict, and problems. Andreassen et al.'s (2012a) study demonstrates a relatively high content validity and reliability; factor loadings are all above 0.5 and Cronbach's alpha for two samples are 0.84 and 0.80, respectively. The reason for selecting a workaholism measure that reflects an addiction point of view is that it provides a unidimensional conceptualisation of workaholism and an opportunity to explore whether constructs similar to those found in alcohol and drug addiction are manifested in workaholism. The seven items that are used to measure work centrality are provided in Table 4.12, and Appendix 2 provides details of any adaptations that have been made to the original items.

Table 4.12: Items Used to Measure Workaholism (WorkA)

Code	Item
bwas1	Over the last year, I have been told by others to work less but I ignore them
bwas2	Over the last year, I worked so much that it has negatively influenced my health
bwas3	Over the last year, I have been thinking of how I can free up more time to work
bwas4	Over the last year, I have spent much more time working than I initially intended
bwas5	Over the last year, I worked to reduce feelings of guilt, anxiety, helplessness, and depression
bwas6	Over the last year, I was stressed whenever something stopped me from working
bwas7	Over the last year, I missed out on my hobbies, leisure activities, and exercise because of work

Source: Adapted from Andreassen et al. (2012a)

4.4.7.1 *Common Method Bias*

In designing the questionnaire, the need to reduce common method bias was taken into consideration. Therefore, a few principles were observed, and procedures undertaken. The Bryman & Bell's (2011) principle of designing a questionnaire to ensure greatest possible clarity was followed to reduce respondent confusion and ensure greater response accuracy. Different response formats were designed, and the most appropriate format was selected for the various sections selected. A pilot study was undertaken to further refine the design, and participant anonymity was prioritised in the design where it was maintained from the outset rather than identifying material earlier included and later removed. Anonymity has been shown to decrease evaluation apprehension which can, in turn, reduce common method bias (CMB) (Podsakoff et al., 2003) and increase willingness to supply honest open responses to questions which the inclusion of identifying material (even if only for the opening approach) might otherwise result in self or business protective answers being supplied. The adoption of an electronic format also increases the assurance of anonymity and the likelihood of frank answer being supplied, which may not be the case in face-to-face interviewing or questionnaire administration.

Evidence shows, however, that one of the most common sources of CMB is misunderstandings arising in the response process (i.e., ambiguous items, concepts) (Tourangeau, Rips & Rasinski, 2000). To diminish CMB risk, the questionnaire design follows that proposed by Bryman and Bell (2011). According to Bryman & Bell (2011), when designing a questionnaire, there are several aspects that need to be considered including the clarity of the questions, and the length of the questionnaire and its appearance. First, questions should be clear rather than ambiguous. For example, “I enjoy going to work” can be interpreted as enjoying doing one’s work or enjoying travelling to work. Secondly, questions should not be too lengthy. Thirdly, questions should not be “double-barrelled” (i.e., address more than one issue). For example, “I enjoy working with my supervisor and colleagues” is problematic because an individual might enjoy working with their colleagues but not with their supervisor or vice-versa. In such instances, it is better to create two separate questions: namely, “I enjoy working with my supervisor” and “I enjoy working with my colleagues”. Fourthly, questions should not be leading or loaded. For example, “Do you agree that ...?” Fifthly, questions should not contain jargon or technical terms that may not be understood by all respondents. Sixthly, questions should not require participants to recall information from long ago or that is unlikely to be remembered. For example, “How many times during the last twelve months have you worked overtime?” Finally, questions that elicit socially desirable responses should not be used. For example, “Do you think people with mental health issues should be given additional time off to see their therapists when necessary?” (Bryman & Bell, 2011; Sekaran & Bouchie, 2013).

Lengthy questionnaires can influence not only the willingness of participants to complete the questionnaire but also the quality of their responses. A long questionnaire can place excessive task demands on participants and can result in them becoming tired or bored towards the end of the questionnaire. Consequently, participants might be inclined not to give serious thought to their responses, thereby biasing the data (e.g., affecting validity and reliability) (Collis & Hussey, 2009).

The appearance of a questionnaire can influence the way participants perceive and respond to the questions. A questionnaire can be made to look simple by using an appropriate layout so that the questionnaire looks attractive and tidy. Additionally, providing an introduction and instructions at beginning of the questionnaire can inform participants about the purpose of the questionnaire and help them to navigate their way

through the questionnaire. This is especially important with lengthy questionnaires (Sekaran & Bougie, 2013).

Studies that rely exclusively on a single source and a single response format for a Likert scale (e.g., strongly disagree to strongly agree) are particularly susceptible to common-method variance. Some individuals tend to stay neutral and not express a strong agreement or disagreement with statements, some tend to be extreme in their responses, some tend to agree, and some tend to answer in ways that they perceive are socially desirable (Podsakoff et al., 2003). The data will therefore be systematically biased if a single response format is used for all the variables.

In this study, self-reported data are necessary. The variables in the current model are at the individual level of analysis and are arguably only valid if self-reported. For example, transformational leadership (TFL) involves individualised consideration, which refers to support from the leader that varies according to the needs of each follower. Additionally, TFL involves 'charisma', the nature of which "is in the eye of the beholder". Consequently, TFL behaviours are likely to be perceived and interpreted differently by different followers (Jacobsen & Andersen, 2014). Workaholism is arguably only valid if self-reported because others cannot report on one's feelings of work addiction or withdrawal symptoms when not working. Self-ratings are the most valid and reliable way to assess workaholism because significant others (e.g., supervisors, colleagues, spouses, acquaintances) tend to underestimate the tendency of workaholics to work compulsively (McMillan, O'Driscoll, & Brady, 2004) and because others cannot accurately assess the extent of one's obsessions/compulsions to work. Demographic data (e.g., age, gender, occupation, years reporting to current supervisor) will be collected and these are also self-reported.

To reduce CMB in the current research, different response formats were used in the questionnaire. Because this creates a temporal psychological separation for the participant, it reduces a participant's ability to use earlier answers to respond to later questions (Podsakoff et al., 2003). Thus, for example, in this study a frequency response format was used for transformational leadership ("not at all, once in a while, sometimes, fairly often, and frequently, if not always"). This response format was used in several studies (e.g., Krishnan, 2005; Brown & Trevino, 2006) to measure TFL. However, an agreement response format (i.e., "strongly disagree, disagree, neither disagree or agree,

agree, and strongly agree”) was used for value congruence, identification, and work centrality. Finally, the frequency response format from Andreassen et al. (2012a) was used for workaholism (i.e., “never, rarely, sometimes, usually, and always”). CMB can also be reduced by keeping and decreasing evaluation uneasiness. Consequently, an invitation letter was sent to the participants informing potential participants that participant anonymity and their privacy would be maintained (Podsakoff et al., 2003).

The questionnaire consisted of six parts. The first part contained the items used to measure TFL with respect to the respondent’s immediate supervisor. The second part contained the items used to measure value congruence and identification with their immediate supervisor. The third part contained the items used to measure value congruence and identification with their organisation. The fourth part contained the items used to measure work centrality. The fifth part contained the items used to measure workaholism. The sixth part contained demographic questions. Self-report data was adopted due to the nature of the study (as discussed above), and all the questionnaire items adopted in this study had been found valid and reliable in previous studies. The questionnaire details are presented in Section 4.4.7 and Appendix 3. The questionnaire was designed to reduce the risk of CMB.

A draft of the questionnaire was developed and sent to the principal supervisor for comment. Based on the feedback received from the principal supervisor, the demographic questions were moved from the front to the end of the questionnaire. The reason for this change was the length of the questionnaire, hence, finishing with demographic questions might make it easier for participants. Furthermore, based on the principal supervisor’s feedback, the items used to measure TFL were modified. Even though it was stated clearly at the beginning of this part of the questionnaire that the following items referred to the participant’s immediate supervisor, the words “My immediate supervisor” were added to each of the items to make it clear to participants that the items were referring to their immediate supervisors. For example, the item “Helps me to develop my strengths” was changed to “My immediate supervisor helps me to develop my strengths”.

Pilot Study

A “pilot study” refers to a small-scale, preliminary study which is developed to test whether the research instruments are adequate and to assess whether the full-scale study is feasible (Connelly, 2008). A pilot study was conducted to assess the design of the

questionnaire. It used Survey Monkey. Eight individuals who had agreed to take part in the pilot study were sent an email containing a link to the modified version of the questionnaire. All eight individuals were white-collar professionals (e.g., engineer, marketer, senior manager), fluent in English, and employed on a full-time basis. They were asked to complete the questionnaire and to answer the following three questions: i) how long did it take you to complete the questionnaire?; ii) did any of the questions make you feel uncomfortable?; and iii) were any of the questions not worded clearly or difficult to understand?

The following feedback was received from the eight individuals who participated in the pilot study. First, the time taken to complete the questionnaire ranged from 10 minutes to 25 minutes based on what they had reported and recorded in Survey Monkey. Secondly, none of the individuals reported that answering any of the questions made them feel uncomfortable. Thirdly, some minor changes were made to the design of the questionnaire, and some items were re-worded for clarity. The final version of the questionnaire is provided in Appendix 3.

To summarise briefly, the current study has taken the following steps to minimise CMB: i) The researcher adhered to Bryman and Bell's (2011) principle of designing a questionnaire to ensure clarity and accuracy of the questionnaire to decrease respondent confusion and to reduce CMB; ii) A pilot study was conducted to ensure the research instruments were adequate and to assess if the respondents had difficulties in understanding the questionnaire and to test if a full-scale study was feasible before full-scale data collection commenced; iii) participants' anonymity was maintained to avoid evaluation apprehension and minimise CMB; and iv) the adoption of electronic questionnaire also helped to reduce CMB as it maintains respondent anonymity and thus is more likely to reduce social desirability and CMB.

Data Collection

After the pilot study was conducted using the online questionnaire via Survey Monkey, the participants' comments were reviewed, the questionnaire was revised, refined, finalised, and approved. Full-scale data collection followed. The data collection was authorised to a third-party organisation (Dynata).

However, Dynata used its own software and system for the data collection procedure.

Therefore, they set up the questionnaire in their system based on the instructions given by the Dynata for data collection, namely that the participants needed: to be white-collar professionals, employed on a full-time basis, able to work outside of the workplace; and to have worked with their current immediate supervisor for at least 12 months. The sampling eligibility criteria are presented in Table 4.2. Secondly, the title of the questionnaire was changed from “Workaholism: The dark side of transformational leadership” to the more neutral “Leadership Study” when it was distributed to the participants. The reason for the change was that the thesis title, “Workaholism: ‘The dark side of transformational leadership’”, may influence the way participants perceive and respond to the questions, and thus it might result in a biased sample. Therefore, a more neutral title “Leadership study” was used to reduce CMB. Furthermore, to ensure the data to be more generalisable, the researcher instructed Dynata to recruit participants from various industries. Consequently, the participants come from multiple sectors including construction, education, engineering, finance, health, IT, media, pharmaceutical industry, and telecommunications.

The final data (n=576) were collected by Dynata and sent to the researcher in Excel file format. The data were stored and backed up properly to ensure the privacy of participants, and the maintenance of the confidentiality of the data.

4.5 Data Analysis

This section first provides a discussion on identifying reflectively measured constructs, followed by data analysis which involves sample description in presenting the demographics of the participants. Secondly, the measurement model (e.g., convergent validity, internal reliability, discriminant validity) is assessed to ensure the data are valid and reliable. Thirdly, the structural model is evaluated by following Hair et al.’s (2017) well-structured guide for how data should be analysed. Its five steps comprise: (1) collinearity assessment; and (2) the calculation of (a) the significance of the path coefficient; (b) the degree of the R^2 values; (c) Q^2 — the predictive relevance; and (d) the f^2 effect size and the q^2 effect size using Smart PLS3.

4.5.1 Reflective Measurement Models

It is crucial to distinguish between reflectively and formatively measured constructs before assessing the measurement model (Hair et al., 2014b) because misclassifying these

constructs can bias the structural estimation and jeopardise the parameter estimate (Petter, Straub, & Rai, 2007). Also, they are based on two separate concepts and thus need different assessment approaches. As Hair et al., (2014b, p. 119) notes, “the criteria of statistical assessment for reflective measurement scales cannot be directly applied to formative measurement models”. This section discusses the distinction between two main categories of measurement model: reflective and formative measurement models. Table 4.13 (Panels I and II) provides the differences between reflective and formative constructs.

Table 4.13: Framework of Reflective and Formative Models (Coltman et al., 2008): Panel I

Theoretical Considerations:	Reflective Model	Formative Model	Relevant Literature
1. Nature of Construct	Latent construct exists independent of the measures used.	Latent construct is determined as a combination of its indicators.	Borsboom, Mellenbergh and Van Heerden (2003)
	Causality from construct to items	Causality from items to construct	
2. Direction of causality between items and latent construct	Variation in the construct causes variation in the item measures.	Variation in the construct does not cause variation in the item measures.	Bollen and Lennox (1991) Rossiter (2002) Edwards and Bagozzi (2000)
	Variation in the measures does not cause variation in the construct.	Variation in item measures causes variation in the construct.	
	Items are manifested by the construct.	Items define the construct.	
	Items share a common theme.	Items need not share a common theme.	
3. Characteristics of items used to measure the construct	Variation in item measures does not cause variation in the construct.	Variation in item measures causes variation in the construct.	Rossiter (2002) Jarvis, MacKenzie and Podsakoff (2003)
	Items are interchangeable.	Items are not interchangeable.	
	Items share a common theme.	Items need not share a common theme.	
	Adding or dropping an item does not change the conceptual domain of the construct.	Adding or dropping an item may change the conceptual domain of construct.	

Table 4.13: Framework of Reflective and Formative Models (Coltman et al., 2008): Panel II

Empirical Considerations:	Reflective model	Formative model	Relevant literature
4. Item inter-correlation	Items should have high positive inter-correlation.	Items can have any pattern of inter-correlation but should possess the same directional relationship.	Cronbach (1951) Nunnally and Bernstein (1994)
	Empirical test: internal consistency and reliability assessed via Cronbach's alpha, average variance extracted, and factor loadings.	Empirical test: indicator reliability cannot be assessed empirically; various preliminary analyses are useful to check directionality between items and construct.	Churchill (1979) Diamantopoulos and Siguaw (2006)
5. Item relationships with construct antecedents and consequences	Items have similar sign and significance of relationships with antecedents/consequences as the construct.	Items may not have similar significance of relationships with the antecedents/consequences as the construct.	Bollen and Lennox (1991)
	Empirical test: content validity is established based on theoretical considerations and assessed empirically via convergent and discriminant validity.	Empirical test: nomological validity can be assessed empirically using a MIMIC model, and/or structural linkage with another criterion variable.	Diamantopoulos and Winklhofer (2001) Diamantopoulos and Siguaw (2006)
6. Measurement error and collinearity	Error term in items can be identified.	Error term cannot be identified if the formative measurement model is estimated in isolation.	Bollen and Ting (2000)
	Empirical test: common factor analysis can be used to identify and extract out measurement error.	Empirical test: vanishing tetrad test can be used to determine if the formative items behave as predicted. Collinearity should be ruled out by standard diagnostics such as the condition index.	Diamantopoulos (2006)

Source: Coltman et al. (2008, p. 5)

As depicted in Table 4.13, the main difference between reflective and formative constructs are summarised as follows. In the reflective measurement model, path causality is from construct to indicators, and indicators of a construct share a common theme and are interchangeable. Therefore, dropping or adding an indicator (i.e., an item) from a construct does not affect the concept of the construct. In the formative measurement model, path causality is from items to construct, items do not share a common theme and are not interchangeable. Therefore, dropping or adding any items would change the meaning of the construct (Jarvis et al., 2003). Moreover, the items of a formative construct may not correlate highly because the indicators represent independent causes of the construct. Hence, empirical tests of internal reliability and validity for formative constructs are precluded due to the nature of the formative construct (Diamantopoulos & Winklhofer, 2001). In contrast, the items of a reflective construct are expected to be highly correlated as each item contributes significantly to the meaning of a construct. Additionally, items of a reflective construct are expected to have similar antecedents and consequences whereas items of a formative construct are not expected to have similar antecedents and consequences.

The current study assessed each construct by referring to Coltman et al. (2008, p. 5) as presented in Table 4.13 “The Framework for Reflective and Formative Models” (above) to identify whether the construct is reflective or formative in the proposed conceptual model.

- “Transformational leadership” (TFL) in the current model is a reflective measure with five second-order constructs (i.e., idealised influence — attributes; idealised influence — behaviour; inspirational motivation; intellectual stimulation; and individualised consideration). There are 20 reflective indicators for the first-order construct (TFL).
- “Follower–Leader Value Congruence” (FLVC) in the current model is a first-order latent construct with five reflective indicators.
- “Follower–Organisation Value Congruence” (FOVC) in the current model is a first-order latent construct with five reflective indicators.
- “Personal Identification with the Leader” (PersID) in the current model is a first-order latent construct with five reflective indicators.
- “Social Identification with the Organisation” (SocID) in the current model is a first order latent construct with five reflective indicators.

- “Work Centrality” (WorkCen) in the current model is a first-order latent construct with eight reflective indicators.
- “Work Addiction Scale” (WorkA) in the current model is a first-order latent construct with seven reflective indicators.

All the constructs in this study were identified as reflective constructs for the following reasons: i) the direction of causality for each construct is from construct to indicators, indicators of a construct share a common theme and are interchangeable; and ii) items of the constructs have similar antecedents and consequences. Most importantly, all the constructs in the current model have been studied extensively with measures that have been established and pre-validated and all the constructs were identified as reflective in the previous studies such as TFL in Bass and Avolio’s (1997) study, Kark et al. (2003) and Hoffman et al.’s (2011) study, FLVC and FOVC in Kark et al.’s (2003) study, PersID and SocID in Hoffman et al.’s (2011) study, WorkCen in Paullay et al.’s (1994) study, and WorkA in Andreassen et al.’s (2012a) study.

4.5.2 Data Screening

The data were first subjected to some preliminary analyses. The purpose of these analyses was to ensure there were no obviously incorrect entries such as a “6” for a five-point response format or missing data. No established guidelines exist for the maximum acceptable number of missing or incorrect data for a particular sample size (Tabachnick & Fidell, 2007). One approach is to remove any cases that have incorrect or missing data, provided the sample size is large enough and there is no pattern in the missing data such as females tending not to answer a particular set of items (Sauro, 2015). Descriptive statistics are often used to provide an overview of a sample and its measures. This convention was followed in the current study. For example, frequencies were used for gender whilst the mean, standard deviation, minimum, maximum, and range were used for interval and ratio measures such as overall work centrality scores and age.

4.5.3 Measurement Model Evaluation

Exploratory Factor Analysis (EFA) was performed using the Statistical Package for the Social Sciences (SPSS) to assess the measurement model, including measuring the sampling adequacy, convergent validity, internal reliability, discriminant validity, and common method variance for this study. Partial Least Squares (PLS) modelling was also

employed to assess convergent validity, internal reliability, and discriminant validity (Diamantopoulos & Winklhofer 2001). This is required as items in formative measurement models (such as the one in the current study) do not share a common theme and are not interchangeable, so dropping or adding any item may change the meaning of the construct due to each item contributing significantly to the meaning of a construct (Podsakoff et al., 2003).

4.5.3.1 Exploratory Factor Analysis (EFA)

EFA provides researchers an insight into the underlying structure of the data and the inter-relationship among constructs (Hair, 2006). EFA is often utilised by researchers to achieve data reduction and data summarisation. The purpose of data summarisation is to review data by using factor analysis and interpret more detailed level material at a more generalised level in order for it to be viewed and represented as a collective rather than an individual concept (Hair et al., 2014a). Factor analysis can also be used to explore each factor and the contributions of each construct to the factors by decreasing the numbers of factors to simplify the multivariate analysis. In short, researchers use EFA to access the data and obtain evidence about how many constructs need to be retained to best represent the data (Hair et al., 2014a). EFA has therefore been selected to assess the current study.

In the current study, the measurement model was assessed by EFA using SPSS. EFA assesses the underlying structure of the data and the inter-relationship among constructs (Hair, 2006). First, the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity was used to measure the sampling adequacy. Secondly, EFA was performed to assess discriminant validity (producing a seven-factor solution) to discern whether any of the items of an associated construct were unique in relation to each other. Thirdly, eigenvalues, representing the percentage of variance, were calculated to assess the factors' convergent validity, and the percentage of cumulative level was employed to assess the common method variance for this study. Finally, Cronbach's alpha is the most popular method to measure internal reliability (Chin, 2010) and was selected to assess the current study.

4.5.3.2 Confirmatory Factor Analysis (CFA)

Confirmatory factor analysis (CFA) is a theory-driven technique and is usually used by researchers to assess a priori hypotheses that are based on a theoretical concept about the

relationship between observed data and the underlying latent constructs (Schreiber, 2006; Jackson et al., 2009). CFA is quite similar to some other multivariate statistical methods and is used as an analytical tool to develop, refine the measurement model and ultimately assess construct validity, evaluate the construct invariance (Brown, 2006, cited in Jackson et al., 2009), and also to demonstrate how soundly the measured constructs represent a reduced number of constructs (Hair et al., 2014a).

The measurement model including internal reliability, convergent validity, and discriminant validity was first assessed with EFA, and was tested again with CFA by using Partial Least Squared analysis (SmartPLS3) to ensure the data were valid and reliable before testing the structural model. Refer to Chapter 5.3.2 for CFA testing results.

4.5.4 Structural Equation Modelling (SEM)

Structural Equation Modelling (SEM) is a multivariate statistical analysis method that is used by researchers to conduct factor analysis and multiple regression analysis to examine structural relationships among variables. SEM offers two major features: i) it enables the creation of a model that clearly represents the conceptualised theory of a study, and ii) it validates the variables in the hypothesised model (i.e., the measurement model) and conducts path analysis (i.e., structural model) (Byrne, 2013).

SEM possesses several benefits: i) compared to other multivariate techniques, SEM is regarded as more flexible as it can accommodate various research design and data analysis methods (Kline, 2011). For instance, SEM allows researchers to adopt either an exploratory or confirmatory approach in the factor analysis while analysing the data a priori or posteriori (Byrne, 2006); ii) SEM is rigorous as it takes the estimates error variance into account whilst testing the relationships among the variables (Tomarken & Waller, 2005); iii) it is suitable for experimental or survey research or cross-sectional or longitudinal studies (Bagozzi & Yi, 2012); and iv) as it originated in the area of psychometrics, the SEM measurement model allows researchers to measure the variable that cannot be measured directly. Therefore, SEM is considered one of the most powerful analytical tools for multivariate data. It has been extensively used in many disciplines (e.g., management, psychology, education, marketing research) (Hair et al., 2012). Considering the proposed model for the current study was a survey-based, cross-sectional with multiple mediators, SEM is appropriate for this research.

4.5.4.1 *PLS-SEM*

Variance-based Partial Least Squares - Structural Equation Modelling (PLS-SEM) focuses on prediction (Chin, 1998). It allows researchers to carry out an exploratory analysis and does not require a priori specification (Götz et al., 2010).

