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The bilateral effects of leaders and followers on the leadership processes and outcomes

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By

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Abstract

While theory and research on leaders and leadership proliferate, understanding the behavioural and attitudinal variations of leaders and their subordinates remains one of the challenging issues for the study of leadership effectiveness. Part of this perplexity returns to the lack of comprehensive models that capable to examine the effects of the interactions between individuals' internal (characteristics) and external (perceptions) motives on their attitudes and behaviours at both intra-interpersonal levels of analysis. Drawing from self-concept, regulatory focus, implicit followership and leadership theories, this study examines leaders' and followers' internal and external motives, interactions and influence on the formation of attitudes and adoption of different behaviours at the intrapersonal level. Further, the study examines the influence of leaders' psychological characteristics on their followers' attitudes and behaviours at the interpersonal level of analysis. Using a process type model, this research is conducted via three separate studies to examine the intra-interpersonal interactions and influences on the leadership process. The first study results have indicated that leaders' psychological characteristics (i.e., identity levels and regulatory focuses) positively interact with their perceptions of followers to influence their manifestation of different leadership behaviours. Results from the second study have indicated a higher order influence of followers' regulatory focuses on the formation of their perceptions, attitudes, and work behaviours. The third study provided several positive indicators for the existence of positive correlations between leaders' psychological characteristics and the formation of their followers' attitudes and behaviours.

Keywords: Leadership process, identity levels, regulatory focus, leaders' implicit followership, commitment to change.

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List of abbreviations

ID_Coll	collective identity
ID_Ind	individual identity
RF_Pro	promotional orientation
RF_Prv	prevention orientation
L-IFT	Leader implicit followership theory
LIF_P	leaders' prototypes "positive" views of their followers
LIF_N	leaders' anti-prototype "negative" views of their followers
TrF	Transformational leadership
Tor	Task oriented leadership
CNr	Contingent reward
MbEx	management by exception leadership
C2C	Commitment to change
Af_c2c	Affective commitment to change
C_c2c	Continuance commitment to change
N_c2c	Normative commitment to change
OCB	Organizational leadership behaviours
CWB	Counter work behaviours
SCT	Social Cognitive theory
SIT	Social identity theory
ITr	Identity Theory
CDT	Cognitive dissonance theory
DLB	Directive leadership behaviours
EASI	Emotions as social information model
M-Turk	Mechanical Turk data base
HIT	Human Intelligence task
LSCS	levels of self-concept scale
GRFM	General Regulatory Focus Measure
MLQ	Multi-level leadership questionnaire
SEM	Structure equation model
AVE	Average variance extracted
VIF	Variance inflation factor

Chapter one

Introduction

This chapter introduce the current study, through providing a summarized view of the overall research and its results. The discussion in this chapter introduces the current research theoretical background, objectives, questions, and a summary of the main findings in relation to the research questions and hypothesis. Thus, we start by presenting the research introduction and significance. Following, that an overview of the study model, conduction and the results in relation, data collection and analysis.

1. Introduction

Scholars define leadership as "a process of influence over the thoughts, feelings, and actions of the others" (Yukl and Mahsud, 2010). Leaders' ability to influence their followers is congruent on the activation of the mechanisms of compliance, identification and internalisation (Kelman, 1974). The activation of these mechanisms is a function of leaders' adoption of different leadership behaviours (Bass and Avolio, 1995, Shamir et al., 1993). However, an exact explanation of the variance in leaders' tendency to act in one particular way or another has been and still is a question in leadership literatures(Tuncdogan et al., 2017, Tuncdogan et al., 2015). Importantly, leading scholars have recently revived the research into leaders' individual differences and how these contribute to the formation of the leadership phenomenon (Antonakis et al., 2012, Epitropaki et al., 2017, Tuncdogan et al., 2017). This interest has mainly been driven by theoretical and methodological advances (Antonakis et al., 2012, Epitropaki et al., 2017, McMullen et al., 2009, Tuncdogan et al., 2017). Self-conceptions and regulatory focuses theories, although significant for the formation of one's perceptions and behaviours, have not received enough attention from leadership scholars (Epitropaki et al., 2017, Tuncdogan et al., 2017, Swann, 1990, Higgins, 1998).