PLS-SEM was selected to test the proposed model in this study for several reasons: first, PLS-SEM is especially useful for examining large and complex models (Sanchez, 2013) — the current proposed model is relatively complex with large sample size ($n = 576$) and containing 7 variables. Secondly, PLS can be used for estimating path models with latent constructs that are measured using multiple items (Chin, 1998). The current study uses 20 items to measure “transformational leadership”. Use of PLS-SEM is, therefore, plausible. Thirdly, PLS is more appropriate for the current study as it is prediction-orientated, which fits the goal of the current research in testing the constructs that predict workaholism behaviour among followers. Fourthly, as Hair, Ringle and Sarstedt (2011; p. 144) recommended:

“If the goal is predicting key target constructs or identifying key ‘driver’ constructs, select PLS-SEM.

If the goal is theory testing, theory confirmation, or comparison of alternative theories, select CB-SEM.

If the research is exploratory or an extension of an existing structural theory, select PLS-SEM.”

As discussed, the current research is prediction-orientated, seeking to identify key drivers among those hypothesised. Its aim is to identify the key drivers that render followers more susceptible to workaholism. In addition to that, the current research is an extension of Shamir et al.’s (1993) model. In line with Hair et al.’s (2011) recommendation, PLS-SEM is preferred for an extension of an existing structural theory. Hence, PLS-SEM was adopted as a suitable technique for the current study.

4.5.4.2 *Two-Step Approach: The Evaluation of PLS-SEM*

In PLS, a conceptual model involving latent variables is regarded as consisting of an “outer model” (i.e., measurement model) and an “inner model” (i.e., structural model). The

outer model refers to the measurement model as it specifies the relationships between the latent variables and the items used to measure them. The inner model refers to the theoretical model and specifies the relationships between the latent variables (Chin, 1998). PLS was used to examine both the measurement model and the structural model in the current study.

4.5.4.3 *Measurement Model (Outer Model)*

In addition to EFA which was used to assess the measurement model, PLS was also used to assess the measurement model to ensure the constructs and associated items were validated before the structural model was assessed. This section provides a detailed discussion of the assessment process for both measurement and structural models via PLS.

Hair et al. (2014b) recommends that PLS be employed to examine measurement models including convergent validity, internal reliability, and discriminant validity of all the reflective constructs in the structural model. PLS uses an iterative combination of principal components analysis and multiple linear regression to simultaneously estimate the size and significance of all item loadings and all path coefficients specified in a model and explain the variance of the constructs in that model (Chin, 1998; White, Varadarajan, & Dacin, 2003). Its selection for use in the current study is thus well-based. The assessment of internal reliability, the convergent validity, and discriminant validity is presented as follows.

PLS can be used to assess the internal reliability, convergent validity, and discriminant validity for the reflective constructs in the model (Johnson, Herrmann, & Huber, 2006). PLS assesses internal reliability using composite reliability and Cronbach's alpha (Vinzi, Trinchera, & Amato, 2010). The advantage of using composite reliability (CR) is that, unlike Cronbach's alpha, it is not influenced by the number of items in a measure, and it is based on item loadings obtained from analysis of the structural or outer model (Barosso, Carrion, & Roldan, 2010). A CR / Cronbach's alpha of 0.7 or more indicates acceptable internal reliability (Bernstein & Nunnally, 1994; Vinzi et al., 2010).

“Average variance extracted” (AVE) is used to assess the convergent validity of the items that are used to measure a reflective construct (Götz et al., 2010). The AVE represents the proportion of variance in the items used to measure a construct that is explained by

the construct. In other words, AVE represents the average squared loadings obtained from a principal component analysis and between a construct and its items (Vinzi et al., 2010). The AVE needs to exceed 0.5 for acceptable convergent validity. This indicates that more than half of the variance in the items is explained by the construct (Fornell & Larcker, 1981).

The AVE and the squared correlations between reflective constructs are used to assess the discriminant validity of the measures (Fornell & Larcker, 1981). For acceptable discriminant validity, the AVE of a construct must be greater than the squared correlations between it and all the other constructs in the model (Fornell & Larcker, 1981; Yoon, 2009). Additionally, all items must load higher on their respective constructs than with any other construct in the model; also, all constructs must load higher with their respective items than with any of the items used to measure the other constructs (Chin & Dibbern, 2010).

Given their suitability for use in the current study, the processes here described for SEM (Outer Model) were each undertaken. Below is more information about the processes associated with SEM (Inner Model). Then follows processes also adopted for assessing the current model. These include assessment for collinearity, and calculation of path coefficient (β), coefficient of determination (R^2), predictive relevance (Q^2), and q^2 effect size and f^2 effect size.

4.5.4.4 *Structural Model Evaluation (Inner Model)*

By employing PLS-ESM rather than using the measures of the goodness of fit, the current study assessed the structural model based on heuristic criteria. Those criteria are determined by predictive capacities. Hair et al. (2017) recommends five main criteria to assess the structural model in PLS-SEM. These include collinearity assessment, and calculation of the significance of the path coefficient, the degree of the R^2 values; Q^2 — the predictive relevance. and the f^2 effect — size (Hair et al., 2017). This study follows this five-step procedure to assess the structural model. This process is discussed below.

4.5.4.4.1 *Collinearity Assessment*

This study first assessed the structural model for collinearity. Collinearity refers to the correlation between two or more independent variables (i.e., collinearity and

multicollinearity, respectively). If the correlation coefficient between two independent variables is one (1), it would indicate complete collinearity, whereas if the correlation coefficient between two independent variables is equal to zero (0), it would reflect a complete lack of collinearity (Hair et al., 2014a). Variance inflation factor (VIF) values can be used to assess collinearity for both formative and reflective measurement models. A VIF of five (5) or greater reveals a collinearity problem (Hair et al., 2011a).

4.5.4.4.2 *Path Coefficient (β)*

Secondly, the study assessed the strength of the relationship among hypothesised relationships among variables by obtaining the path coefficient by applying the PLS-SEM algorithm (Hair et al., 2011). The standard value of path coefficients ranges from -1 to +1. A path coefficient value close to +1 indicates a strong positive relationship among variables and vice versa. The closer the coefficient is to zero (0), the weaker the relationship (Hair et al., 2017). Finally, the bootstrap standard error t-value and p-value are used to assess whether the path coefficients are significant or not (Hair et al. 2014b).

4.5.4.4.3 *Coefficient of Determination (R^2)*

Thirdly, the study determined the coefficient of determination (R^2 value) to assess the structural model. It is widely used as “[t]he coefficient represents the exogenous latent variables’ combined effects on the endogenous latent variable. Because the coefficient is the squared correlation of actual and predicted values, it also represents the amount of variance in the endogenous constructs explained by all of the exogenous constructs linked to it” (Hair et al., 2017, p. 175), and R^2 value is an indicator of the predictive accuracy of a model (Fornell & Bookstein, 1982). The values of R^2 ranges from zero (0) to one (1) with lower levels reflecting lower levels of predictive power (Hair et al., 2017). However, it is hard to provide the acceptable values of R^2 , as it may depend on various factors such as research discipline or the complicity of the model. In behavioural science generally, R^2 values of 0.02, 0.15, and 0.35 for an endogenous latent variable can, “as a rule of thumb”, be characterised as weak, moderate, and substantial, respectively (Cohens, 1988), whereas R^2 values of 0.20 are seen as high in the area of consumer behaviour research (Hair et al., 2017).

4.5.4.4.4 *Predictive Relevance (Q²)*

Fourthly, the study sought to assess predictive relevance of the model. Hair et al. (2017) suggest that researchers should, apart from evaluating the magnitude of the R² value (as above), also assess predictive relevance by calculating Stone-Geisser's Predictive Relevance (Q²). Q² is an indicator of the predictive relevance of a model. "More precisely, it accurately predicts the data points of indicators in reflective measurement models of endogenous constructs and endogenous single-item constructs" (Hair et al., 2017, p. 178). A Q² value less than zero indicates that the model lacks predictive relevance, whereas a Q² value greater than zero suggests, as a rule of thumb, that the model has predictive relevance (Chin, 2010). Q² values are obtained by running the 'blindfolding' procedure in SmartPLS3, using an omission distance of 7 (Ringle et al., 2005).

4.5.4.4.5 *q² Effect Size and f² Effect Size*

The q² effect size is used to measure the strength of predictive relevance of an exogenous latent construct on an endogenous construct (Hair et al., 2014b). As a relative measure of predictive relevance, a q² effect size value of 0.35, 0.15, and 0.02 implies a large, medium, and small predictive relevance for a certain endogenous construct, respectively (Hair et al., 2017). The q² effect size can be calculated as follows (Hair et al., 2014b, p. 183):

$$q^2 = \frac{Q^2_{\text{included}} - Q^2_{\text{excluded}}}{1 - Q^2_{\text{included}}}$$

The effect size f² is used to assess how much effect an exogenous construct has on an endogenous construct (Chin, 1998, 2010). "The change in the R² value when a specified exogenous construct is omitted from the model can be used to evaluate whether the omitted construct has a substantive impact on the endogenous constructs" (Hair et al., 2017, p. 177). The f² effect size can be calculated as follows:

$$f^2 = \frac{R^2_{\text{included}} - R^2_{\text{excluded}}}{1 - R^2_{\text{included}}}$$

where R²_{included} and R²_{excluded} are the R² values of the endogenous latent variable when a selected exogenous latent variable is included in or excluded from the model (Hair et al. 2014b, p. 177). An f² effect size of 0.35, 0.15, and 0.02 implies as large, medium, and small f² effect sizes, respectively (Hair et al., 2017).

SmartPLS3 does not have the capacity to automatically produce the values of q²,

consequently, we first obtained the values of Q^2 included and the values of Q^2 excluded and then manually calculated q^2 by the q^2 effect size formula:

$$q^2 = \frac{Q^2_{\text{included}} - Q^2_{\text{excluded}}}{1 - Q^2_{\text{included}}}$$

4.6 Mediating Analysis

A mediating effect is claimed when an intervening construct (i.e., a mediator) intervenes between two other constructs (i.e., independent variable and dependent variable) (Baron & Kenny 1986). “To explain how mediating effect works, let’s assume a path model involves with both direct and indirect effects. A direct effect refers to the relationship between independent variable and dependent variable with a single arrow whereas an indirect effect refers to the relationship in a sequence of two or more direct effects by multiple arrows. This indirect effect is characterised as the mediating effect” (Hair et al., 2016, p. 36). Several sequential mediating effects will need to be tested in the current study. The details are presented in Chapter 5.

4.7 Common Method Bias Assessment

Common-method variance/bias is a source of measurement error that is commonly found in studies that use questionnaires (Podsakoff et al., 2003). Common-method variance (CMV) refers to a source of systematic bias caused by using a common method (e.g., Likert-scale statements) to collect data for different variables. This bias influences the correlations between the variables. CMV can only be eliminated when a different method is used to collect data for each variable or when data are collected from different sources (Podsakoff et al., 2003).

Section 4.4.6 described the procedural remedy adopted to avoid common method bias (CMB) whilst designing the questionnaire prior to data collection. Apart from procedural remedies utilised in the design phase, a statistical remedy will be applied after data has been collected to assess if the current study suffers from CMB. More specifically, Harmon’s single-factor test will be used to assess CMV as recommended by Podsakoff et al. (2003). This test involves conducting a factor analysis on all the items in the measurement model. If all or most of the items load on a single factor, then CMV is an issue (Podsakoff & Organ, 1986). CMV will be assessed by performing EFA in the SPSS.

4.8 Ethical Considerations

When conducting research, there are four essential ethical criteria that need to be addressed: deception, harm to participants, invasion of privacy, and a lack of informed consent (Diener & Crandall, 1978, cited in Bryman & Bell, 2011). To address these issues, an invitation/information letter was provided to potential participants. To ensure that participants are not deceived in any way, the researcher in the letter explains the purpose of the research and what is required from participants. It informs potential participants that (i) participation in the research is entirely voluntary, and that there are no benefits for them if they participate nor any adverse consequences for deciding not to participate; ii) the participants will remain anonymous because personal identifiers will not be recorded; iii) the privacy of participants will be maintained because all of the data collected will be confidential (i.e., other participants or organisations will not have access to the data); and iv) completing the questionnaire will be taken as implied consent. This research was approved by the University of Technology Sydney Human Research Ethics Committee (HREC REF NO. ETH 18-2188). A copy of the invitation/information letter is provided in Appendix 3.

The survey of the current study included all the required information in the ethics application, including the researcher and the supervisory panel's contact information. The third-party organisation, Dynata, agreed to comply with the ethics considerations required by the University of Technology, Sydney, Australia. First, that participation in the research is entirely voluntary, and that there are no benefits for them if they participate nor any adverse consequences for deciding not to participate. Besides, the participant's anonymity has remained because personal identifiers are not recorded. Dynata does not keep any copy of the data once it is sent to the researcher. Furthermore, participants' privacy and confidentiality are guaranteed because no other participants or organisations can access the data. The data storage is managed by the researcher, and strictly complies with the ethics guidelines provided by the University of Technology, Sydney, Australia.

4.9 Conclusion

This chapter has provided a brief discussion of research methodology to justify the chosen research design and research methods adopted. The positivist research paradigm was chosen because the objective of this research was to test several hypotheses that were

combined to create a conceptual model. A cross-sectional explanatory research design and individual level of analysis were chosen. Non-probability sampling (namely convenience, purposive, and self-selection) was selected for use because random sampling was not possible. Primary, self-report, quantitative data were collected using a self-administered, online questionnaire. All selected measures had been validated in previous studies. A five-point Likert scale was used for all items with different response formats for some of the variables to reduce CMV. Some changes were made to the layout of the questionnaire and the wording of some items based on the feedback received from a pilot study. The data were screened prior to descriptive analyses being conducted. The measurement model was tested using SPSS and Smart PLS3, and the structural model was assessed using Smart PLS3. The ethical issues of this research were addressed, and approval for this research was obtained from University of Technology Sydney Human Research Ethics Committee.

CHAPTER 5. DATA ANALYSIS

5.1 Introduction

The purpose of this chapter is to report the findings of the data collected through the research methodology presented in Chapter 3 and provide an analysis of whether the findings support the hypotheses and the conceptual model constructed. SPSS version 25 and SmartPLS 3 were utilised to conduct the data analysis.

This chapter consists of six major sections: Section 5.1 provides an introduction to the chapter. Section 5.2 describes overall sample details (e.g., age, gender, education, years in the current job, and years with the current supervisor) and a brief profile of the respondents. Section 5.3 presents the findings of the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity to check the sampling adequacy before factor analysis. Meanwhile, percentage of variance explained is employed to assess convergent validity, Furthermore, percentage of cumulative level is employed to assess the common method bias (CMB). The measurement model (e.g., internal reliability, convergent validity, discriminant validity) is assessed prior to hypothesis testing. Section 5.4 presents two major remedies (i.e., procedural remedy, statistical remedy) to reduce CMB for the study. Section 5.5 discusses the structural model evaluation, findings of the hypotheses testing, and the overall conceptual model based on the proposed hypotheses by employing Structural Equation Modelling (SEM).

5.2 Sample Description

The sample contains a total of 755 valid respondents who voluntarily agreed to take part in the study. However, 169 participants were unable to work outside of the workplace due to various reasons such as organisational policies or the nature of their work (e.g., receptionist), and as the purpose of this study was to test workaholism, such participants were removed from the study. In addition, 10 participants responded to the whole questionnaire with the same answers, indicating an unwillingness to genuinely participate, i.e., they responded to every question of the full questionnaire with "1". These 10 participants were excluded from the study to reduce the CMB. Hence, the number of participants retained for the study totalled 576.

Table 5.1 provides a demographic profile of the participants. Participants are 44 years old

on average, with an average of 9 years in the current job and approximately 4.5 years on average with the current supervisor. The sample contains 47.1% male and 52.9% female participants. Nearly 60% of the participants hold bachelor's degrees or higher and approximately 70% of the participants work in management positions. The participants come from various industries including construction, education, engineering, finance, health, IT, media, the pharmaceutical sector, and telecommunications.

Table 5.1: Demographic Characteristics of the Sample

Age		Years in current job		Years with your current supervisor	
Mean (SD)		Mean (SD)		Mean (SD)	
44.0 (12.2)		9.1 (8.6)		4.53 (5.1)	
Gender					
Male			Female		
276 (47.1%)			310 (52.9%)		
Highest level of education					
High School	Diploma	Bachelor	Master	Doctorate	
122 (20.8%)	119 (20.3%)	226 (38.6%)	106 (18.1%)	13 (2.2%)	
Level in organisation					
Non-Management	Lower Management	Middle Management	Senior Management	Executive	
118 (32.1%)	100 (17.1%)	188 (32.1%)	75 (12.8%)	35 (6%)	

5.3 Measurement Model

The measurement model was assessed by Exploratory Factor Analysis (EFA), and by Structural Equation Modelling by PLS-SEM. First, EFA was used to assess the underlying structure of the data and the inter-relationship among constructs (Hair, 2006). More specifically, the Kaiser-Meyer-Olkin (KMO) Measure and Bartlett's Test of Sphericity were used to measure sampling adequacy. Meanwhile, eigenvalues, percentage of variance explained, were employed to assess the factors. Furthermore, percentage of cumulative level was employed to assess the common method variance for this study. Secondly, SmartPLS 3 was utilised to assess convergent validity, discriminant validity and internal consistency of the constructs and also used to assess the structural model and conduct path analysis.

5.3.1 Exploratory Factor Analysis (SPSS)

Exploratory Factor Analysis (EFA) provides researchers with an insight into the underlying structure of the data and the inter-relationship among constructs (Hair, 2006). EFA is often utilised by researchers to achieve data reduction and data summarisation (Hair et al., 2014a). In addition, EFA is used by researchers to assess the data and obtain evidence about how many constructs need to be retained to best represent the data. SPSS version 25 was used to conduct EFA to assess sampling adequacy, and suitability of each factor, degree of freedom, and p-value in the following section.

All of the constructs in the current model (i.e., transformational leadership (TFL), follower–leader value congruence (FLVC), follower–organisation value congruence (FOVC), personal identification with the leader (PersID), social identification with the organisation (SocID), work centrality (WorkCen), and Workaholism (WorkA)) were analysed. The exploratory factor analysis demonstrated that some items (e.g., instim1, consid2, PersID5, and workcen5) needed to be removed from the original model to obtain satisfactory measurement results.

5.3.1.1 Kaiser-Meyer-Olkin and Bartlett’s Test of Sphericity

Prior to conducting factor analysis for each factor, a few tests were carried out to assess if the data were suitable for factor analysis including Kaiser-Meyer-Olkin (KMO) (measure of sampling adequacy) and Bartlett’s Test of Sphericity. Constructed on the basis of observations and empirical studies, the KMO index ranges from 0 to 1, with 0.5 or greater is seen as acceptable for factor analysis. Kaiser (1974) suggests that the index of the factorial simplicity is as follows: 0.9 or greater “marvellous”; 0.8–0.89 “meritorious”; 0.7–0.79 “middling”; 0.6–0.69 “mediocre”; 0.5–0.59 “miserable”; and below 0.5 “unacceptable”. The results of Bartlett’s Test of Sphericity are used by researchers to see if there is relationship among variables. If any of the items contributes significantly to the construct, with a p-value of less than 0.05 which is considered statistically significant, it is thus considered suitable for factor analysis (Williams, Onsman, & Brown, 2010).

Table 5.2 provides the KMO Measure and Bartlett’s Test of Sphericity results of all constructs in the study. The overall KMO for each construct are as follows: TFL “0.97”, SocID “0.88”, PersID “0.84”, FLVC “0.90”, FOVC “0.90”, WorkCen “0.91” and WorkA “0.93”. Since the overall KMO values for all constructs are above 0.8, this indicates an

excellent sampling adequacy. The Bartlett's test results of p-value are lower than 0.05, showing the data to be suitable for conducting a factor analysis. The next section will conduct a seven-factor solution analysis via Exploratory Factor Analysis (EFA).

Table 5.2: Each Construct Separately: Results for KMO Measure and Bartlett's Test of Sphericity

Construct	Overall KMO	Bartlett's Test	Degree of Freedom	P-Value
TFL	0.97	8384.62	153	0.000
SocID	0.88	1596.70	10	0.000
PersID	0.84	1379.37	6	0.000
FLVC	0.90	2494.58	10	0.000
FOVC	0.90	2394.27	10	0.000
WorkCen	0.91	2318.32	21	0.000
WorkA	0.93	2518.59	21	0.000

KMO: Measures of Sampling Adequacy (MSA) — Extraction Method: Principal Component Analysis

5.3.1.2 Exploratory Factor Analysis — Seven-Factor Solution

In order to assess discriminant validity of the factors, the 51 items for the measurement of the 7 constructs in the conceptual model were factor analysed using SPSS. Table 5.3 presents the value of KMO Measure of Sampling Adequacy:0.97, p-value = 0.000, an approximate chi-square of 25063, and a degree of freedom of 1275. The results indicate the Bartlett's Test of Sphericity is statistically significant, and items of the constructs are correlated among each other, which is an indication of high suitability to conduct EFA for a seven-factor analysis.

Table 5.3: All Constructs Together: Results of KMO Measure and Bartlett’s Test of Sphericity

KMO and Bartlett’s Test of Sphericity		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.968
	Approx. Chi-Square	25063.83
Bartlett’s Test of Sphericity	Df	1275
	Sig.	0

Extraction Method: Principal Component Analysis

Table 5.4 reports the results of Explanatory Factor Analysis (EFA) of seven-factor output of all constructs which include percentage of variance explained and cumulative percentage. A principal components analysis was used to assess if construct items are strongly loaded on one factor. This test involved conducting a factor analysis on all the items in the measurement model. If all or most of the items load on a single factor, then CMB may be an issue (Podsakoff & Organ, 1986). As a rule of thumb, if the percentage of variance explained by the first fixed factor is above 50%, that is indicative of potential CMB (Podsakoff et al., 2003). (See also Section 5.4 for a more detailed discussion on CMB.) Table 5.4 contains results indicating that the first factor TFL explains 39.47% of the total variance. This is well below 50%, whereas the remaining factors SocID, PersID, FLVC, FOVC, WorkCen and WorkA account for 31.35% of the total variance, thereby indicating the CMB is not a major concern for this study. Thus, all the factors can be retained for further analysis.

Table 5.4: EFA: Total Variance Explained of All Constructs

Construct	% of Variance Explained	Cumulative %
TFL	39.47	39.47
SocID	12.73	52.20
PersID	7.91	60.11
FLVC	3.99	64.10
FOVC	3.26	67.36
WorkCen	1.78	69.14
WorkA	1.68	70.82

EFA - Extraction Method: Principal Component Analysis

5.3.1.3 *Exploratory Factor Analysis for Each Construct*

EFA was conducted on seven constructs to examine the relationship between items and each construct to assess the convergent validity and dimensionality of the items to ultimately review the number of factors and factor loadings based on percentage of variance explained and cumulative values (Hair et al., 2014a). This section will discuss the analysis results for each construct.

Based on Kaiser's (1974) criteria, the KMO index ranges between 0 to 1, with 0.5 or greater seen as acceptable for factor analysis. In addition, factor loadings are used by researchers to determine the relationship between items and constructs. The general rule of thumb for factor loadings is that a value of 0.3 or greater is regarded as the minimal acceptable level, and a value of 0.5 or greater is considered statistically significant (Hair et al., 2014a).

Appendix 4 provides the results for individual KMO and factor loadings of all constructs in the study. As it shows, all the items for individual KMO are greater than 0.5 which is adequate for factor analysis. Likewise, the factor loadings for all items are greater than 0.6, which reflects a well-defined structure and is ideal for any further analysis (Hair et al., 2014a). The findings of the reliability analysis are presented in the next section.

5.3.1.4 *Reliability Analysis (EFA)*

Peter (1979, p. 6) defines reliability as “the degree to which measures are free from error and therefore yield consistent results”. Hair et. al. (2014a, p. 123) describe reliability as “an assessment of the degree of consistency between multiple measurements of a variable”. There are several methods of testing internal consistency reliability; however, the most popular method is Cronbach's alpha (Cronbach, 1951). Cronbach's alpha ranges from zero to one, a higher value of Cronbach's alpha indicates better internal consistency and degree of reliability. Nunnally (1967, p. 226) suggests a “minimum level of coefficient alpha of 0.5 to 0.6 for preliminary research, 0.7 or higher for strategic management research, 0.8 for basic research and 0.9 to 0.95 for applied research”.

5.3.1.5 *Reliability Results for All Constructs (EFA)*

SPSS version 25 was utilised to conduct reliability analysis to examine scale reliability and consistency of the various items in the measure. Table 5.5 provides the reliability

results of all constructs in the study. As depicted in Table 5.5, all the values of Cronbach’s alpha are greater than the cut-off of 0.7. For example, the value of Cronbach’s alpha for “SocID” construct ($\alpha = 0.89$) has shown the lowest level among all constructs whereas TFL ($\alpha = 0.96$) demonstrates the strongest results. As all constructs are greater than 0.7, it can, therefore, be concluded that all constructs have satisfactory internal reliability.

Table 5.5: Reliability Results for All Constructs

Construct	Cronbach’s Alpha	Number of Items
Transformational Leadership	0.96	18
Follower–Leader Value Congruence	0.94	5
Follower–Organisation Value Congruence	0.94	5
Personal Identification with the Leader	0.90	4
Social Identification with the Organisation	0.89	5
Work Centrality	0.91	7
Workaholism	0.92	7

5.3.1.6 Reliability Results for Each Construct (EFA)

Despite the above overall reliability, with results showing that all constructs have reached the acceptable level of reliability, it is still necessary to check the reliability results for each construct to further assess the contribution of items to each construct to ensure each single item contributes significantly to the overall measure. First, “Item-Total Correlation” will be calculated which measures multi-item scales and correlation between each item, and thus is crucial in testing reliability results for each construct. The cut-off point is 0.5 for each item. In addition, it is also worth checking the value of “Cronbach’s Alpha if Item Deleted”, for any items contributes positively to the construct, that the overall value of Cronbach’s alpha is decreased if the item is removed from the construct.

Appendix 5 shows the reliability analysis for each construct; all items under “Item-Total Correlation” exceed cut-off point 0.5. The Cronbach’s alpha (α) achieved for all items indicates a satisfactory level of reliability. In addition, for the “Cronbach’s Alpha if Item Deleted”, if the item positively contributes to the construct is deleted, the overall reliability values will be reduced. Take the TFL construct for example, with its overall reliability $\alpha = 0.96$, if one of the items is deleted, the overall reliability is unable to reach 0.96 and thus no item is necessary to be deleted to increase internal consistency. Appendix

5 demonstrates that no item needs to be deleted for TFL, FOVC, FLVC, PersID, SocID, WorkCen and WorkA constructs. Please refer to Appendix 5 for details.

5.3.2 *Confirmatory Factor Analysis (SmartPLS)*

Partial Least Squares (PLS) analysis is selected to assess the measurement model (e.g., the outer model) and structural model (e.g., the inner model). PLS is especially useful for examining large and complex models (Sanchez, 2013) such as the conceptual model in this research. The current conceptual model consists of one independent variable (i.e., transformational leadership), five mediator variables (i.e., person–leader value congruence, person–organisation value congruence, personal identification, social identification, and work centrality), and one dependent variable (i.e., workaholism). It is considered a relatively large and complex model. The following section focuses on examining the measurement model.

5.3.2.1 *Evaluation of the Measurement Model*

As discussed in Chapter 4, all seven constructs in the proposed model are classified as reflectively measured constructs. To examine the reliability and validity of the measures in this study, the measurement model was first tested with Exploratory Factor Analysis using IBM SPSS software. Additionally, the measurement model including internal reliability, convergent validity, and discriminant validity, was tested again with Confirmatory Factor Analysis (CFA) using Partial Least Squared analysis (PLS Smart3) (CFA is incorporated in PLS3 tool) to ensure the data were valid and reliable before testing the structural model. Hair et al. (2014b) evaluate reflective measurement models focusing on a few perspectives, including internal consistency (e.g., composite reliability, Cronbach’s alpha), convergent validity (e.g., loadings, AVE), and discriminant validity (e.g., the squared AVE and correlations matrix, cross loadings). This study follows the above-mentioned approach which was recommended by Hair et al. (2014b).

5.3.2.1.1 *Internal Reliability*

Kline (2011, p. 69) defines internal consistency / reliability as “the extent to which responses are consistent across the items within a measure”. Composite reliability (CR) is similar to Cronbach’s alpha, as it can be used to assess internal reliability (Vinzi, Trinchera, & Amato, 2010). The advantage of using CR is that, unlike Cronbach’s alpha,

it is not influenced by the number of items in a measure, and it is based on item loadings obtained from analysis of the structural or outer model (Barosso, Carrion, & Roldan, 2010). The value of CR and Cronbach's alpha should be greater than 0.7 to indicate satisfactory internal reliability (Bernstein & Nunnally, 1994; Vinzi et al., 2010). This study assesses the internal reliability by assessing both CR and Cronbach's alpha. CFA is performed using SmartPLS3. The CR formula is as follows:

$$CR = \frac{(\sum \text{loadings})^2}{\{(\sum \text{loadings})^2 + \sum \text{indicator measurement error}\}}$$

Table 5.6 provides the findings of Cronbach alpha and CR for all the constructs. As shown, all the reflective values of Cronbach alpha and CR are well above threshold of 0.7. It can be, therefore, confirmed that all the measures have achieved satisfactory internal reliability.

Table 5.6: Cronbach's Alpha and Composite Reliabilities (CR)

Latent Construct	Cronbach's Alpha	CR
Transformational Leadership	0.96	0.97
Follower–Leader Value Congruence	0.94	0.95
Follower–Organisation Value Congruence	0.94	0.95
Personal Identification, Social Identification	0.90	0.93
Work Centrality	0.89	0.92
Workaholism	0.91	0.93
	0.92	0.94

5.3.2.1.2 *Convergent Validity*

Convergent validity refers to the items of a variable with a shared amount of variance (Hair, 2006). Both outer loadings and AVE are used to assess the convergent validity of the items used to measure a construct (Götz et al., 2010). To assess convergent validity, researchers should consider assessing the outer loadings as well as the average variance extracted (AVE) because high outer loading for a reflective construct shows the respective indicators that have much in common. The general rule of thumb is that the outer loading needs to be 0.7 or higher for acceptable convergent validity (Hair et al., 2014b). Additionally, the AVE represents the proportion of variance in the items used to measure a construct that is explained by the construct. In other words, the AVE represents

the average squared loadings obtained from a principal component's analysis and between a construct and its items (Vinzi et al., 2010). The AVE needs to exceed 0.5 for acceptable convergent validity, which indicates more than half of the variance in the items is explained by the construct (Fornell & Larcker, 1981). CFA is performed using SmartPLS3

Appendix 6 provides the indicators, outer loadings, means, standard deviations, t-values and p-values for the reflective constructs in the proposed model. Note that the values for three outer loadings are below cut-off threshold 0.7 (e.g., instim1 = 0.606, consid2 = 0.692, wc5 = 0.679), and they are therefore removed from the study, and remaining indicators that are loaded significantly on each latent construct, with their loadings above 0.7, and with significant p-values and t-values. This indicates satisfactory convergent validity.

Table 5.7 provides the results of AVE for each reflective latent construct. As shown, all the AVE of the reflective constructs are well above the threshold of 0.5. As presented in Appendix 6, the results confirm that all the indicators have met the requirement of convergent validity. Please refer to Appendix 6 for details.

Table 5.7: Average Variance Extracted (AVE) for the Reflective Constructs

Latent Construct	AVE
TFL	0.62
FLVC	0.81
FOVC	0.80
PersID	0.76
SocID	0.70
WorkCen	0.64
WorkA	0.67

5.3.2.1.3 *Discriminant Validity*

According to Hair et al. (2014a, p. 619), “discriminant validity is the extent to which a construct is truly distinct from other constructs. Thus, high discriminant validity provides evidence that a construct is unique and captures some phenomena other measures do not”. Discriminant validity is established when a measure is not correlated to measures of constructs that it is not expected to be correlated to, based on theory (Sekaran & Bougie, 2013).

The AVE and the squared correlations between constructs were used to assess the discriminant validity of the measures (Fornell & Larcker, 1981). CFA is performed using Smart PLS3 Algorithm to evaluate the discriminant validity in the measurement model. For acceptable discriminant validity, the AVE of a construct must be greater than the squared correlations between it and all the other constructs in the model (Fornell & Larcker, 1981; Yoon, 2009). Additionally, all items must load higher on their respective constructs than with any other construct in the model (Chin & Dibbern, 2010). Table 5.8 presents the squared root of AVE and correlations matrix for each latent construct.

As shown, the squared root of AVE of each reflective construct is larger than all its correlations with other latent constructs, thus proving that all the latent constructs have acceptable discriminant validity.

Table 5.8: Correlations and Squared AVE for Constructs

Construct	TFL	FLVC	FOVC	PersID	SocID	WorkCen	WorkA
1. TFL	0.788						
2. FLVC	0.749	0.898					
3. FOVC	0.493	0.604	0.892				
4. PersID	0.753	0.850	0.565	0.873			
5. SocID	0.467	0.551	0.827	0.584	0.836		
6. WorkCen	0.288	0.315	0.487	0.407	0.555	0.803	
7. WorkA	0.096	0.098	0.126	0.212	0.201	0.433	0.821

Note: The square root of AVE values is displayed in bold on the diagonal (reflective constructs only); nondiagonal elements are the latent construct correlations.

TFL = Transformational Leadership, FLVC = Follower-Leader Value Congruence, FOVC = Follower-Organisation Value Congruence, PersID = Personal Identification, SocID = Social Identification, WorkCen = Work Centrality, and WorkA = Workaholism.

Cross loadings are the second approach to check the discriminant validity. If the indicators of the outer loadings on the associated latent construct are greater than their correlation with the other latent constructs in the model, the discriminant validity is established (Chin, 1998).

Appendix 7 provides the cross-loadings for each latent construct and the indicators that are used to assess the other latent constructs. As shown, the outer loadings of each indicator are larger than it is with any other latent constructs. Based on the evidence, it can be thus claimed that all the latent constructs have acceptable discriminant validity. Please refer to Appendix 7 for details.

5.4 Common Method Bias (CMB)

According to Podsakoff et al. (2003, p. 879), “method bias or method variance refers to variance that is attributable to the measurement method rather than to the construct of interest”. Common Method Bias (CMB) is a source of systematic bias caused by using a common method to gather information. Measurement error caused by CMB is commonly found in studies that use questionnaires (Podsakoff et al., 2003). For instance, studies that rely exclusively on a single source and a single response format for a Likert scale (e.g., strongly disagree to strongly agree) are particularly susceptible to common-method variance (*please see Chapter 4.4.6 which covers rating scales; Table 4.5 specifies rating scales that are used to measure each construct for the current study*). Some individuals tend to stay neutral and not express strong agreement or disagreement with statements, while some tend to be extreme in their responses, and some tend to agree, and others tend to answer in ways that they perceive are socially desirable (Podsakoff et al., 2003). The data therefore may be likely to be systematically biased if a single response format is used for all the variables.

CMB can be problematic. The empirical evidence shows that CMB can cause significant measurement error which is likely to jeopardise the construct validity and reliability. Additionally, CMB could also “bias” parameter estimates of the relationships between constructs, as it could lead to the inflation, deflation, or no effect between the constructs (MacKenzie & Podsakoff, 2012; Chang, Witteloostuijn & Eden, 2010).

The current study involved collecting data using a self-report questionnaire and a single source method for all the constructs. Therefore, it may be susceptible to CMB.

Nevertheless, CMB can be eliminated if the proper remedies are provided. There were two major types of remedies, namely, procedural and statistical remedies that were conducted to diminish the risk of CMB in the current study.

Procedural Remedy

There are several procedural remedies that were used to reduce CMB in this study, as suggested by Podsakoff et al. (2003), that is, maintaining participant anonymity and decreasing evaluation apprehension. Accordingly, an invitation letter was sent to the participants that informed potential participants that: i) participants remain anonymous because personal identifiers are not recorded; ii) the privacy of participants is maintained because all of the data collected is confidential; iii) there is no right or wrong answer and they should answer the questions as honestly as possible; and iv) participation in the research is entirely voluntary and that there are no benefits for them if they participate nor any adverse consequences for deciding not to participate. By sending such a letter, it is hoped that respondents are honest in their answers rather than editing their answers to appear socially desirable (e.g., culturally acceptable) or to be consistent with how they perceive the researcher wanting them to answer. The invitation letter is provided in Appendix 3.

Another procedure to reduce CMB is to utilise different response formats in the questionnaire design. Using different response formats can help to reduce CMB because it creates a temporal psychological separation for the participant; also, it reduces the participant's ability to use the earlier answer to respond to the questions (Podsakoff et al., 2003). Accordingly, a frequency response format is used for transformational leadership (not at all, once in a while, sometimes, fairly often, and frequently, if not always) while an agreement response format is used for value congruence, identification, work centrality (i.e., strongly disagree, disagree, neither disagree or agree, agree, and strongly agree). Finally, the frequency response format from Andreassen et al. (2012a) is used for workaholism (i.e., never, rarely, sometimes, usually, and always).

Additionally, CMB can be reduced by improving scale items and constructing effective questions, as proposed by Podsakoff, MacKenzie and Podsakoff (2012). Evidence shows one of the most common issues of CMB concerns understanding the response process (i.e., ambiguous items, concept) (Tourangeau et al., 2000). To minimise the risk of CMB, this study follows the questionnaire design proposed by Bryman and Bell (2011). First,

questions should be clear. Secondly, questions should not be too lengthy. Thirdly, questions should not be “double-barrelled” (i.e., addresses more than one issue). Fourthly, questions should not be leading or loaded. For example, “Do you agree that ...?”. Fifthly, questions should not contain jargon or technical terms. Sixthly, questions should not require participants to recall information from long ago or that is unlikely to be remembered. Finally, questions that elicit socially desirable responses should not be used. (Bryman & Bell, 2011; Sekaran & Bougie, 2013).

Statistical Remedy

Apart from the use of procedural remedies to reduce the risk of CMB when designing the questionnaire, CMB can also be assessed by statistical remedy after the data is collected, this section discusses statistical remedy.

After the data were collected, it was noticed there were 10 participants who responded to the whole questionnaire with the same answers (such as responding to every question with “1”). Those 10 participants were excluded from the study to reduce the CMB.

In addition, Harmon’s single-factor test was used to assess common-method variance as recommended by Podsakoff et al. (2003). This test involved conducting a factor analysis on all the items in the measurement model. As a rule of thumb, if the first fixed factor is above 50%, that is an indicative of potential CMB (Podsakoff et al., 2003). A principal components analysis via SPSS 25 was used to assess if they were strongly loaded on one factor. Table 5.4 contains results indicating that the first factor TFL explains 39.47% of the total variance, that is well below 50%, thereby suggesting the common method bias/variance is not a major concern for the current study.

5.5 Structural Model Evaluation

Partial Least Squares – Structural Equation Modelling (PLS-SEM) assesses the structural model based on heuristic criteria rather than using the measures of “goodness-of-fit”. Those criteria are determined by the predictive capacities. Hair et al. (2017) recommends five main criteria to assess the structural model in PLS-SEM including i) collinearity assessment; ii) the significance of the path coefficient; iii) the level of the R^2 values; iv) Q^2 — the predictive relevance; and v) the f^2 effect size (Hair et al., 2017). This study focuses on the five-step procedure to assess the structural model, which is discussed in the following section.

5.5.1 Collinearity Assessment (Step 1)

Collinearity refers to the correlation between two independent variables (i.e., collinearity) or more independent variables (i.e., multicollinearity). If the correlation coefficient between two independent variables is one (1), it is an indication of complete collinearity. Conversely, if the correlation coefficient between two independent variables is equal to zero (0), it reflects a complete lack of collinearity (Hair et al., 2014a). A variance inflation factor (VIF) value was employed to assess collinearity for the current models. A VIF value of 5 or greater reveals a collinearity problem (Hair et al., 2011a).

Smart PLS3 Algorithm was utilised to assess the collinearity in the structural model. Appendix 8 presents the VIF values of each indicator. As shown, all the values in the model are less than 5. It is thus proved that all the indicators have satisfactory collinearity. Please refer to Appendix 8 for details.

5.5.2 Findings of the Path Coefficient (β) — Direct Effect (Step 2)

Table 5.9 provides the findings for the direct effects of the overall model using Smart PLS3 Bootstrapping. Specifically, it presents sample, mean, standard deviation, path coefficient, t-value, p-value, and confidence interval for each path using the bootstrapping approach. As shown, all the hypotheses below are statistically significant apart from H5a and H8a.

Table 5.9: Findings of the Hypotheses Testing — Direct Effects

Hypothesis	Path Relationship	Sample (O)	Mean (M)	Standard Deviation (SD)	t-value	p-value	95% of Confidence Interval		Outcome
							2.50%	97.50%	
H1a	TFL → FLVC	0.749	0.749	0.022	33.840	0.000	0.701	0.788	Supported
H1b	TFL → FOVC	0.493	0.495	0.038	12.932	0.000	0.411	0.561	Supported
H2a	TFL → PersID	0.265	0.265	0.034	7.784	0.000	0.202	0.335	Supported
H2b	TFL → SocID	0.078	0.080	0.028	2.842	0.005	0.024	0.132	Supported
H3a	FLVC → PersID	0.652	0.652	0.033	19.738	0.000	0.581	0.712	Supported
H3b	FOVC → SocID	0.788	0.787	0.024	32.961	0.000	0.737	0.832	Supported
H5a	TFL → WorkCen	-0.076	-0.077	0.053	1.449	0.148	-0.185	0.026	Not supported
H6a	PersID → WorkCen	0.182	0.184	0.061	2.986	0.003	0.066	0.300	Supported
H6b	SocID → WorkCen	0.482	0.480	0.040	11.975	0.000	0.399	0.560	Supported
H7a	WorkCen → WorkA	0.443	0.447	0.037	12.015	0.000	0.359	0.510	Supported
H8a	TFL → WorkA	-0.032	-0.033	0.043	0.739	0.460	-0.113	0.061	Not supported

TFL = Transformational Leadership, FLVC = Follower-Leader Value Congruence, FOVC = Follower-Organisation Value Congruence, PersID = Personal Identification with the Leader, SocID = Social Identification with the Organisation, WorkCen = Work Centrality and WorkA = Workaholism. ns= non-significant, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

The findings of the direct effects from Table 5.9 are summarised as follows (please also refer to Section 5.5.8 for full details of hypothesis testing results):

- i) Transformational leadership is the strongest predictor of follower–leader value congruence (H1a).
- ii) Transformational leadership has a strong effect on follower–organisation value congruence (H1b).
- iii) Transformational leadership has positive effects on personal identification with the leader (H2a).
- iv) Transformational leadership also has positive effects on social identification with the organisation (H2b).
- v) There is no relationship between transformational leadership and work centrality among followers (H5a).
- vi) Follower–leader value congruence has profound effects on personal identification with the leader (H3a).
- vii) Follower–organisation value congruence is the strongest predictor of social identification with the organisation (H3b).
- viii) Personal identification has positive effects on work centrality among followers (6a).
- ix) Social identification has strong positive effects on work centrality among followers (H6b).
- x) Work centrality among followers positively affects workaholism among followers (H7a).
- xi) Transformational leadership does not have a direct positive effect on workaholism among followers (H8a).

5.5.3 Findings for the Coefficient of Determination (R^2) (Step 3)

The coefficient of determination (R^2 value) is widely used to assess the structural model. “ R^2 value represents the amount of the variance in the endogenous latent constructs explained by all of the exogenous latent constructs that associated to it” (Hair et al., 2017, p. 175), and R^2 value is an indicator of the predictive accuracy of a model (Fornell & Bookstein, 1982). The values of R^2 ranges from zero (0) to one (1) with lower levels reflecting lower levels of the predictive power (Hair et al., 2017). However, it is hard to provide the acceptable values of R^2 , as it may depend on various factors such as research

disciplines or the complexities of the model. In behavioural sciences, R^2 values of 0.02, 0.15, and 0.35 for an endogenous latent variable can be described as weak, moderate, and substantial respectively as a rule of thumb (Cohens, 1988).

Table 5.10 provides the R^2 values of the various constructs. The R^2 value for follower–leader value congruence is 0.56, R^2 value for follower–organisation value congruence is 0.24, R^2 value for personal identification with the leader is 0.75, R^2 value for social identification with the organisation is 0.69, R^2 value for work centrality is 0.32, and R^2 value for workaholism is 0.19. The R^2 value for all the latent constructs is well above the cut-off threshold of 0.15 for moderate level of predictive accuracy. “Average variance accounted for” (AVA or average R^2) is another approach to explain the predictive power / accuracy of a model (Fornell & Bookstein, 1982). The cut-off threshold of an AVA or average R^2 is 0.10 (Falk & Miller, 1992). The AVA or the average R^2 for the current model is 0.46, which is well above the acceptable cut-off threshold. The findings of R^2 demonstrate the proposed model has a relatively strong predictive accuracy.

Table 5.10: Findings of the Coefficient of Determination (R^2)

Latent Construct	R^2
Follower–Leader Value Congruence (FLVC)	0.56
Follower–Organisation Value Congruence (FOVC)	0.24
Personal Identification with the Leader (PersID)	0.75
Social Identification with the Organisation (SocID)	0.69
Work Centrality (WorkCen)	0.32
Workaholism (WorkA)	0.19

5.5.4 Findings for the Predictive Relevance (Q^2) (Step 4)

Apart from evaluation the magnitude of R^2 value, Hair et al. (2017) suggested that researchers should also assess Stone-Geisser’s Predictive Relevance (Q^2). Q^2 is an indicator of the predictive relevance of a model. “More precisely, it accurately predicts the data points of indicators in reflective measurement models of endogenous constructs and endogenous single-item constructs” (Hair et al., 2017, p. 178). A Q^2 value of less than zero indicates that the model lacks predictive relevance, whereas a Q^2 value greater than zero suggests that the model has predictive relevance as a rule of thumb (Chin, 2010). Q^2 values are obtained by running the ‘blindfolding’ procedure in SmartPLS3, using an

omission distance of 7 (Ringle et al., 2005).

Table 5.11 provides the Q² for the various constructs. The Q² value for follower–leader value congruence is 0.45, Q² value for follower–organisation value congruence is 0.19, Q² value for personal identification with the leader is 0.57, Q² value for social identification with the organisation is 0.47, Q² value for work centrality is 0.20, and Q² value for workaholism is 0.12. The findings suggest that the proposal model has a satisfactory predictive relevance.