Importantly, leaders' traits are capable of influencing both leaders' and followers' behaviours (Rus et al., 2010, Jackson and Johnson, 2012). However, the uniaxial focus of leadership literature on the study of either leaders or followers has resulted in a lack of understanding of the role of leaders' individual differences in the formation of their followers' attitudes and behaviours, independent of or at least complementary formation to leadership behaviours (Tuncdogan et al., 2017). Underpinned by social cognition, identity, chronic regulatory and leadership theories, this study aims to examine the

interrelationships between leaders' individual characteristics (i.e., self-levels and motivation orientations), leadership behaviours, followers' motivations, attitudes and work-related behaviours. In doing so, the study incorporates transformational, task-oriented, contingent reward and management by exception leadership behaviours. The inclusion of these behaviours has special importance for understanding the hierarchy of influence that leaders' individual characteristics have on their manifestation of leadership behaviours from the most transformational (i.e., charismatic) to non-transformational leadership behaviours "management by exception". This has special importance for the study of leadership effectiveness in today's organisations, in which leaders are required to preserve the balance between efficiency and adaptation. Consequently, the current study is organised into three parts: the first part aims to examine the drivers of different leadership behaviours (i.e., transformational and directive leadership) by examining their relationships with leaders' psychological characteristics and their prototypical views of followers. In the second part, the study examines how different leadership behaviours interact with the followers' motivational orientations to induce different work-related attitudes and behaviours. Third, the study aims to examine the correlation between leaders' individual characteristics and the formation of followers' attitudes and work behaviours.

Firstly, identity refers to how people define themselves relative to others (Day and Harrison, 2007). Scholars have identified several levels of identity – collective, relational and individual – together they form one's self-concept (Day and Harrison, 2007). Self-concept refers to knowledge structures that organise information meanings and perceptions, and regulate cognition and behaviours (Johnson and Yang, 2010). Based on the notion of self-consistency, individuals tend to act in particular ways that confirm their self-concepts, such that the salience of one's individual-based identity (i.e.,

individual self) possess a higher correlation with the adoption of self-serving behaviours compared to group-based identity, which attaches more to collective forms of behaviour (Rus et al., 2010, Johnson et al., 2012, Swann, 1990). Consequently, the study aims to examine how leaders' levels of identity induce different leadership behaviours. This is believed to offer unique insights into the drivers of leaders' behaviours in a real organisational context (Antonakis et al., 2012, Tuncdogan et al., 2017). Individuals' actions result not only from their conceptions of themselves but also from their motivational orientation (Tuncdogan et al., 2015).

The chronic regulatory focus theory describes the variation in an individual's motivation to approach pleasure and or avoid pain (Higgins, 2000). Scholars classified the regulatory focus theory as one of the main psychological traits that differentiates individuals in their tendency to act in one way or another (Cropanzano et al., 2008, Kark and Van Dijk, 2007, Tuncdogan et al., 2017). Self-regulation via promotion and/or prevention focuses also reveals the needs pertaining to individuals' quest to fulfil their motivations and behavioural focuses (Higgins, 2000, Higgins, 2005). On the other hand, promotionally oriented people seek to achieve their ideal self through advancement and accomplishment, while individuals with prevention orientation seek to achieve their ought self by fulfilling duties and obligations (Lanaj et al., 2012). It is therefore believed that these two orientations direct people's behaviours towards either changing the status quo into a more desirable one (i.e., promotionally oriented), and/or maintaining the status quo and stability in their environment (i.e., prevention oriented) (Lanaj et al., 2012, Kark and Van Dijk, 2007). leadership scholars interest to study chronic regulatory theory is relatively recent with more efforts still required to understand the effects of chronic regulatory on a wide range of leadership behaviours (Tuncdogan et al., 2017). Consequently, this study examined the influence of leaders' self-levels and goal pursuit

orientation (chronic regulatory focus) on a variety of leadership behaviours with relative importance for the success of today'sorganisations, namely, charismatic, relational, task-oriented, and management by exception leadership behaviours. The overall results supported the theoretical predictions concerning the correlation between different identities, motivational bases and leadership behaviours.

The perception behaviour correlation model Bargh (1997), Bargh et al. (1996) indicates that individuals' behaviours stem not only from internal sources of motivation but also from external motives in the form of the perceptions of other people's behaviours and characteristics (Bargh, 1997, Bargh et al., 1996). Leaders' implicit conceptions of their followers are believed to unconsciously define the way they treat or act towards them (Whiteley et al., 2012, Gawronski et al., 2006). Consequently, the study of the interactions between leaders' characteristics and their assumptions about their followers become critically important for understanding the drivers of different leadership behaviours. Importantly, the study results supported a mediation rather than a moderation role for leaders' prototypical views on the relationships between leaders' traits and their leadership behaviours. This supports the notion that individuals' conceptions of themselves influence the way in which they tend to construct their environment (Swann, 1990).