Table 5.11: Findings for the Predictive Relevance (Q²) — Reflective Constructs

Latent Construct	Q ²
Follower–Leader Value Congruence (FLVC)	0.45
Follower–Organisation Value Congruence (FOVC)	0.19
Personal Identification with the Leader (PersID)	0.57
Social Identification with the Organisation (SocID)	0.47
Work Centrality (WorkCen)	0.20
Workaholism (WorkA)	0.12

5.5.5 Findings of the q² Effect Size and f² Effect Size (Step 5)

As discussed in Section 5.5, this study will follow a five-step procedure to evaluate the structural model. Collinearity, significance of path coefficients of determination (R²), and the predictive relevance (Q²) of the model have been assessed. This section evaluates the q² effect size and f² effect size.

The q² effect size is used to measure the strength of predictive relevance of an exogenous latent construct on an endogenous construct (Hair et al., 2014b). As a relative measure of predictive relevance, a q² effect size value of 0.35, 0.15, and 0.02 implies a large, medium, and small predictive relevance, respectively, for a certain endogenous construct (Hair et al., 2017).

The q² effect size can be calculated as follows (Hair et al., 2014b, p. 183):

$$q^2 = \frac{Q^2_{\text{included}} - Q^2_{\text{excluded}}}{1 - Q^2_{\text{included}}}$$

The effect size f² is used to assess how much effect an exogenous construct has on an

endogenous construct (Chin, 1998, 2010). “The change in the R² value when a specified exogenous construct is omitted from the model can be used to evaluate whether the omitted construct has a substantive impact on the endogenous constructs” (Hair et al., 2017, p. 177). The f² effect size can be calculated as follows:

$$f^2 = \frac{R^2_{\text{included}} - R^2_{\text{excluded}}}{1 - R^2_{\text{included}}}$$

Where R²_{included} and R²_{excluded} are the R² values of the endogenous latent variable when a selected exogenous latent variable is included in or excluded from the model (Hair et al. 2014b, p. 177). An f² effect size of 0.35, 0.15, and 0.02 implies large, medium, and small f² effect sizes, respectively (Hair et al., 2017).

SmartPLS3 does not have the capacity to automatically produce the values of q²; consequently, we obtained the values of Q²_{included} and the values of Q²_{excluded} and then manually calculate q² by the q² effect size formula:

$$q^2 = \frac{Q^2_{\text{included}} - Q^2_{\text{excluded}}}{1 - Q^2_{\text{included}}}$$

For instance, to compute the q² for an independent variable “follower–leader value congruence (FLVC)” and dependent variable “personal identification with the leader (PersID)” in the model., we performed the steps as follows: First, we obtained the value of Q²_{included} (0.565) by running the full model through SmartPLS 3 Blindfolding Algorithm; secondly, we excluded the construct “follower–leader value congruence (FLVC)” in the model and ran PLS Blindfolding Algorithm again to obtain the Q²_{excluded} value of 0.422; finally, q² was computed as (0.565-0.423) / (1-0.565) = 0.33. Each of the values of q² was obtained by using the same procedure in Table 5.16.

The effect size f² values were obtained by running the SmartPLS Algorithm (Ringle et al., 2015). The resultant f² values were then extracted from the SmartPLS report and presented in Table 5.12.

Table 5.12: Findings of f^2 Value and q^2 Value

Path Relationship	Path Coefficient	q^2	f^2
TFL → FLVC	0.75	0.80	1.27
TFL → FOVC	0.49	0.24	0.32
TFL → PersID	0.27	0.05	0.13
TFL → SocID	0.08	0.01	0.02
FLVC → PersID	0.65	0.33	0.76
FOVC → SocID	0.79	0.62	1.51
TFL → WorkCen	-0.08	0.00	0.00
PersID → WorkCen	0.18	0.01	0.02
SocID → WorkCen	0.48	0.12	0.23
WorkCen → WorkA	0.44	0.13	0.22
TFL → WorkA	-0.03	0.00	0.00

Table 5.12 summarises the findings of f^2 value and q^2 value. The figures reveal that:

- i) Transformational leadership (TFL) has a strong effect as well as a strong predictive relevance on follower–leader value congruence (FLVC), and TFL has a significant impact and a medium predictive relevance on follower–organisation value congruence (FOVC);
- ii) TFL is found to have a small effect and small predictive relevance on personal identification with the leader (PersID) and on social identification with the organisation (SocID);
- iii) FLVC has a relatively significant effect and a strong predictive relevance on PersID;
- iv) FOVC has a strong effect as well as a strong predictive relevance on SocID;
- v) there is no effect and weak predictive relevance between TFL and work centrality among followers (WorkCen);
- vi) PersID has a small effect and small predictive relevance on WorkCen;
- vii) SocID has positive impact as well as medium predictive relevance on WorkCen;
- viii) WorkCen is found to have a positive effect and medium predictive relevance on workaholism among followers (WorkA); and
- ix) TFL is found to have a negative effect and a weak predictive relevance on WorkA among followers.

5.5.6 Statistical Power Assessment

As discussed in Chapter 4, a minimum sample size of 110 observations is sought to meet the minimum sample size requirement based on Barclay et al.'s (1995) "ten times" guideline. However, a perusal of previous similar studies revealed that a sample of approximately 500 (n=500) is generally used. The sample size for the current study reached 576, larger than minimum required size and similar in size to those in the previous studies. To ensure the adequate power of the data analysis, this study conducted statistical power tests using G*Power software to calculate if the data for the current study could achieve 80% of the required statistical power with a 5% (0.05) significance level (Hair et al., 2014b). As can be seen from Table 5.13, apart from the two insignificant path relationships due to small effect sizes, all the tests for the remaining nine hypothesised direct effects achieved the commonly required statistical power of 80% (Hair et al., 2004b).

Table 5.13: Statistical Power for the Hypotheses

Path Relationship	Path Coefficient	No. of Predictors	Effect Size f^2	Significance Level	Sample Size	Statistical Power
TFL > FLVC	0.749	1	1.2741328	0.05	576	100%
TFL > FOVC	0.493	1	0.3210697	0.05	576	100%
TFL > PersID	0.265	2	0.1253908	0.05	576	100%
FLVC > PersID	0.652	2	0.7584185	0.05	576	100%
TFL > SocID	0.079	2	0.0150937	0.05	576	84%
FOVC > SocID	0.789	2	1.5145116	0.05	576	100%
TFL > WorkCen	-0.075	3	0.0035408	0.05	576	30%
PersID > WorkCen	0.181	3	0.0176293	0.05	576	89%
SocID > WorkCen	0.484	3	0.2264772	0.05	576	100%
WorkCen > WorkA	0.442	2	0.2205649	0.05	576	100%
TFL > WorkA	-0.031	2	0.0011012	0.05	576	12%

5.5.7 Findings of the Mediating Effect

The previous mediation effects literature heavily relies on Sober and Michael's (1982) Z test, which is a traditional approach also known as the "normal theory approach". The Z test is criticised for lacking statistical power and the imprecise assumptions of the sampling distribution (Hayes, 2013), as the assumption made about the shape of the sampling distribution of the indirect effect over repeated sampling from the population (Hayes, 2013, p. 105). Therefore, Hayes suggests conducting mediation effects analysis

using the Bootstrapping approach which is simple and can be tested for multiple mediators in a model and, therefore, this study adopted the Bootstrapping approach using Smart PLS3.

The findings of the indirect effects (i.e., mediating effects) are presented in Table 5.14 are as follows (Please also refer to Section 5.5.8 for hypothesis testing result details):

- i) The findings indicate that a strong positive mediating effect of TFL → FLVC → PersID as well as TFL → FOVC → SocID. Specifically, the former reveals that follower–leader value congruence strongly mediates the relationship between transformational leadership and personal identification. Likewise, the latter shows follower–organisation value congruence also strongly mediates the relationship between transformational leadership and social identification with the organisation.
- ii) The findings indicate that a positive mediating effect exists in TFL → PersID → WorkCen as well as in TFL → SocID → WorkCen. Specifically, both types of identification (i.e., personal identification and social identification) positively mediate the relationship between transformational leadership and work centrality.
- iii) The serial multiple mediators that run through parallel paths: TFL → FLVC → PersID → WorkCen and TFL → FOVC → SocID → WorkCen have both been found to have significant indirect effects. The former has a relatively smaller effect than the latter.
- iv) The mediating effect of PersID in FLVC → PersID → WorkCen and of WorkCen in FOVC → SocID → WorkCen were both found to be significant. The former has a smaller effect than the latter.
- v) The indirect effects of WorkCen in SocID → WorkCen → WorkA and in PersID → WorkCen → WorkA were both found to be significant. The former has a stronger effect than the latter.
- vi) The findings indicate that work centrality does not mediate the relationship between transformational leadership and work centrality (TFL → WorkCen → WorkA).
- vii) The serial multiple mediators that run through parallel paths TFL → PersID → WorkCen → WorkA and TFL → SocID → WorkCen → WorkA have both been

found to have positive mediating effects.

- viii) The serial multiple mediators that run in parallel paths through three mediators TFL → FLVC → PerI → WorkCen → WeokA and TFL → FOVC → SocID → WorkCen → WorkA have both been found to have positive mediating effects.

Table 5.14: Findings of the Hypotheses Testing — Mediating Effect

Hypothesis	Indirect Path	Sample (O)	Mean (M)	Standard Deviation (STDEV)	t-value	p- value	95% Confidence Interval		Outcome
							2.50%	97.50%	
H4a	TFL → FLVC → PersID	0.488	0.488	0.027	17.979	0.000	0.435	0.540	Supported
H4b	TFL → FOVC → SocID	0.389	0.390	0.031	12.586	0.000	0.329	0.447	Supported
H5b	TFL → PersID → WorkCen	0.048	0.049	0.018	2.738	0.006	0.017	0.086	Supported
H5c	TFL → SocID → WorkCen	0.038	0.038	0.013	2.878	0.004	0.013	0.066	Supported
H6e	TFL → FLVC → PersID → WorkCen	0.089	0.090	0.030	2.927	0.003	0.033	0.151	Supported
H6f	TFL → FOVC → SocID → WorkCen	0.187	0.187	0.023	8.170	0.000	0.145	0.235	Supported
H6c	FLVC → PersID → WorkCen	0.119	0.120	0.040	2.972	0.003	0.044	0.199	Supported
H6d	FOVC → SocID → WorkCen	0.380	0.378	0.036	10.632	0.000	0.307	0.448	Supported
H7b	PersID → WorkCen → WorkA	0.080	0.083	0.029	2.767	0.006	0.029	0.143	Supported
H7c	SocID → WorkCen → WorkA	0.214	0.215	0.024	8.930	0.000	0.169	0.263	Supported
H8b	TFL → WorkCen → WorkA	-0.034	-0.034	0.024	1.411	0.158	-0.083	0.012	Not supported
H8c	TFL → PersID → WorkCen → WorkA	0.021	0.022	0.008	2.574	0.010	0.007	0.040	Supported
H8d	TFL → SocID → WorkCen → WorkA	0.017	0.017	0.006	2.772	0.006	0.006	0.030	Supported
H8e	TFL → FLVC → PersID → WorkCen → WorkA	0.039	0.040	0.014	2.711	0.007	0.014	0.071	Supported
H8f	TFL → FOVC → SocID → WorkCen → WorkA	0.083	0.084	0.012	6.841	0.000	0.061	0.109	Supported

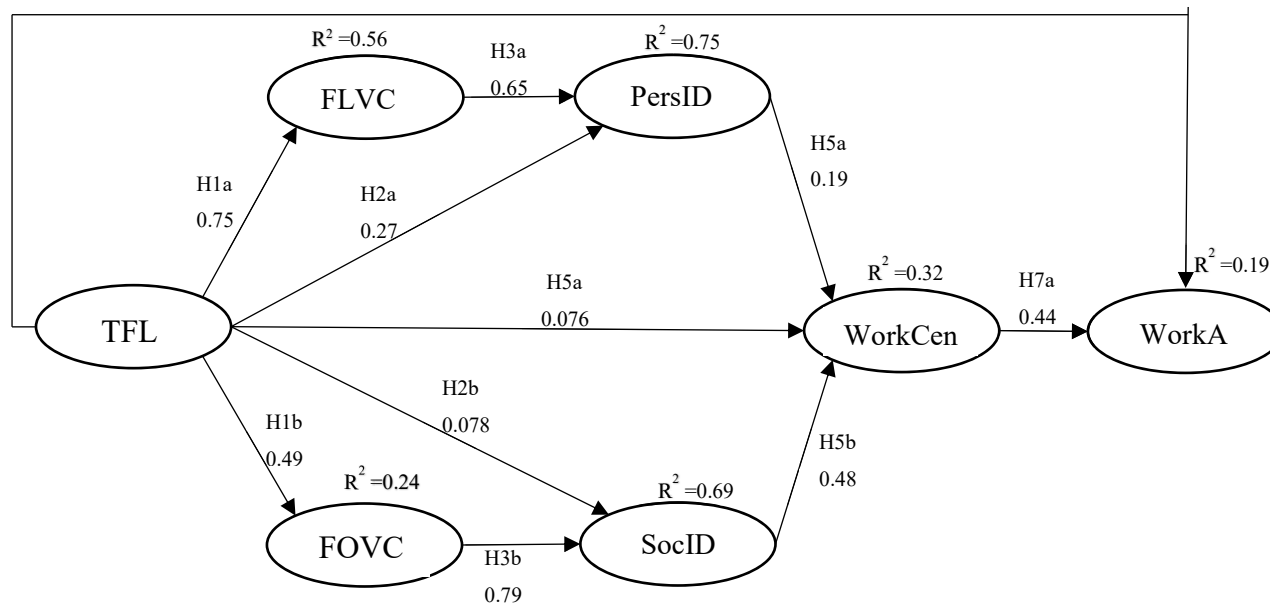
TFL = Transformational Leadership, FLVC = Follower-Leader Value Congruence, FOVC = Follower-Organisation Value Congruence, PersID = Personal Identification with the Leader, SocID = Social Identification with the Organisation, WorkCen = Work Centrality and WorkA = Workaholism.

ns = non-significant, * p < 0.05, ** p < 0.01, *** p < 0.001

5.5.8 Hypotheses Testing Findings

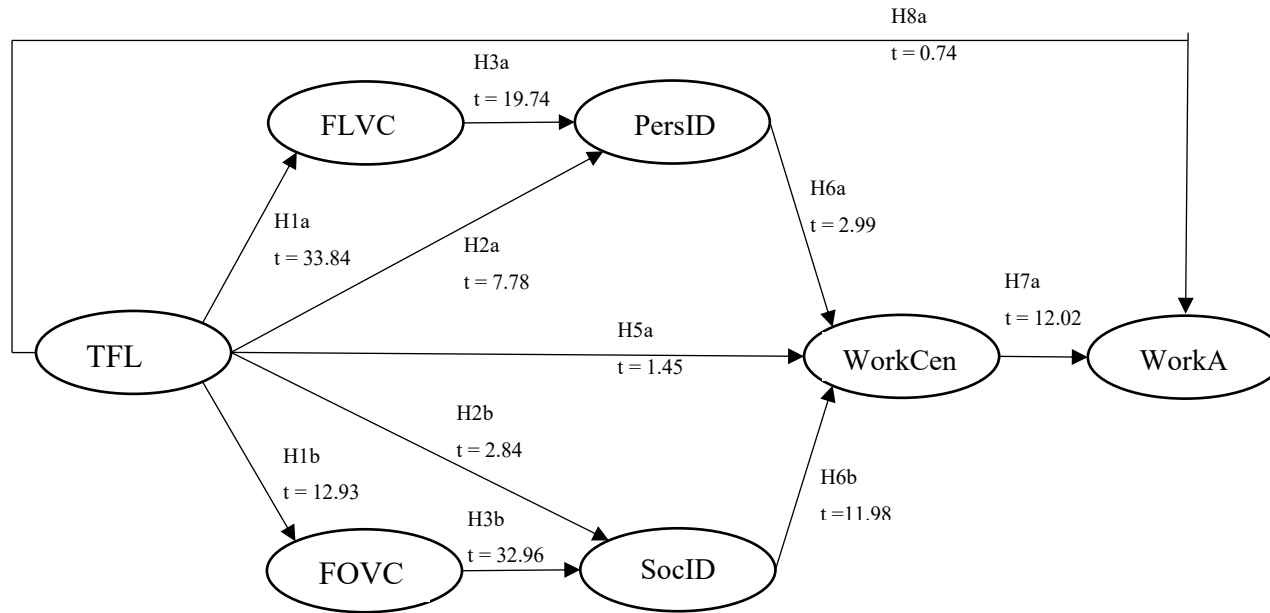
The research hypotheses proposed in this study not only involved direct effect (e.g., relationship between two relevant variables), but also involved mediated effect. Figure 5.1 and Figure 5.2 provide the overview of the findings for the current model including the standardised path coefficients, R^2 and t-values using SEM path analysis approach. The findings of the 20 hypotheses in the tested model are discussed in the hypothesis testing.

Figure 5.1: Overview of the Findings for the Standardised Path Coefficient and R^2 Values



TFL = Transformational Leadership, FLVC = Follower-Leader Value Congruence, FOVC = Follower-Organisation Value Congruence, PersID = Personal Identification, SocID = Social Identification, WorkCen = Work Centrality and WorkA= Workaholism.

Figure 5.2: Overview of the Findings for the t-values



TFL = Transformational Leadership, FLVC = Follower-Leader Value Congruence, FOVC = Follower-Organisation Value Congruence, PersID = Personal Identification, SocID = Social Identification, WorkCen = Work Centrality and WorkA= Workaholism.

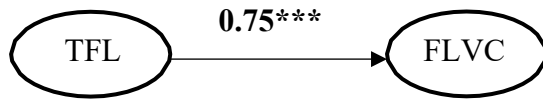
5.5.8.1 Hypothesis One

H1a: Transformational leadership has a positive relationship with follower–leader value congruence.

H1a proposes that transformational leadership positively affects follower–leader value congruence. Hypothesis testing was performed through SmartPLS3 Bootstrapping, and the findings of the analysis are provided in Figure 5.3. As shown, transformational leadership is found to be strongly related to follower–leader value congruence [$\beta = 0.75$, 95% CI (0.70, 0.79), t-value = 33.84, p-value = 0.000]. H1a is therefore supported.

Hypothesis 1a

Figure 5.3: Transformational Leadership → Follower–Leader Value Congruence



TFL= Transformational Leadership, FLVC = Follower-Leader Value Congruence

ns = non-significant, * p < 0.05, ** p < 0.01, *** p < 0.001

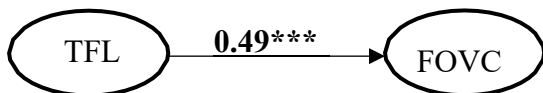
Standardised Coefficient = 0.75, p-value = 0.000, t-value = 33.84, Lower = 0.70, Upper = 0.79.

H1b: Transformational leadership has a positive relationship with follower–organisation value congruence.

H1b suggests that transformational leadership positively affects follower–organisation value congruence. Hypothesis testing was performed through SmartPLS3 Bootstrapping, and the findings of the analysis are provided in Figure 5.4. As shown, transformational leadership is found to be positively related to follower–organisation value congruence [$\beta = 0.49$, 95% CI (0.41, 0.56), t-value = 12.93, p-value = 0.000]. H1b is therefore supported.

Hypothesis 1b

Figure 5.4: Transformational Leadership → Follower–Organisation Value Congruence



TFL= Transformational Leadership, FLVC = Follower-Organisation Value Congruence

ns = non-significant, * p < 0.05, ** p < 0.01, *** p < 0.001

Standardised Coefficient = 0.49, p-value = 0.000, t-value = 12.93, Lower = 0.41, Upper = 0.56.

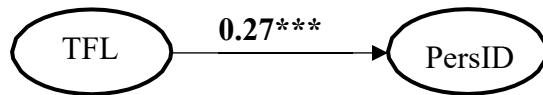
5.5.8.2 Hypothesis Two

H2a: Transformational leadership is positively related to personal identification with the leader.

H2a proposes transformational leadership positively affects personal identification with the leader. Hypothesis testing was performed through SmartPLS3 Bootstrapping and the findings of the analysis are provided in Figure 5.5. As shown, transformational leadership is found to be significantly related to personal identification with the leader [$\beta = 0.27$, 95% CI (0.20, 0.34), t-value = 7.78, p-value = 0.000]. H2a is therefore supported.

Hypothesis 2a

Figure 5.5: Transformational Leadership → Personal Identification with the Leader



TFL = Transformational Leadership, PersID = Personal Identification with the Leader

ns = non-significant, * p < 0.05, ** p < 0.01, *** p < 0.001

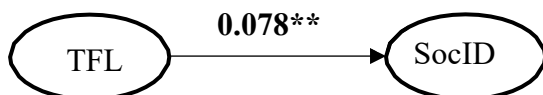
Standardised Coefficient = 0.27, p-value = 0.000, t-value = 7.78, Lower = 0.20, Upper = 0.34.

H2b: Transformational leadership is positively related to social identification with the organisation.

H2b states that transformational leadership positively affects social identification with the organisation. Hypothesis testing was performed through SmartPLS3 Bootstrapping, and the findings of the analysis are provided in Figure 5.6. As shown, the coefficient, t-value and p-value are significant [$\beta = 0.078$, 95% CI (0.024, 0.13), t-value = 2.84, p-value = 0.005.] H 2b is thereby supported.

Hypothesis 2b

Figure 5.6: Transformational Leadership → Social Identification with the Organisation



TFL = Transformational Leadership, SocID = Social Identification with the Organisation

ns = non-significant, * p < 0.05, ** p < 0.01, *** p < 0.001

Standardised Coefficient = 0.078, p-value = 0.005, t-value = 2.84, Lower = 0.024, Upper = 0.13.

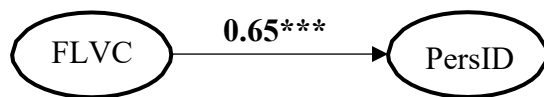
5.5.8.3 Hypothesis Three

H3a: Follower–leader value congruence is positively related to personal identification with the leader.

H3a proposes that follower–leader value congruence positively affects personal identification with the leader. Hypothesis testing was performed through SmartPLS3 Bootstrapping, and the findings of the analysis are provided in Figure 5.7. As shown, follower–leader value congruence is found to be significantly related to personal identification with the leader [$\beta = 0.65$, 95% CI (0.58, 0.71), t -value = 19.74, p -value = 0.000]. H3a is therefore supported.

Hypothesis 3a

Figure 5.7: Follower–Leader Value Congruence → Personal Identification with the Leader



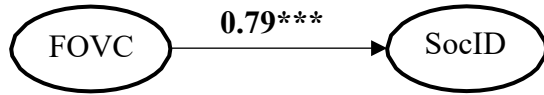
FLVC = Follower–Leader Value Congruence, PersID = Personal Identification with the Leader
ns = non-significant, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
Standardised Coefficient = 0.65, p -value = 0.000, t -value = 19.74, Lower = 0.58, Upper = 0.71.

H3b: Follower–organisation value congruence is positively related to social identification with the organisation.

H3b proposes that follower–organisation value congruence positively affects social identification with the organisation. Hypothesis testing was performed through SmartPLS3 Bootstrapping and the findings of the analysis are provided in Figure 5.8. As shown, follower–organisation value congruence is found to be strongly related to social identification with the organisation [$\beta = 0.79$, 95% CI (0.74, 0.83), t -value = 32.96, p -value = 0.000]. H3b is therefore supported.

Hypothesis 3b

Figure 5.8: Follower–Organisation Value Congruence → Social Identification with the Organisation



FOVC = Follower-Organisation Value Congruence, SocID = Social Identification with the Organisation ns = non-significant, * p < 0.05, ** p < 0.01, *** p < 0.001
Standardised Coefficient = 0.79, p-value = 0.000, t-value = 32.96, Lower = 0.74, Upper = 0.83.

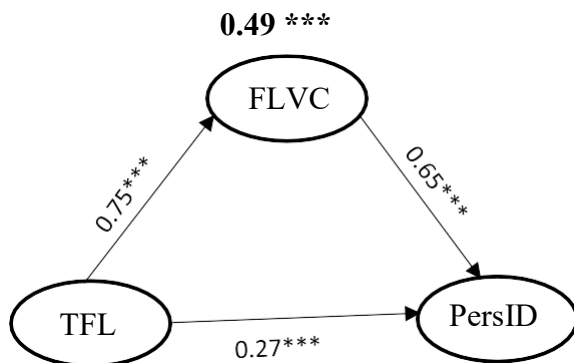
5.5.8.4 Hypothesis Four

H4a: Follower–leader value congruence mediates the relationship between transformational leadership and personal identification with the leader.

H4a proposes that follower–leader value congruence positively mediates the relationship between transformational leadership and personal identification with the leader. Hypothesis testing was performed through Bootstrapping SmartPLS3, and the findings of the analysis are provided in Figure 5.9. As shown, the findings indicate that the relationship between transformational leadership and personal identification with the leader is found to be strongly mediated by follower–leader value congruence [$\beta = 0.49$, 95% CI (0.44, 0.54), t-value = 17.98, p-value = 0.000]. H4a is thereby supported.

Hypothesis 4a

Figure 5.9: Transformational Leadership → Follower–Leader Value Congruence → Personal Identification with the Leader



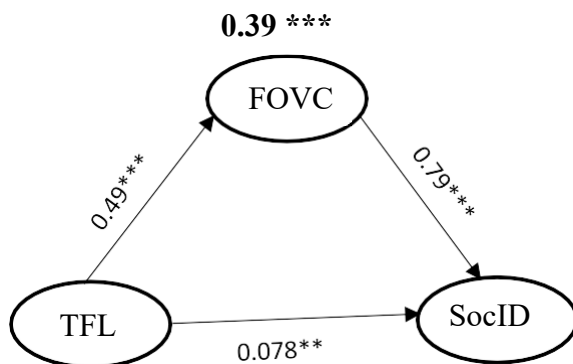
TFL = Transformational Leadership, FLVC = Follower-Leader Value Congruence, PersID = Personal Identification with the Leader
ns = non-significant, * p < 0.05, ** p < 0.01, *** p < 0.001
Direct Effect = 0.27; Indirect Effect = 0.49, p-value = 0.000, t-value = 17.98, Lower = 0.44, Upper = 0.54.

H4b: Follower–organisation value congruence mediates the relationship between transformational leadership and social identification with the organisation.

H4b proposes that follower–organisation value congruence positively mediates the relationship between transformational leadership and social identification with the organisation. Hypothesis testing was performed through Bootstrapping SmartPLS3 and the findings of the analysis are provided in Figure 5.10. As shown, the findings indicate that the relationship between transformational leadership and social identification with the organisation is found to be strongly mediated by follower–organisation value congruence [$\beta = 0.39$, 95% CI (0.33, 0.45), t-value = 12.59, p-value = 0.000]. H 4b is thereby supported.

Hypothesis 4b

Figure 5.10: Transformational Leadership → Follower–Organisation Value Congruence → Social Identification with the Organisation



TFL = Transformational Leadership, FOVC = Follower-Organisation Value Congruence, SocID = Social Identification with the Organisation

ns = non-significant, * p < 0.05, ** p < 0.01, *** p < 0.001

Direct Effect = 0.078; Indirect Effect = 0.39, p-value = 0.000, t-value = 12.59, Lower = 0.33, Upper = 0.45.

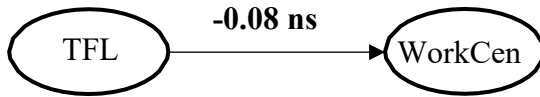
5.5.8.5 Hypothesis Five

H5a: Transformational leadership is positively related to work centrality among followers.

H5a proposes that transformational leadership positively affects work centrality among followers. Hypothesis testing was performed through SmartPLS3 Bootstrapping, and the findings of the analysis are provided in Figure 5.11. As shown, the coefficient and t-value are negative and p-value is non-significant [$\beta = -0.08$, 95% CI (-0.19, 0.03), t-value = 1.45, p-value = 0.15]. H5a is therefore not supported.

Hypothesis 5a

Figure 5.11: Transformational Leadership → Work Centrality



TFL = Transformational Leadership, WorkCen = Work Centrality

ns = non-significant, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

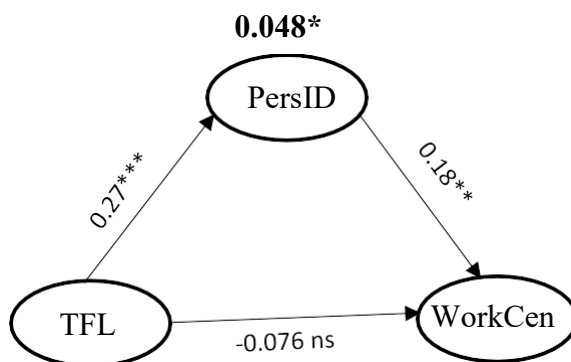
Standardised Coefficient = -0.08, p-value = 0.15, t-value = 1.45, Lower = -0.19, Upper = 0.03.

H5b: Personal identification with the leader mediates the relationship between transformational leadership and work centrality.

H5b proposes that personal identification with the leader positively mediates the relationship between transformational leadership and work centrality. Hypothesis testing was performed through Bootstrapping SmartPLS3, and the findings of the analysis are provided in Figure 5.12. As shown, the findings indicate that the relationship between transformational leadership and work centrality is positively mediated by personal identification with the leader [$\beta = 0.048$, 95% CI (0.017, 0.086), t-value = 2.74, p-value = 0.006]. H5b is thereby supported.

Hypothesis 5b

Figure 5.12: Transformational Leadership → Personal Identification with the Leader → Work Centrality



TFL = Transformational Leadership, PersID = Personal Identification with the Leader, WorkCen = Work Centrality

ns = non-significant, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

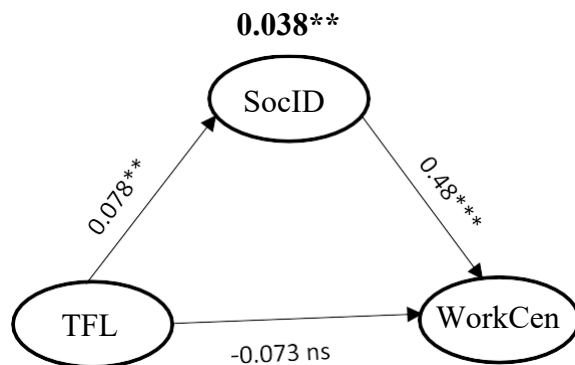
Direct Effect = -0.076; Indirect Effect = 0.048, p-value = 0.006, t-value = 2.74, Lower = 0.017, Upper = 0.086.

H5c: Social identification with the organisation mediates the relationship between transformational leadership and work centrality.

H5c proposes that social identification with the organisation positively mediates the relationship between transformational leadership and work centrality. Hypothesis testing was performed through Bootstrapping SmartPLS3, and the findings of the analysis are provided in Figure 5.13. As shown, the findings indicate that the relationship between transformational leadership and work centrality is positively mediated by social identification with the organisation [$\beta = 0.038$, 95% CI (0.013, 0.066), t-value = 2.88, p-value = 0.004]. H5c is therefore supported.

Hypothesis 5c

Figure 5.13: Transformational Leadership → Social Identification with the Organisation → Work Centrality



TFL = Transformational Leadership, Social Identification with the Organisation, WorkCen = Work Centrality
 ns = non-significant, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
 Direct Effect = -0.073; Indirect Effect = 0.038, p-value = 0.004, t-value = 2.88, Lower = 0.013, Upper = 0.066.

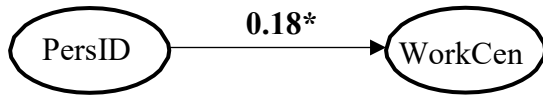
5.5.8.6 Hypothesis Six

H6a: Personal identification with the leader is positively related to follower work centrality.

According to hypothesis 6a, personal identification with the leader is positively related to follower work centrality. Hypothesis testing was performed through SmartPLS3, and the findings of the analysis are provided in Figure 5.14. As shown, personal identification with the leader is found to be positively related to follower work centrality [$\beta = 0.18$, 95% CI (0.066, 0.30), t-value = 2.99, p-value = 0.003]. H6a is therefore supported.

Hypothesis 6a

Figure 5.14: Personal Identification with the Leader → Work Centrality



PersID = Personal Identification with the Leader, WorkCen = Work Centrality

ns = non-significant, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

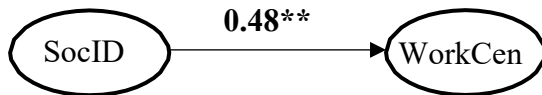
Standardised coefficient = 0.18, p-value = 0.003, t-value = 2.99, Lower = 0.066, Upper = 0.30.

H6b: Social identification with the organisation is positively related to follower work centrality.

H6b proposes that social identification with the organisation positively affects follower work centrality. Hypothesis testing was performed through SmartPLS3 Bootstrapping, and the findings of the analysis are provided in Figure 5.15. As shown, social identification with the organisation is found to be strongly related to follower work centrality [$\beta = 0.48$, 95% CI (0.40, 0.56), t-value = 11.98, p-value = 0.000]. H6b is therefore supported.

Hypothesis 6b

Figure 5.15: Social Identification with the Organisation → Work Centrality



SocID = SocID Identification with the Organisation, WorkCen = Work Centrality

ns = non-significant, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

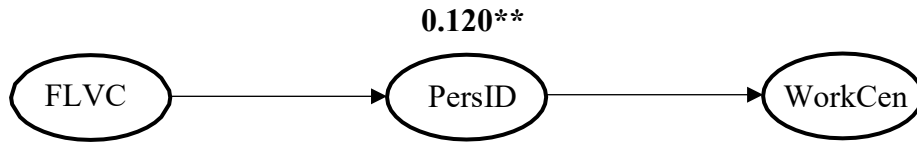
Standardised coefficient = 0.48, p-value = 0.000, t-value = 11.98, Lower = 0.40, Upper = 0.56.

H6c: Personal identification with the leader mediates the relationship between follower–leader value congruence and work centrality.

H6c proposes that personal identification with the leader positively mediates the relationship between follower–leader value congruence and work centrality. Hypothesis testing was performed through Bootstrapping SmartPLS3, and the findings of the analysis are provided in Figure 5.16. As shown, the relationship between follower–leader value congruence and work centrality is found to be positively mediated by personal identification with the leader [$\beta = 0.120$, 95% CI (0.04, 0.20), t-value = 2.97, p-value = 0.003]. H6c is thereby supported.

Hypothesis 6c

Figure 5.16: Follower–Leader Value Congruence → Personal Identification with the Leader → Work Centrality



TFL = Follower-Leader Value Congruence, PersID = Personal Identification with the Leader, WorkCen = Work Centrality

ns = non-significant, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

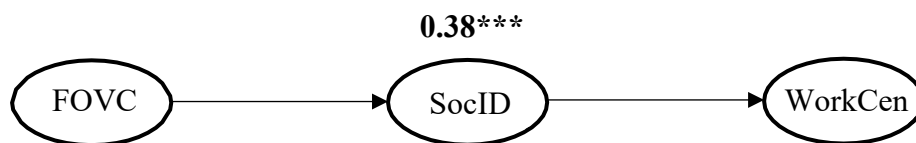
Standardised coefficient = 0.12, p -value = 0.003, t -value = 2.97, lower = 0.044, upper = 0.20.

H6d: Social identification with the organisation mediates the relationship between follower–organisation value congruence and work centrality.

H6d proposes that social identification with the organisation positively mediates the relationship between follower–organisation value congruence and work centrality. Hypothesis testing was performed through Bootstrapping SmartPLS3, and the findings of the analysis are provided in Figure 5.17. As shown, the relationship between follower–organisation value congruence and work centrality is found to be positively mediated by social identification with the organisation [$\beta = 0.38$, 95% CI (0.31, 0.45), t -value = 10.63, p -value = 0.000]. H6d is thereby supported.

Hypothesis 6d

Figure 5.17: Follower–Organisation Value Congruence → Social Identification with the Organisation → Work Centrality



FOVC = Follower-Organisation Value Congruence, SocID = Social Identification with the Organisation, WorkCen = Work Centrality

ns = non-significant, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Standardised coefficient = 0.38, p -value = 0.000, t -value = 10.63, lower = 0.31, upper = 0.45.

5.5.8.7 Hypothesis Seven

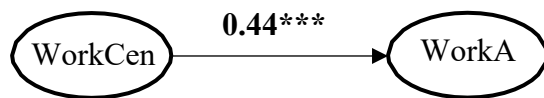
H7a: Work centrality is positively related to workaholism.

H7a states that work centrality positively affects workaholism. Hypothesis testing was performed through SmartPLS3 Bootstrapping, and the findings of the analysis are

provided in Figure 5.18. As shown, work centrality is found to be strongly related to workaholism among followers [$\beta = 0.44$, 95% CI (0.36, 0.51), t -value = 12.02, p -value = 0.000]. H7a is therefore supported.

Hypothesis 7a

Figure 5.18: Work Centrality \rightarrow Workaholism



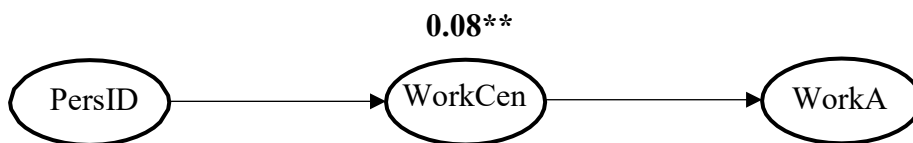
WorkCen = Work Centrality, WorkA = Workaholism
 ns = non-significant, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
 Standardised coefficient = 0.44, p -value = 0.000, t -value = 12.02, lower = 0.36, upper = 0.51.

H7b: Work centrality mediates the relationship between personal identification with the leader and workaholism.

H7b proposes that work centrality mediates the relationship between personal identification with the leader and workaholism. Hypothesis testing was performed through SmartPLS3 Bootstrapping, and the findings of the analysis are provided in Figure 5.19. As shown, the relationship between personal identification with the leader and workaholism is found to be positively mediated by work centrality [$\beta = 0.08$, 95% CI (0.03, 0.14), t -value = 2.77, p -value = 0.006]. H7b is thereby supported.

Hypothesis 7b

Figure 5.19: Personal identification with the leader \rightarrow Work Centrality \rightarrow Workaholism



PersID = Personal Identification with the Leader, WorkCen = Work Centrality, WorkA = Workaholism ns = non-significant, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
 Standardised coefficient = 0.08, p -value = 0.006, t -value = 2.77, lower = 0.03, upper = 0.14.

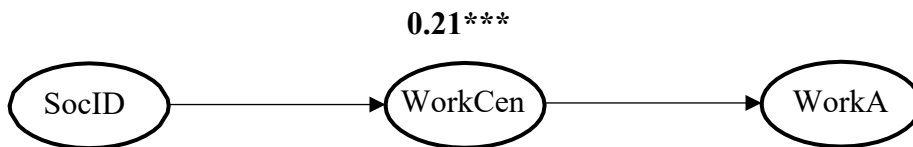
H7c: Work centrality mediates the relationship between social identification with the organisation and workaholism.

H7c proposes that work centrality mediates the relationship between social identification with the organisation and workaholism. Hypothesis testing was performed through Bootstrapping SmartPLS3, and the findings of the analysis are provided in Figure 5.20.

As shown, the relationship between social identification with the organisation and workaholism is found to be strongly mediated by work centrality [$\beta = 0.21$, 95% CI (0.17, 0.26), t-value = 8.93, p-value = 0.000]. H7c is thereby supported.

Hypothesis 7c

Figure 5.20: Social identification with the Organisation → Work Centrality → Workaholism



SocID = Social Identification with the Organisation, WorkCen = Work Centrality, WorkA = Workaholism
 ns = non-significant, * p < 0.05, ** p < 0.01, *** p < 0.001
 Standardised coefficient = 0.21, p-value = 0.000, t-value = 8.93, lower = 0.17, upper = 0.26.

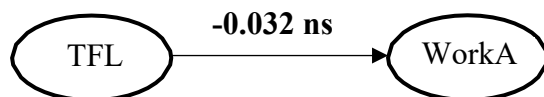
5.5.8.8 Hypothesis Eight

H8a: Transformational leadership is positively related to workaholism among followers.

H8a proposes that transformational leadership positively affects workaholism among followers. Hypothesis testing was performed through SmartPLS3 Bootstrapping, and the findings of the analysis are provided in Figure 5.21. As shown, transformational leadership is not related to workaholism among followers as the coefficient is negative and the t-value and p-value are insignificant [$\beta = -0.032$, 95% CI (-0.11, 0.06), t-value = 0.74, p-value = 0.46]. H8a is therefore not supported.

Hypothesis 8a

Figure 5.21: Transformational Leadership → Workaholism



TFL = Transformational Leadership, WorkA = Workaholism
 ns = non-significant, * p < 0.05, ** p < 0.01, *** p < 0.001
 Standardised coefficient = -0.032, p-value = 0.46, t-value = 0.74, lower = -0.11, upper = 0.06.

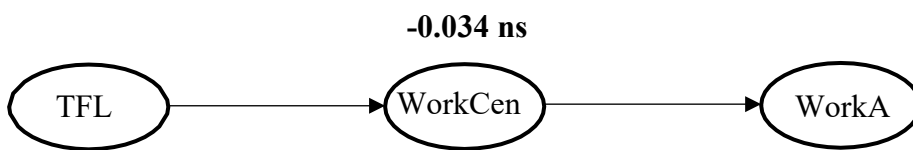
H8b: Work centrality mediates the relationship between transformational leadership and workaholism.

H8b proposes that the relationship between transformational leadership and workaholism is positively mediated by work centrality among followers. Hypothesis testing was

performed through SmartPLS3 Bootstrapping, and the findings of the analysis are provided in Figure 5.22. As shown, the coefficient and p-value are insignificant [$\beta = -0.034$, 95% CI (-0.08, 0.01) t-value = 1.41, p-value = 0.16] which suggests the relationship between transformational leadership and workaholism is not mediated by work centrality among followers. H8b is thereby not supported.

Hypothesis 8b

Figure 5.22: Transformational Leadership → Work Centrality → Workaholism



TFL = Transformational Leadership, WorkCen = Work Centrality, WorkA = Workaholism
 ns = non-significant, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$
 Standardised coefficient = -0.034, p-value = 0.16, t-value = 1.41, lower = -0.08, upper = 0.012.

5.6 Conclusion

This chapter discussed the findings of the data analysis for the current study. First, the EFA findings of the Kaiser-Meyer-Olkin (KMO) Measure and Bartlett's Test of Sphericity demonstrated a satisfactory sampling adequacy. While the percentage of variance findings were explained, and percentage of cumulative level was shown, common method variance was not an issue for this study. Secondly, the findings of reliability analysis provided evidence that all constructs in this study have achieved a satisfactory level of reliability. Thirdly, the findings for the measurement model indicated a satisfactory convergent validity, internal reliability, and discriminant validity. Fourthly, PLS SEM was utilised to assess the structural model and test 20 hypotheses. The findings indicated the direct effect of H1a, H1b, H2a, H2b, H3a, H3b, H6a, H6b, and H7a have been found significant whereas H5b and H8a have been found statistically insignificant. Furthermore, the mediating effects in H4a, H4b, H5b, H5c H6c, H6d, H7b, and H7c were supported whereas no mediating effect was found for H8b. Chapter 6 will further discuss these research findings, including theoretical, practical contributions of the study as well as the limitations of the study and the recommended avenues of future research.

CHAPTER 6. DISCUSSION AND CONCLUSION

6.1 Introduction

This final thesis chapter addresses the study's two research questions and purpose considering the findings obtained from the hypotheses testing. Theoretical and practical contributions derived from the research model are discussed. Limitations that constrained the current study, along with areas for future research based on these, are also presented.

6.2 Review of Main Findings — Research Objectives and Questions

As outlined in Chapter 1, workaholism is associated with many harmful consequences (Caruso, 2006). The current study was undertaken to better understand the processes involved by addressing important gaps in the existing literature to determine whether leaders' transformational leadership style could lead to workaholism among their followers and explain the psychological mechanisms through which this might occur. To achieve these goals, the study sought to answer two related research questions: (i) can transformational leadership result in workaholism among followers; and (ii) what are the psychological mechanisms through which transformational leadership could result in workaholism among followers? In seeking answers these questions, the study developed a conceptual model for testing a series of hypotheses examining the relationship between transformational leadership, followers' workaholism, and five mediating variables: followers' values congruence with the organisation, followers' values congruence with the leader, followers' social identification with the organisation, followers' social identification with the leader, and followers' work centrality. The results, reported in detail in Chapter 5, are summarised in Table 6.1 below.

Based on the theoretical model that was developed in response to the first question, the results supported the hypothesis that transformational leadership could affect workaholism among followers, although this relationship was not direct (H8a in Table 6.1). Rather, the model revealed that it is only through the configuration of particular psychological mechanisms, such as value congruence and identification, that followers of a transformational leader experience workaholism.

Table 6.1: The Findings of the Hypotheses Testing

Hypothesis	Supported
H1a : Transformational leadership has a positive relationship with follower–leader value congruence.	Yes
H1b : Transformational leadership has a positive relationship with follower–organisation value congruence.	Yes
H2a: Transformational leadership is positively related to personal identification with the leader.	Yes
H2b: Transformational leadership is positively related to social identification with the organisation.	Yes
H3a: Follower–leader value congruence is positively related to personal identification with the leader.	Yes
H3b: Follower–organisation value congruence is positively related to social identification with the organisation.	Yes
H4a: Follower–leader value congruence mediates the relationship between transformational leadership and personal identification with the leader.	Yes
H4b: Follower–organisation value congruence mediates the relationship between transformational leadership and social identification with the organisation.	Yes
H5a: Transformational leadership is positively related to work centrality among followers.	No
H5b: Personal identification with the leader mediates the relationship between transformational leadership and work centrality.	Yes
H5c: Social identification with the organisation mediates the relationship between transformational leadership and work centrality.	Yes
H6a: Personal identification with the leader is positively related to follower work centrality.	Yes
H6b: Social identification with the organisation is positively related to follower work centrality.	Yes
H6c: Personal identification with the leader mediates the relationship between follower–leader value congruence and work centrality.	Yes
H6d: Social identification with the organisation mediates the relationship between follower–organisation value congruence and work centrality.	Yes
H7a: Work centrality is positively related to workaholism.	Yes
H7b: Work centrality mediates the relationship between personal identification with the leader and workaholism.	Yes
H7c: Work centrality mediates the relationship between social identification with the organisation and workaholism.	Yes
H8a: Transformational leadership is positively related to workaholism among followers.	No
H8b: Work centrality mediates the relationship between transformational leadership and workaholism.	No

The second research question sought to identify the types and configuration of individual psychological mechanisms that might lead followers of transformational leaders to workaholism. This analysis revealed that transformational leadership could influence followers’ workaholism via two or three sequential mediators that included (i) followers’ identification and their work centrality, or (ii) followers’ value congruence, identification, and work centrality. Importantly, it was only through their effects on these mediating

psychological mechanisms (i.e., value congruence, identification, and work centrality) that transformational leaders affected workaholism among followers.