Second, leadership behaviours represent an essential contextual force that induces followers' different mindsets or means-of-work (Meyer and Parfyonova, 2010, Wang and Howell, 2012a). However, individuals' motivational orientations determine their responses to the contextual forces (Stapel and Koomen, 2001). Different literature, therefore, has supported the idea of fit between the perception of different leadership behaviours and follower motivational orientation in the formation of followers' work-related attitudes and behaviours (Hamstra et al., 2011b, Higgins, 2002a, Higgins, 2005).

Importantly, individuals' regulatory focus could be considered either as stable individual characteristics or as a work-related regulatoryfocus(Johnson and Yang, 2010, Neubert et al., 2008, Schuh et al., 2016, Wallace and Chen, 2006). Whereas leadership literaturehas focused on the study of regulatory focus as a situational-induced state (Wallace et al., 2009), scholars in psychology have indicated the superiority of individuals' stable characteristics in the formation of their perceptions (Swann, 1990). Therefore, this study examined how followers' chronic regulatory focuses interacted with their perceptions of different leadership behaviours. The examination of these interactions is of relative importance to the study of leadership phenomenon, as it contributes to understanding the importance of the recently levelled criticisms against leadership literature's inability to differentiate between the perception of and the actual leadership behaviours (Hansbrough et al., 2015). In contrast to the previous literatures that indicated the superiority of the perceptio of various leadership behaviours on the formation of their motivational orienation (i.e. measured as situationaly induced characteristic). The current study has indicated a higher order influence of one's motivational orienation on their perception of different leadership behavoiurs. The results revealed a higher order influence of the motivational orientations on the formation of one's perceptions of different leadership behaviours, attitudes, and work-related behaviours.

Third, scholars' ability to draw a consistent conclusion about leadership effectiveness requires the inclusion of more stable traits in the estimation models (Antonakis et al., 2012). This is believed to advance our understanding of how leaders' traits contribute to the formation of their followers' attitudes and work-related outcomes, independent of or complementary to leadership behaviours (Tuncdogan et al., 2017). The study results have provided positive indicators of the influence of leaders' traits on the formation of their

followers' attitudes and work-related behaviours through the perception of leadership behaviours.

Overall, this research was conducted over three different studies, the results indicates a significant interactions between leaders' psychological characteristics, leadership behaviours, followers' attitudes, and work-related outcomes. The study is organised in six different chapters. The first chapter introduces the research questions, objectives, and contribution. The second chapter presents an explanation of the literature relevant to the research questions and goals. In the third chapter, the study presents a detailed discussion of the research methodology. The remaining sections provide a comprehensive analysis of the research model, interpretation of the analysis results, and their implications for both the theoretical and professional domains.

2. Research Questions

Based on the above discussion, this research aspire to answer the following questions about the interactions between leaders and their followers in the leadership process.

1. How does the variation in leaders' psychological orientations (i.e., identity levels, regulatory focuses) influence their manifestation of different leadership behaviours?

2. How do leaders' prototypical views of their followers interact with their individual characteristics (i.e., levels of self, motivational orientation) to induce different leadership behaviours?

3. How do followers' regulatory orientations interact with their perception of different leadership behaviours to influence their work-related attitudes and behaviours?

4. How do leaders' individual characteristics and prototypes interact with the perception of leadership behaviours, followers' attitudes and work behaviours?

3. Research Objectives

The current study aims to understand thereciprocal influences of the leaders and followers on the leadership process and outcomes, which include achieving the following objectives:

1. Understand the underlying motives of different leadership behaviours based on examining how leaders' psychological characteristics (i.e., levels of identity & motivational orientation) interact with their leadership behaviours.
2. Examine how leaders' characteristics and assumptions about their followers interact to induce the manifestation of different leadership behaviours.
3. Examine the formation of followers' work-related attitudes and behaviours through the interactions between their motivational systems and perceptions of different leadership behaviours.
4. Understand how leaders' traits and assumptions about their followers contribute to the formation of their followers' attitudes and work-related behaviours.

4. Research Significance and Contribution

Nowadays, organisations are challenged to survive in a complex, dynamic and uncertain business environment (Boga and Ensari, 2009). The attainment of organisational success in such a situation requires leaders who are capable of achieving both efficiency and adaptation for their organisations (Pawar and Eastman, 1997, Carter et al., 2014). Different leadership behaviours (i.e., transformational and transactional) are considered necessary for the achievement of both efficiency and adaptation (Van der Voet, 2014, Pawar and Eastman, 1997, Carter et al., 2014). However, a continuous challenge is still present in the leadership literature to define different triggers of various leadership behaviours (Tuncdogan et al., 2017). Identity and chronic regulatory theories are believed to