More specifically, the findings revealed that value congruence was a key driver through which transformational leadership could reinforce followers' identification with the leader as well as with the organisation (H4a and H4b). While neither work centrality (H5a) nor workaholism (H8a) were directly related to transformational leadership, personal identification and social identification positively mediated the relationship between transformational leadership and work centrality (H5b and H5c). Furthermore, identification (e.g., personal identification with the leader, social identification with the organisation) strengthened the effects of transformational leadership to achieve its effects on followers and subsequently rendered followers more likely to perceive and place work as a more central life interest (i.e., work centrality). Finally, the relationship between two types of identification and workaholism were found to be positively mediated by work centrality (H7b and H7c), even though the model found no support for the hypothesis that work centrality positively mediates the relationship between transformational leadership and workaholism (H8b).

As outlined in Chapter 1, the study aimed to examine relationships between six variables that were theorised to link (transformational) leadership style to followers' proclivity to workaholism. Specifically, the research sought to identify whether:

- (i) transformational leadership is directly related to workaholism among followers;
- (ii) value congruence with the leader and the organisation mediate the relationship between transformational leadership and identification with the leader and the organisation, respectively;
- (iii) work centrality influences the relationship between transformational leadership and workaholism;
- (iv) both types of identification mediate the relationship between transformational leadership and work centrality;
- (v) work centrality occurs as a result of personal identification and social identification; and
- (vi) work centrality mediates the relationship between two types of identification and workaholism.

This is the first study (to my knowledge) to empirically investigate these relationships in

a single model. The findings of the serial multiple mediators in parallel paths passing through two mediators in the relationship between transformational leadership and workaholism via both types of identification and work centrality (i.e., TFL → PersID → WorkCen → WorkA and TFL → SocID → WorkCen → WorkA) have both been found to have positive mediating effects. Likewise, the findings of the serial multiple mediators in parallel paths passing through three mediators in the relationship between transformational leadership and workaholism via value congruence, identification, and work centrality (i.e., TFL → FLVC → PersID → WorkCen → WorkA and TFL → FOVC → SocID → WorkCen → WorkA) have both also been found to have positive mediating effects. These findings demonstrated the importance of psychological mechanisms (i.e., value congruence, identification, and work centrality) as mediators that magnified the impact of transformational leadership and ultimately led to follower workaholism. As Shamir et al. (1993) pointed out, transformational leadership motivates followers to change their values, goals, needs, and aspirations via self-concept (psychological/motivational mechanisms) so that such leadership can achieve its profound effects on followers such as value internalisation, personal identification, and social identification. Self-concepts (i.e., value congruence and identification) are, therefore, the key factors that indirectly influence the followers of transformational leadership, leading them to be susceptible to workaholism. The implications of these findings for organisational practice are considered further below.

6.3 Theoretical Contributions

This section discusses the study's main theoretical contributions.

6.3.1 *Revealing the Psychological Mechanisms through Which Transformational Leaders Influence Followers' Workaholism*

Arguably the main contribution of the current study is to extend Shamir et al.'s (1993) motivational theory/model by revealing the mechanisms through which transformational leadership achieves its profound effects on followers via self-concepts such as value congruence and identification. As outlined in Chapter 2, Shamir et al. (1993) proposed that transformational leadership achieves its effects on followers by increasing their self-esteem and self-worth, increasing their individual and collective self-efficacy beliefs, and by promoting followers to internalise shared values and to identify more strongly with the

leader and with the organisation. These authors' empirical research found a direct relationship between transformational leadership and four variables: person–leader value congruence, person–organisation value congruence, personal identification, and social identification, respectively, with no relationship between these variables evident.

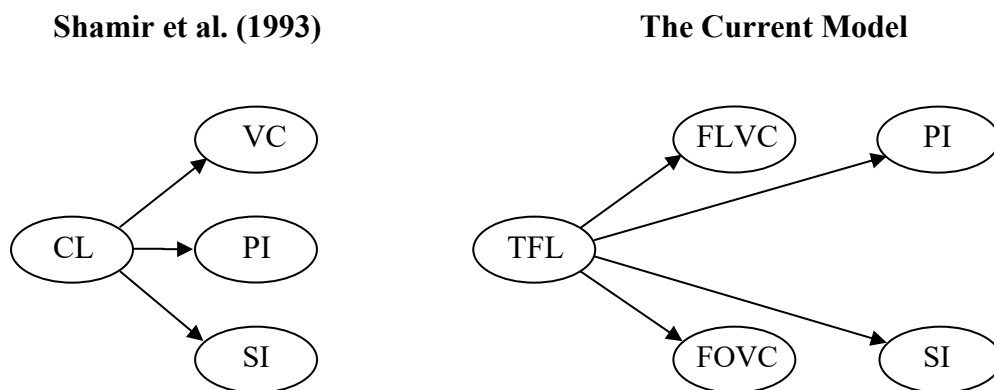
The current study has extended this model by testing a sequential mediating model that explicated the relationship between transformational leadership and two types of identification (i.e., personal and social) via the mediating effect of value congruence. Earlier studies have shown that values have a profound influence on individuals' behaviour, emotions, and cognitions (Meglino & Ravlin, 1998; Rokeach, 1973) and that value congruence can mediate the impact of transformational leadership on positive organisational outcomes that include group efficacy (Hoffman et al., 2011), individual performance (Jung & Avolio, 2000), and affective commitment (Astakhova, 2016). The results reported in this thesis add empirical texture to this line of research by revealing the importance of the psychological process of value congruence in shaping how followers form identification with their leaders and organisations. Thus, an important new insight from this study is the identification of value congruence — between followers and leaders or followers and the organisation — in explaining how transformational leaders exert their influence on followers' identification and ultimately behaviours. Equally important, this study is the first, to my knowledge, to propose (and find) support for sequential mediating hypotheses for the relationship between transformational leadership and two types of identification (i.e., personal and social) through the mediating effects of value congruence. The results have shown that these mediating (i.e., indirect) effects between followers values' congruence (personal and social) demonstrate a stronger relationship than the direct relationships between transformational leadership and identification (personal and social) which were proposed in Shamir et al.'s (1993) study. It is when followers identify with the leader and the group in terms of shared values that their identification with the leader or organisation is strongest, and when they are more susceptible to significant psychological and social forces that come from their leader. This increases the likelihood of enhancing followers' willingness to place work as the central part of their lives. In other words, the study is the first to show that value congruence and identification are key components that reinforce transformational leadership, shaping the attitudes, beliefs, and behaviours of followers, and eventually resulting in followers perceiving work as the dominant part of their lives, and thus more susceptible to

workaholism.

In revealing this, the study explicates more clearly the psychological mechanisms that underpin the influence of transformational leadership on followers' work attitudes and behaviours. Because "values are a person's or social group's consistent beliefs or sets of schemas about something in which they have an emotional investment", they "not only drive behaviours but also affect and are affected by, how individuals perceive and make sense of our world" (Clegg et al., 2019, p. 51). When a transformational leader articulates an irresistible vision for the organisation based on carefully chosen values, this compels followers to make the leader's, and hence the organisation's, ideology their own (Bryman, 1992). Moreover, transformational leaders can connect followers' self-concepts to the collective mission and to the group by increasing the prominence of the collective identity in followers' self-concepts. Transformational leaders motivate their followers by making the achievement of the collective vision self-expressive rather than instrumental-calculative. That is, followers willingly help to achieve the collective vision not for material or financial benefits but because the behaviours required to achieve the vision are symbolic and express their ideals and values (i.e., who they are), and thus enhance their self-worth. The results of this study supported the theory that transformational leaders through their words (e.g., articulating a positive future based on shared values) and actions (e.g., unselfish, or self-sacrificing behaviours) are seen by their followers as extraordinary because of their abilities and because they embody values and traits that are highly regarded. Accordingly, transformational leaders can profoundly influence followers in ways that increase person–leader and person–organisation value congruence. When followers share the same values with the leader and the organisation, transformational leaders are likely to become role models for their followers and followers are thus willing to imitate their beliefs, feelings, and behaviour to identify/match those of their leaders (Shamir et al., 1993). This is because values not only drive followers' behaviours but also affect how they perceive their leader and organisation, and how they make sense of the world. Consequently, followers are willing to incorporate the leader's/organisation's values into their self-concepts and ultimately to identify with the leader as well as with the organisation. Follower–leader value congruence is thus an important requirement for personal identification with the leader. Similarly, follower–organisation value congruence is an important pre-condition for social identification.

The findings and the theorising that underpins them add important nuance to Shamir et al.'s (1993) model which explicates followers' value congruence and identification as independent of each other. In contrast, the findings of the current study reveal value congruence as a key driver through which transformational leadership can further enhance follower identification with both the leader and with the organisation. The empirical evidence reported in Chapter 5 supports the view that, through value congruence, the strength of the positive relationship between transformational leadership and personal identification with the leader increases as the follower–leader value congruence increases. Likewise, the strength of the positive relationship between transformational leadership and social identification with the organisation increases as the follower–organisation value congruence increases. These distinctions between Shamir et al.'s initial model and the results of the current study are depicted in Figure 6.1.

Figure 6.1: The Extended Model of Shamir et al. (1993)



CL = Charismatic Leadership, VC = Value Congruence, PI = Personal Identification, SI = Social Identification, TFL = Transformational Leadership, FLVC = Follower Leader Value Congruence, FOVC = Follower Organisation Value Congruence

A further extension of Shamir et al.'s (1993) model comes from the inclusion of work centrality as an explanatory mediator between transformational leadership and workaholism. Shamir et al. proposed several mediators for the relationship between transformational leadership and follower–related outcomes. These mediators included value congruence, and personal and social identification. Previous studies that have tested Shamir et al.'s propositions have examined the effects of transformational leadership on one or two of the mediators proposed by Shamir et al., yet work centrality has never been identified as a mediator in the relationship between transformational leadership and follower workaholism — until this current research.

6.3.2 *Shedding New Light on Transformational Leadership's Influence on Work Centrality*

Beyond these contributions articulating the psychological mechanisms underpinning the relationship between transformational leadership and workaholism, a further finding of note is that, contrary to my hypothesis, transformational leadership was not directly associated with follower work centrality (H5a). Rather, work centrality emerged solely from followers' identification with the leader or organisation. This unexpected result highlights the importance of identification as a key psychological mechanism/mediator that enhances the effectiveness of transformational leadership which ultimately resulted in followers' placing work as central to their lives. Earlier research has pointed out that followers who identify with the leader and the leader's group/organisation are more willing to contribute to group objectives (Shamir et al., 2000). The relationships (e.g., person–leader, person–organisation) involve a sense of belongingness and oneness with the organisation whereby individuals define themselves in terms of the organisations with which they identify (Stinglhamber et al., 2015). When followers identify with the leader and the group with certain values, they are more susceptible to significant psychological and social forces, and this thus increases the likelihood of enhancing their personal commitment (Salancik, 1977; Shamir et al., 1993). The findings of the current study suggest that followers who identify with their leader and with their leader's organisation are likely to integrate the identities — personal, social, *and work* — into their self-concepts. When followers identify with their work, work becomes an important part of who followers “are” and thus a more central part of their lives (Shamir et al., 1993). Identification (personal and social) thus substantially strengthens the effects of transformational leadership to achieve its effects on followers and subsequently renders followers likely to perceive and regard work as the central part of their lives.

This study serves to explicate the significant effects of transformational leadership on the self-concepts of followers that provide a prominent psychological impact on shaping the perceptions, attitudes, and behaviours of followers. Changing the self-concepts of followers changes the way followers perceive their work such that work is no longer seen in instrumental terms (i.e., a means to an end) but rather as an opportunity for self-expression, self-consistency, and the enhancement of self-esteem and self-worth (Shamir et al., 1998). Followers of transformational leaders are likely to do their utmost to meet their leaders' expectations because their self-esteem and self-worth stem partly, if not

largely, from their work due to their identification with both the leader and the organisation and due to follower–leader and follower–organisation value congruence. Consequently, followers are likely to put in enormous time and effort to meet their leaders’ expectations. Followers are likely to be devoted to work because they can gain recognition and approval from their leaders and organisations by exhibiting such devotion. Devotion to one’s work also allows followers to demonstrate their loyalty and commitment to the leader, the leader’s vision, and the leader’s organisation. Obsession with one’s work, however, is a cornerstone of workaholism. This study helps to explain that transformational leadership shifts the mindset of the followers, which increases value congruence with the leader and the organisation, which in turn further increases identification with the leader and the organisation, which then increases work centrality and ultimately leads to work addition behaviour (i.e., workaholism).

6.3.3 Revealing the ‘Dark Side’ of Transformational Leadership that Results in Workaholism

The study is the first, to my knowledge, to examine the relationship between a holistic and reliable measure of transformational leadership and the counterproductive outcome of workaholism. It is also the first to examine the role that work centrality plays as an additional psychological mechanism through which transformational leadership can influence followers and subsequently result in workaholism among followers. In doing so, it goes further and offers stronger theoretical bases for these relationships than those offered by previous studies. For instance, a recent study of Lithuanian (mainly female) workers — published after the data were collected for the current thesis (Morkevičiūtė, Endriulaitienė, & Jočienė, 2019) — reported contrasting relationships between some dimensions of transformational leadership style and employees’ excessive work and general workaholism. Specifically, they found that while leaders’ “high expectations” of followers were positively correlated with workaholism, “individualised support” was negatively correlated. Importantly, the authors offer no theoretical explanations for this discrepancy and no insight into how psychological mechanisms within followers come together to affect their workaholism.

In contrast, the current study tested whether the effects of transformational leadership could facilitate an increase in follower workaholism through the influence of psychological mechanisms on work centrality, incorporating five components of

transformational leadership as a single construct. Rather than testing each dimension individually, all the dimensions of transformational leadership were taken together as no single dimension fully reflects the characteristics/traits, behaviours, and effects of transformational leadership on followers. While the research approaches differed, and notwithstanding the discrepant findings outlined above, the current study's results are consistent with the findings of Morkevičiūtė et al. (2019) in revealing that none of the individual dimensions (e.g., articulating a vision, intellectual stimulation, individualised support) positively correlated with general workaholism (Morkevičiūtė et al., 2019). The current study tested transformational leadership as incorporating five components as a single construct because some similar studies in the top-tier journals have also tested transformational leadership as a single construct including Jung and Avolio's (2000) "Opening the black box: An experimental investigation of the mediating effects of trust and value congruence on transformational and transactional leadership", Wang and Howell's (2012) "A multilevel study of transformational leadership, identification, and follower outcomes" and Kark et al.'s (2003) "The two faces of transformational leadership: Empowerment and dependency".

The findings support the view that work centrality is strongly related to workaholism among followers. Individuals who perceive work as an important part of their lives are more likely to work long hours and be more involved in and more committed to work than those with low levels of work centrality (Sharabi & Harpaz, 2010). Therefore, those who perceive work as more central to their lives are more likely to go beyond the formal requirements of work duties, perform to the best of their abilities, and find it difficult to disengage from work, all of which are symptomatic of workaholism (Schaufeli et al., 2008b). However, the finding did not support the view that psychological mechanism work centrality positively mediates the relationship between transformational leadership and workaholism among followers. Yet, importantly, it is only through the activation of a strong personal or social identity — strengthened by values congruence — that individuals' personal, social, and work identification seem to coalesce in ways that promote workaholism. The inclusion of work centrality as a mediating mechanism in the current study, therefore, offers the clearest path to date to explain how transformational leaders act upon the workaholism tendencies of their followers.

6.3.4 *Providing Support for Previous Research Findings in a New Context*

Finally, the current study's results add support to the existing empirical research on transformational leadership in several ways. The current empirical study findings are consistent with the previous literature in revealing that transformational leadership is positively associated with follower–leader value congruence (hypothesis 1a) (Shamir, 1995; Hoffman et al., 2011), follower–organisation value congruence (hypothesis 1b) (Hoffman et al., 2011), and both follower–leader value congruence (hypothesis 2a) and follower–organisation value congruence (hypothesis 2b) (e.g., Shamir et al., 1993; Jung & Avolio, 2000). As discussed in Chapter 3, follower–leader value congruence is a two-way process: followers idolise and want to be like their transformational leaders because they regard the leaders as extraordinary (e.g., personal characteristics, qualities, vision, attitudes) (Yukl, 1998) and are thus prone to align their values with the leaders; whereas transformational leaders shape followers' values to align with their own by empowering followers, expressing confidence in followers (Conger & Kanungo, 1998), articulating an inspiring vision (Conger, Kanungo & Menon, 2000; Posner, 1992), conveying the importance of the shared values (Dirks and Ferrin, 2002), possessing self-confidence, and genuinely caring for the well-being of their followers (Hoffman et al., 2011). In a similar vein, transformational leaders emphasise the organisation's collective mission and values, thus facilitating follower–organisation value congruence. A compelling vision articulated by transformational leader based on shared values can also facilitate follower–organisation value congruence (Shamir et al., 1993). Also consistent with existing literature (Shamir et al., 1993; Kark et al., 2003), the findings add weight to empirical studies showing a positive relationship between transformational leadership and (i) personal identification with the leader, and (ii) social identification with the organisation.

These findings, which arise from a context and with a sample (i.e., white-collar Australian professionals) that had yet to be studied in this manner, support the view that transformational leaders become role models for their followers who admire, respect, and trust them because of their exceptional qualities and vision, and because they “walk the talk” (Bass & Riggio, 2006); that is, they exemplify their vision and values in their deeds, by what they do, rather than produce just “mere words”. Likewise, transformational leadership could facilitate followers' social identification with organisation by articulating a compelling vision. The vision serves several purposes including the creation of a valued organisational identity that members endorse and incorporate into their self-

concepts (Ashforth & Mael, 1989).

In sum, the current research corroborates previous findings and lends support to the assertion that transformational leadership positively affected follower–leader value congruence, follower–organisation value congruence, and personal identification with leader and social identification with organisation, respectively.

6.4 Limitations and Future Research

All studies have limitations. Before moving on to discuss the practical contributions of the current study, its three main limitations will be addressed, along with suggestions and opportunities for future research.

6.4.1 *Self-report Questionnaire and Single Source Method*

Data collection in this study relied on a self-report questionnaire and a single source method for all variables. This raises the potential for a number of response biases to arise, including social desirability, recall errors, and/or common method bias (CMB). Chapter 4 outlines in detail the steps taken to mitigate and screen for CMB pre- and post-data collection and to ensure the reliability and validity of the self-report data that was collected. For instance, Bryman & Bell's (2011) principle to ensure questionnaire clarity was incorporated by designing different response formats in the questionnaire. The instrument was pilot-tested and wording adjusted to reduce possible miscomprehension. The order of sections and the title of the research project were carefully presented to decrease respondents' evaluation apprehension. The data collection procedures were structured to ensure participant anonymity was maintained and this was communicated to participants; both are important in reducing social desirability in responses and CMB (Podsakoff et al., 2003). Additionally, a statistical remedy, the Harmon's single-factor test, was used to assess CMB after the data were collected. Although sufficient measures were taken to reduce CMB, future research should adopt a trigonometric method to obtain data from multiple resources to ensure an even more credible and robust research design.

Despite these efforts, the question of whether participants answered in ways that they perceived to be socially desirable — that is, reporting responses on constructs like workaholism to present themselves more favourably to the researchers (Podsakoff et al., 2003) — remains pertinent. Many of the latent individual-level variables measured in this

study necessitated self-report responses. For example, followers' perceptions of the transformational leadership behaviours of their leaders, which refers to support received from the leader that varies according to the needs of each follower, involves individualised consideration. Additionally, transformational leadership dimensions such as charisma are "is in the eye of the beholder." Consequently, transformational leadership behaviours and traits are likely to be perceived and interpreted differently by different followers (Jacobsen & Andersen, 2014) and so are difficult to verify through third-party observations. While behavioural indicators of workaholism may be verified through objective measures like hours/days worked, the Bergen Work Addiction Scale (Andreassen et al., 2012a) used in this study was developed as a unidimensional self-report construct and includes items (e.g., "I worked to reduce feelings of guilt, anxiety, helplessness and depression") that require respondents' interpretations of the causes of internal emotional states. While imperfect, self-ratings are the most valid and reliable way to assess workaholism because others cannot accurately assess the extent of one's obsessions/compulsions to work like this, and because significant others (e.g., supervisors, colleagues, spouses, acquaintances) tend to underestimate the tendency of workaholics to work compulsively (McMillan, O'Driscoll, & Brady, 2004).

Of the variables used in the current study, "identification" and "value congruence", while fundamentally latent individual-level constructs, are those most likely to benefit from third-party rating (e.g., by the transformational leaders themselves). Therefore, future researchers may consider deploying external evaluations for these constructs, which involve self-report items such as "I strongly identify with my supervisor/organisation" (identification) and "My personal values match my supervisor's/organisation's values" (Values congruence). Doing so may provide more accurate (and/or differing) accounts of the influences on workaholism. Comparisons of these results with the self-reported data in this thesis may also unveil insight into the prevalence of self-report biases for constructs like workaholism.

6.4.2 Cross-sectional Design (causality)

A second potential limitation of the current study was the use of a cross-sectional design. That is, data were collected on the seven variables in the proposed model (i.e., TFL, FLVC, FOVC, SocID, PersID, WorkCen, and WorkA) simultaneously (Wilson, 2010). The advantage of cross-sectional data is that they allow examination of relationships

between variables and are relatively easy to collect. This design has been adopted in numerous transformational leadership studies (Gardner et al., 2010; Cavazotte, Moreno, & Bernardo, 2013), including Shamir et al.'s (1993) seminal study.

However, there are certain limitations surrounding cross-sectional designs. One of the major limitations is that it is not possible to prove causal relationships between variables using cross-sectional data (Bryman & Bell, 2011). This emphasises the need for future longitudinal research designs to adequately examine the causal effect of transformational leadership on person–leader value congruence, person–organisation value congruence, personal identification, social identification, work centrality, and workaholism among followers. The adoption of a longitudinal design would allow researchers to observe how transformational leadership could influence their followers' perceptions and attitudes as well as behaviours over time. For instance, it would be interesting to observe whether, when and how newcomers in an organisation under the influence of transformational leadership integrate their three psychological mechanisms (i.e., value congruence, identification, and work centrality) and/or begin to change workaholism attitudes and behaviours over time by repeated observations (perhaps every six months). Additionally, followers' perceptions, attitudes, and behaviours towards transformational leaders and organisations may change over time due to leader's characteristics, behaviours, or new challenges that the organisations may encounter (e.g., crisis, re-structuring).

While desirable, longitudinal research is costly and challenging. For instance, the attrition rates in longitudinal studies is problematic (Yee & Niemeier, 1996). Participants who choose to participate in a stage one survey may not be able to participate in later stages, leading to a reduced sample size that may limit the study's statistical power and introduce systematic differences between those who complete all stages and those who drop out along the way (Yee & Niemeier, 1996). Nonetheless, studies using a longitudinal research design provide greater confidence in the cause-effect relationship between the variables than the analysis in this thesis was able to achieve. Hence, researchers should consider investing the time and resources to undertake more longitudinal research (Antonakis, 2012; Cavazotte, 2013). Doing so is likely to generate more reliable data and unearth more findings that more precisely unpick the processes of transformational leaders' effects on their followers' tendency to workaholism.

6.4.3 *The Characteristics of the Sample (generalisability of the results)*

A final limitation of the current study is the characteristics of the sample. The current research was conducted in an Australian context with a particular sample composition. While efforts were made to assemble a sample with relative heterogeneity in terms of sector, experience, and level (Chapter 4), all respondents were full-time, white-collar employees in Australia. As such, the context and culture of the sample's workplaces may limit the generalisability of the results. This seems most pertinent in relation to national culture. For instance, the findings from the International Labor Organization (2013a) demonstrated that, at the national level, Japan exhibits levels of two cultural values that are far higher than those in Australia and with potential consequences for workaholism: (i) mastery (Snir & Harpaz, 2009) and (ii) masculinity (Hofstede & McCrae, 2004). Workaholism is more prevalent in societies that highly value mastery compared to societies that do not emphasise mastery (Snir & Harpaz, 2009) because mastery involves a cultural emphasis on "getting ahead" or success through self-assertion, ambition, independence, and competence (Schwartz, 1999). Similarly, individuals in masculine societies are more susceptible to workaholism because such societies value being assertive, competitive, dominant, and ambitious (Hofstede & McCrae, 2004).

Therefore, there remains the need to replicate the current study outside Australia to explore and compare any cross-cultural differences among followers from different cultural backgrounds or in multicultural workplaces. Consideration should be given to undertaking future research in other countries to explore the implications of other specific cultural factors (e.g., power distance, uncertainty avoidance, masculinity, mastery) for the effects of transformational leadership.

6.5 Practical Contributions

In addition to theoretical contributions outlined in Section 6.3, the current research offers several insights to practice. This research synthesises transformational leadership, self-concept, value congruence, social identity theories, and work centrality to examine the transformational leadership process from various perspectives. It identifies three significant psychological mechanisms/mediating mechanisms of transformational leadership, namely value congruence, identification, and work centrality. The findings reinforce the profound influence that prosocial transformational leadership, along with its

psychological mechanisms, can have on followers in ways that are not always positive. This is an important contribution to practice as it is widely accepted that transformational leadership has positive effects. Noted exceptions are when the leader fosters a personality cult, has psychological issues such as narcissism, a lack of morality, and/or demonstrates various types of leadership behaviours (e.g., abusive supervision, bullying, destructive leadership, supervisor aggression, toxic leadership, unethical leadership) which adversely affect followers and others (Takala, 2010; Stachowicz-Stanusch, 2011). The current study not only shows that positive outcomes are not always the case for transformational leadership but also identifies the psychological processes through which negative effects flow from even benign transformational leadership practice. The current findings can help organisations to become aware of and seek to mitigate the “dark side of transformational leadership” which could lead to workaholism to the detriment of followers, followers’ families, and their organisations.

Related to this, these research findings draw attention to the effects of transformational leadership and the importance of the psychological process of value congruence. It presents empirical evidence to explain how followers form identification with their leaders and organisations, how followers position work as their central life interest and, in the process, establish counter-productive attitudes and behaviours associated with workaholism. Very high levels of value congruence with leaders or organisations — while often perceived favourably in organisational settings — may be early warning signs that followers are susceptible to the potentially negative consequence of workaholism. It is worth observing that even if transformational leaders are well-meaning in their intentions, this leadership style can have serious pitfalls. Based on the findings of the current research, followers, leaders, and organisations should be cognisant of the negative side effects of transformational leadership and be aware of signs that might indicate tendencies towards workaholism.

Recommendations that organisations/leaders may consider that may help followers minimise workaholic behaviour include the following. First, it would be sensible for organisations to minimise follower workaholism and improve productivity by fostering values and norms that encourage work engagement and efficiency rather than workaholism (Andreassen, 2014). Secondly, leaders should be aware of the example they set for their followers, as it is evident that workaholic behaviours are more common among managers than others (Morkevičiūtė et al., 2019; Andreassen et al., 2014). Transformational leaders

are role models for their followers, and workaholism can be induced by vicarious learning in the workplace or even at home. According to social learning theory (Bandura, 1963), individuals can learn cognitively by observing significant others, such as managers who act as role models, and subsequently imitate those whose behaviours they have observed. If senior managers and supervisors display workaholic behaviours, such as working late into the night and over weekends and are seen to be rewarded for doing so, it is feasible that their followers may develop similar behaviours. It is crucial, therefore, that transformational leaders are neither supporting workaholic behaviours nor role modelling workaholic behaviours consciously or subconsciously (Clark et al., 2016). Thirdly, organisations should ensure that their Employee Assistance Programmes (EAP) are able to help their employees to understand the warning signs that may precede workaholism, and to manage and/or mitigate the consequences it manifests. Counselling can be provided as part of an EAP, and the findings of the current study can help employees and leaders to understand the effects of transformational leadership and the psychological mechanisms that can facilitate workaholism. This knowledge can eventually help leaders and followers to maintain a balance whereby strong value congruence and identification (personal or social) are productive without ‘tipping over’ into workaholism.

The current study accordingly provides empirical evidence, knowledge, and insights for organisations, leaders, managers, and employees themselves, so they gain a better understanding of the effects of transformational leadership. Specifically highlighted are the psychological mechanisms (i.e., value congruence, identification, work centrality) giving rise to a potential adverse consequence (i.e., workaholism) of transformational leadership.

The current study helps the followers of a transformational leader understand that the culture of an organisation is usually created by the owners of the organisation or their agents (e.g., leaders, managers). These issues take on prominence because organisations’ concern for their employees and the importance they place on providing meaning in people’s lives are often communicated in official documents and in the speeches made by owners and/or top managers. Unfortunately, such employee wellbeing narratives are often empty rhetoric designed to conceal the intentions of organisational leaders or managers who do not value employees as people but, instead, as ‘a means to an end’ (Mitchell, 1985). Organisational leaders may use symbols, stories, myths, legends, and metaphors to manipulate the values of their members so that they will conform with the

organisation's values — effort, productivity, teamwork, striving for excellence — thereby helping to achieve organisational goals such as improving organisational performance (Mitchell, 1985) at the employee's expense. Such efforts are, however, short-sighted, as workaholism is not sustainable.

Related to this, this study's findings raise questions about organisations' (and leaders') moral responsibilities. It helps organisations and leaders to look beyond their self-interest to consider the moral and ethical consequences of their actions. Workaholism is related to many harmful consequences not only for workaholics themselves but also for their families (Caruso, 2006). It can lead to increased errors and injuries (Nakata et al., 2000), increased health-care costs for their organisations (Vodanovich & Piotrowski, 2006), decreased self-reported job performance (Shimazu & Schaufeli, 2009), increased absenteeism particularly due to mental-health problems (Matsudaira et al., 2013), and increased intention to quit (Burke & MacDermid, 1999). Therefore, organisations and leaders need to ensure the efforts to create organisational cultures and/or strong associations between their (transformational) leaders and others in the organisation are managed in ways that might prevent or mitigate workaholism as a less desirable outcome of transformational leadership. By highlighting the psychological mechanisms that connect a leader's style and followers' workaholism tendencies, the study identifies those 'red flags' that might warn individuals and organisations when these tendencies become counterproductive.

6.6 Conclusion

Since workaholism has been associated with many harmful consequences (Caruso, 2006), the current study was undertaken to better understand the processes involved. It unearthed relationships between a leader's style and followers' proclivity for workaholism. The results have implications for future research and for practical ways that executives, managers, and employees might understand, recognise, and manage the effects of transformational leadership, the psychological mechanisms involved (i.e., value congruence, identification, work centrality), and potential adverse consequences (i.e., workaholism). Through this, the study's ultimate aim is to help managers, followers, and organisations benefit from the positive outcomes of transformational leadership while avoiding the extreme workaholism tendencies that can undermine followers' well-being and work performance. The limitations of the study have been discussed and some

suggestions and opportunities for future research set forth. It is hoped that this study contributes to both workaholism and leadership literature as this study has explored a different perspective — the ‘dark side’ of transformational leadership. Workaholism poses a severe risk to physical and mental health. The study shows that followers of transformational leaders can suffer serious adverse consequences even when those leaders have benevolent intentions. This needs to be acknowledged and actions taken to avoid or mitigate damage to both the organisations as well as their people and their families. Hence, it constitutes a serious health and safety issue in many workplaces that must be addressed in the best way possible through outcomes-based interventions, training, and processes. Research into the psychological mechanisms involved provides the necessary groundwork for the design of any such actions.

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APPENDICES

Appendix 1: Transformational Leadership Items

Transformational Leadership Original Items (Bass and Avolio, 1997)		Adaptation (<i>in italics</i>)	Rationale for Adaption	
Idealised influence attributed	iibh1	Talks about his/her most important values and beliefs	<i>My immediate supervisor</i> talks about his/her most important values and beliefs	To clarify the question for the participants
	iibh2	Specifies the importance of having a strong sense of purpose	<i>My immediate supervisor</i> specifies the importance of having a strong sense of purpose	To clarify the question for the participants
	iibh3	Considers the moral and ethical consequences of decisions	<i>My immediate supervisor</i> considers the moral and ethical consequences of decisions	To clarify the question for the participants
	iibh4	Emphasises the importance of having a collective sense of mission	<i>My immediate supervisor</i> emphasises the importance of having a collective sense of mission	To clarify the question for the participants
Idealised influence behaviour	iiat1	Instils pride in me for being associated with him/her	<i>My immediate supervisor</i> instils pride in me for being associated with him/her	To clarify the question for the participants
	iiat2	Goes beyond his/her self-interest for the good of the group	<i>My immediate supervisor</i> goes beyond his/her self-interest for the good of the group	To clarify the question for the participants
	iiat3	Acts in ways that builds my respect	<i>My immediate supervisor</i> acts in ways that builds my respect	To clarify the question for the participants
	iiat4	Displays a sense of power and confidence	<i>My immediate supervisor</i> displays a sense of power and confidence	To clarify the question for the participants

Appendix 1: Transformational Leadership Items (continued)

Original Items (Bass and Avolio, 1997)			Adaptation (<i>in italics</i>)	Rationale for Adaption
Intellectual stimulation	instim1	Re-examines ways of doing things to see if they are	<i>My immediate supervisor</i> re-examines ways of doing things to see if they are	To clarify the question for the participants
	instim2	Gets me to look at problems from many different angles	<i>My immediate supervisor</i> gets me to look at problems from many different angles	To clarify the question for the participants
	instim3	Suggests new ways of looking at how to complete assignments	<i>My immediate supervisor</i> suggests new ways of looking at how to complete assignments	To clarify the question for the participants
	instim4	Seeks differing perspectives when solving problems	<i>My immediate supervisor</i> seeks differing perspectives when solving problems	To clarify the question for the participants
Inspirational motivation	inspire1	Talks enthusiastically about what needs to be accomplished	<i>My immediate supervisor</i> talks enthusiastically about what needs to be accomplished	To clarify the question for the participants
	inspire2	Talks about a great vision of the future	<i>My immediate supervisor</i> talks about a great vision of the future	To clarify the question for the participants
	inspire3	Expresses confidence that goals will be achieved	<i>My immediate supervisor</i> expresses confidence that goals will be achieved	To clarify the question for the participants
	inspire4	Talks optimistically about the future	<i>My immediate supervisor</i> talks optimistically about the future	To clarify the question for the participants
Individualised consideration	consid1	Spends time teaching and coaching	<i>My immediate supervisor</i> spends time teaching and coaching	To clarify the question for the participants
	consid2	Considers me as having different needs, abilities, and aspirations from others	<i>My immediate supervisor</i> considers me as having different needs, abilities, and aspirations from others	To clarify the question for the participants
	consid3	Helps me to develop my strengths	<i>My immediate supervisor</i> helps me to develop my strengths	To clarify the question for the participants
	consid4	Treats me as an individual rather than as a member of a group	<i>My immediate supervisor</i> treats me as an individual rather than as a member of a group	To clarify the question for the participants

Appendix 2: Workaholism Items

Original Items (Andreassen et al., 2012a)		Adaptation (<i>in italics</i>)	Rationale for Adaptation
bwas1	I have been told by others to work less but I ignore them	<i>Over the last year, I have been told by others to work less but I ignore them</i>	To improve clarity of questionnaire.
bwas2	I worked so much that it has negatively influenced my health	<i>Over the last year, I worked so much that it has negatively influenced my health</i>	To improve clarity of questionnaire.
bwas3	I have been thinking of how I can free up more time to work	<i>Over the last year, I have been thinking of how I can free up more time to work</i>	To improve clarity of questionnaire.
bwas4	I have spent much more time working than I initially intended	<i>Over the last year, I have spent much more time working than I initially intended</i>	To improve clarity of questionnaire.
bwas5	I worked to reduce feelings of guilt, anxiety, helplessness and depression	<i>Over the last year, I worked to reduce feelings of guilt, anxiety, helplessness and depression</i>	To improve clarity of questionnaire.
bwas6	I was stressed whenever something stopped me from working	<i>Over the last year, I was stressed whenever something stopped me from working</i>	To improve clarity of questionnaire.
bwas7	I missed out on my hobbies, leisure activities, and exercise because of work	<i>Over the last year, I missed out on my hobbies, leisure activities, and exercise because of work</i>	To improve clarity of questionnaire.

Appendix 3: Electronic Questionnaire

Organisation Invitation Letter

Invitation to participate in a research project entitled
“Leadership Study”

Dear Madam/Sir.

My name is Wenjuan (Michelle) Cai and I am a student at the University of Technology, Sydney. Your organisation is invited to participate in the research project identified above which is being conducted by me as part of my doctoral studies. The purpose of this research is to investigate whether certain types of leadership style and certain personal characteristics of employees are related to workaholism among employees.

Your organisation and numerous others have been randomly selected for two reasons.

1. They are listed in the Australian Stock Exchange.
2. They have full-time, white-collar employees.

Please note there are four eligibility criteria for participation in this research.

1. White-collar professionals;
2. Employed on a full-time basis;
3. You can work outside of the workplace; and
4. Worked with current immediate supervisor for at least 12 months.

If you agree to participate, we will ask that you distribute a package from us to your employees. The package contains an invitation letter, a survey and a stamped self-addressed envelope. **We have included the invitation letter and questionnaire for your perusal.** I do not know how much time your organisation will need to distribute the packages to eligible employees but I imagine it should take less than an hour for most organisations. You can decide on the number of packages you wish to distribute.

All the data will be anonymous and confidential as only the researchers will have access to the data. All answers will be numerically coded and analysed statistically. Archived data will be accessible only to my academic supervisors and me. Results will be analysed as a whole rather than on an individual or company basis. Thereafter, the paper-based questionnaires will be destroyed.

The data will only be used for the purpose of this research project. The results will be included in my doctoral thesis and may be presented at academic conferences and published in academic journals. **In any presentation or publication, information will be provided in such a way that organisations and individuals cannot be identified.** We are interested in the overall relationships between leadership style, employee needs and workaholism. **We are not interested in the in the responses of particular**

individuals or individuals from particular organisations.

There are neither risks nor benefits to your organisation if you choose to participate in the research. If you decide not to participate, it will not affect your relationship with the researchers or the University of Technology Sydney. If you wish to withdraw from the study once it has started, you can do so at any time without having to give a reason, by contacting myself or my supervisors.

However, it will not be possible to withdraw any completed surveys that have been sent to the researchers because personal identifiers (e.g., name, job title, organisation) will not be recorded. **Please note that you are under no obligation to participate in this research.**

Should you have any questions or concerns regarding this research project, please do not hesitate to contact me (Tel: +61 [REDACTED], E-mail: [REDACTED]@student.uts.edu.au). Alternatively, you can contact my supervisors, Dr. Karen Wang (Tel: +61 2 9514 3577, E-mail: Karen.Yuan.Wang@uts.edu.au), Dr. Paul Wang (Tel: +61 2 9514 3692, E-mail: Paul.Wang@uts.edu.au) or Dr. Ace Simpson (Tel: +61 2 9514 3278, E-mail: Ace.Simpson@uts.edu.au).

If your organisation is interested in participating, please complete the consent form below and return it to me. By signing the consent form you consent to distributing the participant packages to your employees. Please note that participants will be requested to complete the survey outside of their workplaces at their own convenience.

Please keep this letter for your records.

Yours sincerely,

Ms. Wenjuan (Michelle) Cai
PhD Candidate
UTS Business School
University of Technology, Sydney
PO Box 123, Broadway NSW 2007 Tel.: [REDACTED]
E-mail: [REDACTED]@student.uts.edu.au

NOTE:

This study has been approved by the University of Technology, Sydney Human Research Ethics Committee. If you have any complaints or reservations about any aspect of your participation in this research which you cannot resolve with the researcher, you may contact the Ethics Committee through the Research Ethics Officer (ph: +61 2 9514 2478 Research.Ethics@uts.edu.au) and quote the UTS HREC reference number. Any complaint you make will be treated in confidence and investigated fully and you will be informed of the outcome.

Organisation Consent Form

“Leadership Study”.

UTS HREC APPROVAL NUMBER: UTS HREC REF NO. ETH 18-2188

I _____ have read the information on the research project “Workaholism: The roles of transformational leadership and follower needs” and all of my questions have been answered satisfactorily.

I understand the purposes, procedures and risks of the research as described in the Invitation Letters. I have had an opportunity to ask questions and I am satisfied with the answers I have received.

I freely agree to consent to employees from my organisation being invited to participate in this research. I understand that the project will be conducted in accordance with the Invitation Letter, a copy of which I have retained. I have read the Organisation Invitation Letter, the Participant Invitation Letter and the Survey.

I agree to arrange for the distribution of packages containing a participant information letter, a questionnaire and a self-addressed, stamped envelope.

I agree that the research data gathered from this project may be presented/published in a form that does not identify my organisation or any of its employees in any way and may be used for future research purposes.

I am aware that I can contact Wenjuan (Michelle) Cai or her supervisors if I have any concerns about the research.

I understand that I am free to withdraw my consent at any time, and do not have to give any reason for withdrawing, without affecting my relationship with the researchers or the University of Technology Sydney.

Signature: _____

Name: _____

Organisation: _____

Position: _____

Date: _____

Participant Invitation Letter

Invitation to participate in a research project entitled “Leadership Study”.

UTS HREC Approval Number: UTS HREC REF NO. ETH 18-2188

Dear Madam/Sir.

My name is Wenjuan (Michelle) Cai and I am a Ph.D. student at the University of Technology, Sydney.

Your organisation has given me permission to invite its employees to participate in my doctoral research project. The purpose of my research is to investigate whether certain types of leadership style and certain personal characteristics of employees are related to workaholism among employees.

Please note you need to satisfy three eligibility criteria to participate in this research.

1. You are a white-collar professional;
2. You are employed on a full-time basis;
3. You can work outside of the workplace; and
4. You have worked with your current immediate supervisor for at least 12 months.

If you decide to participate, you will be required to complete an electronic survey, which should take approximately 20 minutes. The survey contains questions about your supervisor’s leadership style, your personality, your attitudes to work and your working habits. Please complete the survey outside of your workplace at your own convenience.

All of your responses will be anonymous and confidential. Only the researchers will have access to the data. All answers will be numerically coded and analysed statistically. Archived data will be accessible only to my academic supervisors and myself. Results will be analysed as a whole rather than on an individual or company basis.

Completing the online survey will be considered implied consent from you that you freely agree to participate in the research. Please note it will not be possible to withdraw your data from the study because personal identifiers (e.g., name, job title, organisation) will not be recorded and thus we will not be able to identify your responses.

There are no risks or benefits to you if you choose to participate in the research. Your organisation will not be able to determine whether you participated in the study.

The data will only be used for the purpose of this research project. The results will be included in my doctoral thesis and may be presented at academic conferences and published in academic journals. In any presentation or publication, information

will be provided in such a way that organisations and individuals cannot be identified. We are interested in the overall relationships among leadership style, follower needs and workaholism. We are not interested in the in the responses of particular individuals or individuals from particular organisations.

Please note that you are under no obligation to participate in this research. Participation in this study is voluntary. It is completely up to you whether or not you decide to participate. If you decide not to participate, it will not affect your relationship with the researchers or the University of Technology Sydney.

Please keep this invitation letter for your records. Your participation will be greatly appreciated.

Should you have any questions or concerns regarding this research project, please do not hesitate to contact me (Tel: +61 [REDACTED], E-mail: [REDACTED]@student.uts.edu.au). Alternatively, you can contact my supervisors, Dr. Karen Wang (Tel: +61 2 9514 3577, E-mail: Karen.Yuan.Wang@uts.edu.au),

Dr. Paul Wang (Tel: +61 2 9514 3692, E-mail: Paul.Wang@uts.edu.au) or Dr. Ace

Simpson (Tel: +61 2 9514 3278, E-mail: Ace.Simpson@uts.edu.au).

Yours sincerely,

Wenjuan Cai

Ms. Wenjuan (Michelle) Cai

PhD Candidate

UTS Business School

University of Technology, Sydney PO Box 123, Broadway NSW 2007 Tel.: [REDACTED]

E-mail: [REDACTED]@student.uts.edu.au

NOTE:

This study has been approved by the University of Technology, Sydney Human Research Ethics Committee. If you have any complaints or reservations about any aspect of your participation in this research which you cannot resolve with the researcher, you may contact the Ethics Committee through the Research Ethics Officer (ph: +61 2 9514 2478 Research.Ethics@uts.edu.au) and quote the UTS HREC reference number. Any complaint you make will be treated in confidence and investigated fully and you will be informed of the outcome.

Part 1. Please use the rating scale below to describe Your Supervisor.

Not At All <i>1</i>	Once in a While <i>2</i>	Sometimes <i>3</i>	Fairly Often <i>4</i>	Frequently, If Not Always <i>5</i>	
1. My immediate supervisor re-examines ways of doing things to see if they are up to standard.....	1	2	3	4	5
2. My immediate supervisor talks about his/her most important values and beliefs.....	1	2	3	4	5
3. My immediate supervisor instils pride in me for being associated with him/her.....	1	2	3	4	5
4. My immediate supervisor talks enthusiastically about what needs to be accomplished.....	1	2	3	4	5
5. My immediate supervisor specifies the importance of having a strong sense of purpose.....	1	2	3	4	5
6. My immediate supervisor spends time teaching and coaching.....	1	2	3	4	5
7. My immediate supervisor goes beyond his/her self-interest for the good of the group.....	1	2	3	4	5
8. My immediate supervisor acts in ways that builds my respect.....	1	2	3	4	5
9. My immediate supervisor displays a sense of power and confidence.....	1	2	3	4	5
10. My immediate supervisor considers the moral and ethical consequences of decisions.....	1	2	3	4	5
11. My immediate supervisor talks about a great vision of the future.....	1	2	3	4	5
12. My immediate supervisor considers me as having different needs, abilities, and aspirations from others.....	1	2	3	4	5
13. My immediate supervisor gets me to look at problems from many different angles.....	1	2	3	4	5
14. My immediate supervisor helps me to develop my strengths.....	1	2	3	4	5
15. My immediate supervisor suggests new ways of looking at how to complete assignments.....	1	2	3	4	5
16. My immediate supervisor emphasises the importance of having a collective sense of mission.....	1	2	3	4	5
17. My immediate supervisor expresses confidence that goals will be achieved.....	1	2	3	4	5
18. My immediate supervisor talks optimistically about the future.....	1	2	3	4	5
19. My immediate supervisor seeks differing perspectives when solving problems.....	1	2	3	4	5
20. My immediate supervisor treats me as an individual rather than as a member of a group.....	1	2	3	4	5

Part 2. Please rate the extent to which you agree or disagree with each of the following statements about Your Supervisor.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	
1. My personal values match my supervisor's values.....	1	2	3	4	5
2. My supervisor and I value the same things in life.....	1	2	3	4	5
3. My supervisor's values fit well with the things I value.....	1	2	3	4	5
4. I agree with the values of my supervisor.....	1	2	3	4	5
5. My supervisor and I have the same values.....	1	2	3	4	5
6. I strongly identify with my supervisor.....	1	2	3	4	5
7. I view the success of my supervisor as my own success.....	1	2	3	4	5
8. I am proud of my supervisor.....	1	2	3	4	5
9. When someone criticises my supervisor, it feels like a personal insult.....	1	2	3	4	5
10. I am very interested in what others think of my supervisor.....	1	2	3	4	5

Part 3. Please rate the extent to which you agree or disagree with each of the following statements about Your Organisation.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	
1. I feel like “part of the family” at my organisation.....	1	2	3	4	5
2. I feel “emotionally attached” to my organisation.....	1	2	3	4	5
3. My organisation has a great deal of personal meaning for me.....	1	2	3	4	5
4. I feel a strong sense of belonging to my organisation.....	1	2	3	4	5
5. My personal values match my organisation’s values.....	1	2	3	4	5
6. My organisation and I value the same things in life.....	1	2	3	4	5
7. My organisation’s values fit well with the things I value.....	1	2	3	4	5
8. I agree with the values of my organisation.....	1	2	3	4	5
9. My organisation and I have the same values.....	1	2	3	4	5
10. I strongly identify with my organisation.....	1	2	3	4	5
11. I view the success of my organisation as my own success.....	1	2	3	4	5
12. I am proud of my organisation.....	1	2	3	4	5
13. When someone criticises my organisation, it feels like a personal insult.....	1	2	3	4	5
14. I am very interested in what others think of my organisation.....	1	2	3	4	5

Part 4. Please rate the extent to which you agree or disagree with each of the following statements about Yourself.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	
1. The major satisfaction in my life comes from my work.....	1	2	3	4	5
2. The most important things that happen to me involve my work.....	1	2	3	4	5
3. I have few other activities more important than my work.....	1	2	3	4	5
4. Work should be considered a central part of life.....	1	2	3	4	5
5. I would probably keep working even if I didn't need the money.....	1	2	3	4	5
6. My work is a big part of who I am.....	1	2	3	4	5
7. Few things in life are more important to me than my work.....	1	2	3	4	5
8. Overall, I consider work to be very central to my existence.....	1	2	3	4	5
9. One of my favourite and most satisfying pastimes is being close to others, listening to them, and relating to them.....	1	2	3	4	5
10. Just being around others and finding out about them is one of the most interesting things I can think of doing.....	1	2	3	4	5
11. I think it would be very satisfying to have very close relationships with quite a few people.....	1	2	3	4	5
12. I enjoy spending time with people.....	1	2	3	4	5
13. The main thing I like about being around other people is the warm glow I get from being with them.....	1	2	3	4	5
14. I continue working until everything is perfect.....	1	2	3	4	5
15. I excel in what I do.....	1	2	3	4	5
16. I am highly motivated to succeed.....	1	2	3	4	5
17. I keep myself busy even in my spare time.....	1	2	3	4	5
18. I have a fast pace to my life.....	1	2	3	4	5

Part 5. Please rate the following statements use the rating scale below to describe Yourself.

	Never	Rarely	Sometimes	Usually	Always
	1	2	3	4	5
1. I seem to be in a hurry and racing against the clock.....	1	2	3	4	5
2. I stay busy and keep many irons in the fire.....	1	2	3	4	5
3. I find myself doing two or three things at one time such as eating lunch and writing a memo, while talking on the phone.....	1	2	3	4	5
4. I find myself continuing to work after my co-workers have called it quits.....	1	2	3	4	5
5. I spend more time working than on socialising with friends, on hobbies, or on leisure activities.....	1	2	3	4	5
6. It is hard for me to relax when I am not working.....	1	2	3	4	5
7. I feel it is very important to work hard.....	1	2	3	4	5
8. Something inside me drives me to work hard.....	1	2	3	4	5
9. I feel guilty when I take time off work.....	1	2	3	4	5
10. I feel obliged to work hard.....	1	2	3	4	5
11. I enjoy spending evenings and weekends working.....	1	2	3	4	5
12. I feel very addicted to my work.....	1	2	3	4	5
13. I prefer to work excessive hours.....	1	2	3	4	5
14. I think about work constantly.....	1	2	3	4	5
15. I have a need for control over my work.....	1	2	3	4	5
16. I feel anxious when I am not working.....	1	2	3	4	5
17. I feel guilty when I am not working.....	1	2	3	4	5
18. I feel bored or restless when I am not working.....	1	2	3	4	5
19. I am unable to relax at home because I think about my work.....	1	2	3	4	5
20. I frequently check over my work many times before I finish it.....	1	2	3	4	5

21. I ask others to check my work often.....	1	2	3	4	5
22. It takes me a long time to finish my work because it must be perfect.....	1	2	3	4	5
23. I feel anxious or nervous about my work.....	1	2	3	4	5
24. I obsess about my work-related goals and achievements.....	1	2	3	4	5
25. I am impatient and in a hurry.....	1	2	3	4	5
26. I am aggressive.....	1	2	3	4	5
27. I get irritated with others.....	1	2	3	4	5
28. I have a need for control over others.....	1	2	3	4	5
29. I have been told by others to work less but I ignore them.....	1	2	3	4	5
30. I work so much it has negatively influenced my health.....	1	2	3	4	5
31. I think of how I can free up more time to work.....	1	2	3	4	5
32. I spend much more time working than I initially plan to.....	1	2	3	4	5
33. I work to reduce feelings of guilt, anxiety, helplessness and depression.....	1	2	3	4	5
34. I become stressed whenever something stops me from working.....	1	2	3	4	5
35. I miss out on my hobbies, leisure activities, and exercise because of work.....	1	2	3	4	5

Part 6. Demographic Information.

1. Age _____(Years)
2. Gender (please circle): Male / Female
3. Profession: Accountant, Consultant, Educator, Engineer, IT Specialist, Lawyer, Medical Practitioner (e.g.,
Chiropractor, Dentist, GP, Specialist), Other: _____
4. Highest Level of Education (please circle):
High School / Diploma / Bachelors / Masters / Doctorate
5. Employment Status: Full-time / Part-time / Other _____
6. Does your job allow you to start early or finish late? Yes / No
7. Can you do your job outside of your workplace?
Not at all / Once in a while / Sometimes / Fairly often / Frequently, if not always
8. How long have you been in your current job? _____(Years)
9. At what organisational level is your job? (please circle):
Non-Management / Lower Management / Middle Management / Senior Management / Executive
10. How long have you been working with your current supervisor? _____(Years)
11. How many staff do you supervise? _____
12. How long have you been with your current organisation? _____(Years)
13. In which industry is your organisation? Construction, Education, Energy, Engineering, Finance, Health, IT, Media,
Pharmaceutical, Telecommunications, Other: _____

THANK YOU FOR PARTICIPATING IN THIS STUDY

Appendix 4: EFA Results for Each Construct

Construct	tems	Individual KMO	Factor Loadings
Transformational Leadership (TFL)	IIBH1	0.97a	0.70
	IIBH2	0.98a	0.79
	IIBH3	0.98a	0.78
	IIBH4	0.98a	0.81
	IIAT1	0.97a	0.80
	IIAT2	0.96a	0.83
	IIAT3	0.95a	0.83
	IIAT4	0.98a	0.75
	INSPIRE1	0.98a	0.79
	INSPIRE2	0.98a	0.77
	INSPIRE3	0.97a	0.79
	INSPIRE4	0.97a	0.80
	INSTIM2	0.98a	0.76
	INSTIM3	0.96a	0.81
	INSTIM4	0.98a	0.82
	CONSID1	0.97a	0.79
CONSID3	0.96a	0.84	
CONSID4	0.98a	0.73	
Personal Identification with Leader (PERSID)	PERSID1	0.80a	0.90
	PERSID2	0.87a	0.86
	PERSID3	0.82a	0.89
	PERSID4	0.89a	0.83
Social Identification with Organisation (SOCID)	SOCID1	0.87a	0.86
	SOCID2	0.87a	0.87
	SOCID3	0.87a	0.87
	SOCID4	0.89a	0.84
	SOCID5	0.92a	0.74

EFA - Extraction Method: Principal Component Analysis

Appendix 4: EFA Results for Each Construct (continued)

Construct	Items	Individual KMO	Factor Loadings
Follower–Leader Value Congruence (FLVC)	FLVC1	0.93 ^a	0.88
	FLVC2	0.89 ^a	0.90
	FLVC3	0.90 ^a	0.91
	FLVC4	0.90 ^a	0.90
	FLVC5	0.90 ^a	0.90
Follower–Organisation Value Congruence (FOVC)	FOVC1	0.91 ^a	0.90
	FOVC2	0.89 ^a	0.89
	FOVC3	0.88 ^a	0.92
	FOVC4	0.90 ^a	0.87
	FOVC5	0.92 ^a	0.88
Work Centrality (WorkCen)	WORKCEN1	0.90 ^a	0.80
	WORKCEN2	0.89 ^a	0.85
	WORKCEN3	0.92 ^a	0.74
	WORKCEN4	0.93 ^a	0.78
	WORKCEN6	0.93 ^a	0.76
	WORKCEN7	0.91 ^a	0.82
	WORKCEN8	0.91 ^a	0.85
Workaholism (WorkA)	BWAS1	0.95 ^a	0.81
	BWAS2	0.93 ^a	0.83
	BWAS3	0.95 ^a	0.77
	BWAS4	0.94 ^a	0.83
	BWAS5	0.92 ^a	0.82
	BWAS6	0.91 ^a	0.85
	BWAS7	0.93 ^a	0.84

EFA - Extraction Method: Principal Component Analysis

Appendix 5: Reliability Results for Each Construct

Construct	Items	Item-Total Correlation	Cronbach's Alpha if Item Deleted
Transformational Leadership (TFL)	IIBH1	0.67	0.96
	IIBH2	0.77	0.96
	IIBH3	0.75	0.96
	IIBH4	0.78	0.96
	IIAT1	0.77	0.96
	IIAT2	0.80	0.96
	IIAT3	0.81	0.96
	IIAT4	0.72	0.96
	INSTIM2	0.72	0.96
	INSTIM3	0.78	0.96
	INSTIM4	0.79	0.96
	INSPIRE1	0.76	0.96
	INSPIRE2	0.73	0.96
	INSPIRE3	0.76	0.96
	INSPIRE4	0.77	0.96
Follower–Leader Value Congruence (FLVC)	CONSID1	0.76	0.96
	CONSID3	0.82	0.96
	CONSID4	0.69	0.96
	FLVC1	0.81	0.93
	FLVC2	0.85	0.93
Follower–Organisation Value Congruence (FOVC)	FLVC3	0.85	0.92
	FLVC4	0.84	0.93
	FLVC5	0.85	0.92
	FOVC1	0.84	0.92
	FOVC2	0.83	0.92
	FOVC3	0.86	0.91
	FOVC4	0.80	0.93
	FOVC5	0.81	0.92

Appendix 5: Reliability Results for Each Construct (continued)

Construct	Item	Item-Total Correlation	Cronbach's Alpha if Item Deleted
Personal Identification with the Leader (PersID)	PERSID1	0.81	0.85
	PERSID2	0.75	0.87
	PERSID3	0.80	0.85
	PERSID4	0.71	0.89
Social Identification with the Organisation (SocID)	SOCID1	0.76	0.86
	SOCID2	0.78	0.86
	SOCID3	0.77	0.86
	SOCID4	0.74	0.87
	SOCID5	0.62	0.89
Work Centrality (WorkCen)	WORKCEN1	0.72	0.89
	WORKCEN2	0.79	0.89
	WORKCEN3	0.65	0.90
	WORKCEN4	0.70	0.90
	WORKCEN6	0.68	0.90
	WORKCEN7	0.75	0.89
	WORKCEN8	0.78	0.89
Workaholism (WorkA)	BWAS1	0.73	0.91
	BWAS2	0.77	0.91
	BWAS3	0.69	0.91
	BWAS4	0.76	0.91
	BWAS5	0.75	0.91
	BWAS6	0.79	0.90
	BWAS7	0.77	0.91

Appendix 6: Loadings, t-values and Means (SD) for Reflective Constructs

Latent Construct	Indicator	Outer Loadings	Mean	SD	t-value	p- value
Transformational Leadership (TFL)	IIBH1	0.702	0.701	0.024	28.754	0.000
	IIBH2	0.794	0.794	0.017	46.133	0.000
	IIBH3	0.779	0.779	0.020	39.070	0.000
	IIBH4	0.804	0.804	0.019	42.204	0.000
	IIAT1	0.797	0.797	0.018	45.217	0.000
	IIAT2	0.831	0.831	0.014	58.642	0.000
	IIAT3	0.834	0.834	0.014	59.044	0.000
	IIAT4	0.749	0.750	0.024	31.083	0.000
	INSTIM2	0.757	0.756	0.021	36.253	0.000
	INSTIM3	0.804	0.803	0.020	39.734	0.000
	INSTIM4	0.820	0.819	0.018	46.006	0.000
	CONSID1	0.791	0.791	0.016	48.004	0.000
	CONSID3	0.843	0.843	0.013	65.927	0.000
	CONSID4	0.729	0.729	0.023	31.951	0.000
	INSPIRE1	0.789	0.788	0.019	42.548	0.000
	INSPIRE2	0.763	0.763	0.019	39.467	0.000
	INSPIRE3	0.785	0.785	0.020	38.475	0.000
	INSPIRE4	0.800	0.800	0.016	51.482	0.000
	PERSID1	0.907	0.907	0.008	116.594	0.000
	PERSID2	0.856	0.856	0.014	61.830	0.000
Personal Identification with Leader (PersID)	PERSID3	0.896	0.896	0.009	99.741	0.000
	PERSID4	0.830	0.829	0.018	45.687	0.000
	SOCID1	0.867	0.867	0.012	71.357	0.000
	SOCID2	0.866	0.866	0.014	61.356	0.000
Social Identification with Organisation (SocID)	SOCID3	0.866	0.866	0.013	65.157	0.000
	SOCID4	0.836	0.835	0.015	56.867	0.000
	SOCID5	0.737	0.736	0.028	26.566	0.000
	FLVC1	0.879	0.879	0.014	64.971	0.000
	FLVC2	0.902	0.902	0.010	88.172	0.000

Appendix 6: Loadings, t-values and Means (SD) for Reflective Constructs (continued)

Latent Construct	Indicator	Outer Loadings	Mean	SD	t-value	p-value
Follower– Leader Value Congruence (FLVC)	FLVC3	0.909	0.908	0.010	93.779	0.000
	FLVC4	0.897	0.897	0.012	74.484	0.000
	FLVC5	0.905	0.905	0.010	93.831	0.000
	FOVC1	0.897	0.897	0.010	85.530	0.000
	FOVC2	0.893	0.893	0.011	80.230	0.000
Follower– Organisation Value Congruence (FOVC)	FOVC3	0.916	0.916	0.010	89.921	0.000
	FOVC4	0.872	0.872	0.015	58.960	0.000
	FOVC5	0.883	0.883	0.015	58.808	0.000
	WORKCEN1	0.808	0.808	0.015	52.826	0.000
	WORKCEN2	0.858	0.858	0.011	75.610	0.000
Work Centrality (WorkCen)	WORKCEN3	0.741	0.741	0.025	29.570	0.000
	WORKCEN4	0.777	0.777	0.019	40.196	0.000
	WORKCEN6	0.764	0.764	0.021	37.043	0.000
	WORKCEN7	0.818	0.818	0.017	47.553	0.000
	WORKCEN8	0.849	0.848	0.013	63.830	0.000
	BWAS1	0.811	0.811	0.018	44.546	0.000
	BWAS2	0.817	0.817	0.018	45.307	0.000
	BWAS3	0.764	0.764	0.025	30.504	0.000
Workaholism (WorkA)	BWAS4	0.827	0.826	0.016	51.153	0.000
	BWAS5	0.833	0.833	0.015	54.255	0.000
	BWAS6	0.866	0.866	0.011	79.993	0.000
	BWAS7	0.830	0.830	0.017	49.058	0.000

TFL = Transformational Leadership, FLVC = Follower-Leader Value Congruence, FOVC = Follower-Organisation Value Congruence, PersID = Personal Identification, SocID = Social Identification, WorkCen = Work Centrality, and WorkA = Workaholism.

Appendix 7: Cross Loadings

Indicator	FLVC	FOVC	PersID	SocID	TFL	WorkA	WorkCen
flvc1	0.879	0.542	0.740	0.495	0.683	0.046	0.250
flvc2	0.902	0.541	0.757	0.502	0.657	0.110	0.292
flvc3	0.909	0.535	0.770	0.490	0.684	0.063	0.293
flvc4	0.897	0.555	0.748	0.500	0.664	0.069	0.288
flvc5	0.905	0.541	0.803	0.489	0.674	0.152	0.293
fovc1	0.539	0.897	0.480	0.747	0.435	0.129	0.416
fovc2	0.551	0.893	0.520	0.748	0.451	0.130	0.459
fovc3	0.549	0.916	0.522	0.741	0.454	0.085	0.460
fovc4	0.502	0.872	0.468	0.721	0.419	0.075	0.383
fovc5	0.554	0.883	0.528	0.735	0.440	0.140	0.451
Persid1	0.827	0.533	0.907	0.509	0.695	0.214	0.362
persid2	0.696	0.483	0.856	0.523	0.617	0.170	0.332
persid3	0.777	0.519	0.898	0.522	0.725	0.131	0.352
persid4	0.654	0.430	0.829	0.486	0.580	0.231	0.380
socid1	0.529	0.798	0.536	0.868	0.449	0.151	0.482
socid2	0.446	0.685	0.487	0.865	0.382	0.139	0.478
socid3	0.507	0.751	0.502	0.867	0.420	0.095	0.422
socid4	0.476	0.645	0.533	0.836	0.400	0.253	0.496
socid5	0.317	0.548	0.361	0.734	0.282	0.222	0.445
iiat1	0.603	0.381	0.645	0.342	0.797	0.128	0.228
iiat2	0.642	0.372	0.644	0.349	0.831	0.074	0.235
iiat3	0.689	0.385	0.677	0.365	0.834	-0.015	0.226
iiat4	0.536	0.398	0.553	0.401	0.749	0.040	0.242
iibh1	0.497	0.394	0.518	0.361	0.702	0.155	0.289
iibh2	0.588	0.443	0.574	0.400	0.794	0.110	0.238
iibh3	0.623	0.419	0.589	0.389	0.779	-0.004	0.223
iibh4	0.554	0.365	0.575	0.374	0.804	0.109	0.195
inspire1	0.583	0.394	0.576	0.347	0.789	0.037	0.205
inspire2	0.528	0.378	0.533	0.371	0.763	0.102	0.247
inspire3	0.574	0.427	0.552	0.354	0.785	-0.014	0.170
inspire4	0.589	0.435	0.554	0.408	0.800	0.024	0.201
instim2	0.581	0.382	0.587	0.376	0.757	0.147	0.254
instim3	0.558	0.373	0.612	0.369	0.804	0.156	0.257
instim4	0.605	0.342	0.624	0.363	0.820	0.091	0.217
consid1	0.572	0.358	0.601	0.350	0.791	0.150	0.253
consid3	0.634	0.401	0.659	0.383	0.843	0.116	0.245
consid4	0.634	0.347	0.583	0.331	0.729	-0.038	0.158

Appendix 7: Cross Loadings (continued)

Indicator	FLVC	FOVC	PersID	SocID	TFL	WorkA	WorkCen
bwas1	0.111	0.125	0.206	0.178	0.097	0.812	0.374
bwas2	0.002	0.004	0.101	0.074	0.013	0.814	0.262
bwas3	0.082	0.124	0.179	0.178	0.104	0.767	0.295
bwas4	0.071	0.127	0.157	0.183	0.070	0.826	0.341
bwas5	0.118	0.111	0.212	0.174	0.117	0.835	0.397
bwas6	0.107	0.134	0.203	0.195	0.096	0.867	0.438
bwas7	0.035	0.061	0.124	0.141	0.025	0.827	0.323
workcen1	0.334	0.485	0.395	0.520	0.299	0.311	0.813
workcen2	0.292	0.428	0.375	0.461	0.262	0.425	0.858
workcen3	0.194	0.285	0.276	0.341	0.172	0.391	0.736
workcen4	0.217	0.369	0.258	0.423	0.175	0.314	0.775
workcen6	0.271	0.405	0.330	0.483	0.253	0.256	0.768
workcen7	0.161	0.304	0.279	0.404	0.177	0.387	0.814
workcen8	0.274	0.427	0.349	0.464	0.255	0.353	0.850

TFL = Transformational Leadership, FLVC = Follower-Leader Value Congruence, FOVC = Follower- Organisation Value Congruence, PersID = Personal, Identification with the Leader, SocID = Social Identification with the Organisation, WorkCen = Work Centrality and WorkA = Workaholism.

Appendix 8: Collinearity Assessment - Variance Inflation Factor (VIF) Results

Latent Construct	Indicator	VIF
Transformational Leadership (TFL)	CONSID1	2.76
	CONSID3	3.69
	CONSID4	2.26
	IIAT1	2.71
	IIAT2	3.68
	IIAT3	4.26
	IIAT4	2.22
	IIBH1	2.09
	IIBH2	2.78
	IIBH3	2.52
	IIBH4	2.85
	INSPIRE1	2.61
	INSPIRE2	2.42
	INSPIRE3	2.81
	INSPIRE4	3.03
	INSTIM2	2.31
	INSTIM3	3.24
INSTIM4	2.93	
Personal Identification with Leader (PersID)	PERSID1	3.08
	PERSID2	2.30
	PERSID3	2.89
	PERSID4	2.04
Social Identification with Organisation (SocID)	SOCID1	2.54
	SOCID2	2.60
	SOCID3	2.61
	SOCID4	2.22
	SOCID5	1.64

Appendix 8: Collinearity Assessment - Variance Inflation Factor (VIF) Results (continued)

Latent Construct	Indicator	VIF
Follower–Leader Value Congruence (FLVC)	FLVC1	2.92
	FLVC2	3.66
	FLVC3	3.76
	FLVC4	3.43
	FLVC5	3.60
Follower–Organisation Value Congruence (FOVC)	FOVC1	3.36
	FOVC2	3.39
	FOVC3	4.03
	FOVC4	2.96
	FOVC5	2.97
Work Centrality (WorkCen)	WORKCEN1	2.32
	WORKCEN2	2.87
	WORKCEN3	1.86
	WORKCEN4	2.03
	WORKCEN6	1.93
	WORKCEN7	2.42
	WORKCEN8	2.69
	BWAS1	2.18
Workaholism (WorkA)	BWAS2	2.49
	BWAS3	1.95
	BWASs4	2.40
	BWAS5	2.43
	BWAS6	2.77
	BWAS7	2.51

TFL = Transformational Leadership, FLVC = Follower-Leader Value Congruence, FOVC = Follower-Organisation Value Congruence, PersID = Personal Identification, SocID = Social Identification, WorkCen = Work Centrality, and WorkA = Workaholism