determine individuals' perceptions, motivation, and actions, yet have not received enough attention from leadership scholars (Epitropaki et al., 2017, Tuncdogan et al., 2017). Importantly in the currently changing business environment, leaders are challenged to tackle several complex problems within a limited period of time, and with a lack of information (Mumford et al., 2000). In such a situation, leaders' actions represent the best manifestation of their individual differences (Epitropaki et al., 2017). Consequently, the examination of both identity levels and regulatory focus correlations with different leadership behaviours is believed to add to the current accumulated knowledge about the drivers of leadership behaviours considered necessary for the success of today's organisations (Epitropaki et al., 2017, Johnson et al., 2012). This is also believed to assist in leaders' development, which requires not only enhancing their leadership-related skills but also inducing the appropriate shifts in their identity or individual characteristics (Lord and Hall, 2005).

Scholars indicate that individuals' behaviours stem not only from internal sources of motivation but also from external motives in the form of the perceptions of other people's behaviours and characteristics (Bargh, 1997, Bargh et al., 1996). Leaders' implicit conceptions of their followers are believed to unconsciously define the way they treat or act towards them (Whiteley et al., 2012, Gawronski et al., 2006). Studies in psychology indicate that individuals' perceptions are highly influenced by their individual traits (Swann, 1990). Therefore, the examination of the interaction between leaders' traits and the implicit assumptions about their followers can advance our understanding of leader-follower interactions and contribute to the formation of different leadership behaviours.

The study contributes to our understanding of the formation of not only leaders' behaviours, but also how followers' attitudes and behaviours are formed through the

interactions between their individual characteristics and perceptions of leadership behaviours. Previous leadership literaturehas disclosed leaders' ability to influence their follower's attitudes and work behaviours, by priming their different motivational systems (or regulatory focuses) (Neubert et al., 2008, Kark and Van Dijk, 2007). However, these studies relied on the definition of regulatory focus as a spatial or situational-induced state (Neubert et al., 2008, Hamstra et al., 2011b). The examination of followers' regulatory focuses as a chronicle (stable) characteristic in this study is believed to contribute in our understanding of leadership effectiveness by aligning followers' attitudes and behaviours with more stable individual characteristics (Antonakis et al., 2012). This alsoenriches the recent debates in leadership literature concerning the necessity to differentiate between perceptions and actual leadership behaviours (Hansbrough et al., 2015). The estimation results indicated a significant influence of followers' chronicle regulatory focuses on their attitudes and work-related outcomes through the perceptions of different leadership behaviours.

Drawing a consistent conclusion about leadership effectiveness requires leadership scholars to add more stable leaders' traits to their research models (Antonakis et al., 2012). One of the main advantages of this is that it enables the examination of the direct and indirect correlation between the leaders' traits and the formation of their followers' attitudes and work-related behaviours (Tuncdogan et al., 2017). Leaders' traits are believed to cause followers to effect independent of or complementary with leadership behaviours., even though this issue has not received enough attention from leadership scholars (Johnson et al., 2012, Tuncdogan et al., 2015). Therefore, studying the direct and indirect interactions between leaders' traits and their followers' attitudes and behaviours is believed to add new insights to our understanding of the leadership phenomenon.

Overall, the study offers several theoretical and empirical implications as follows:

Theoretically,

1. The studycontributesto advancing the current accumulated knowledge about the antecedents of different leadership behaviours (i.e., transformational and directive leadership behaviours).

2. The study further understanding of how followers attitudes and work related behaviours could be enhanced through a selection process that consider both the leaders and their team members.

3. The study unveilsa significant result concerning the interactions between followers' chronicle characteristics, their perceptions of different leadership behaviours, and the formation of their work-related attitudes and behaviours.

4. The study discloses a relationship between leaders' individual psychological characteristics and the formation of their followers' attitudes and work-related outcomes.

On the professional side, the study offers several promising implications for selection, training and policy implementation activities, as follows:

1. The study presents how to increase leaders' engagement in different leadership behaviours by shifting the psychological orientations from one level to another.

2. The study increases our understanding of how followers' attitudes and work-related behaviours could be enhanced through a selection process that considers both the leaders' and their team members' individual characteristics.

3. The study increases our understanding of how to increase policy implementation effectiveness by enhancing leaders' self-knowledge, motivational orientations, and their implicit perceptions of their followers.

5. Study Model, Conduction and Results

To achieve the objectives mentioned above, three separate empirical studies were conducted using three different samples. The first study was conducted using a sample of 100 managers, to examine the interrelationships between leaders' individual differences, implicit assumptions and different leadership behaviours. The following framework presents the first study variables and its hypothesis.
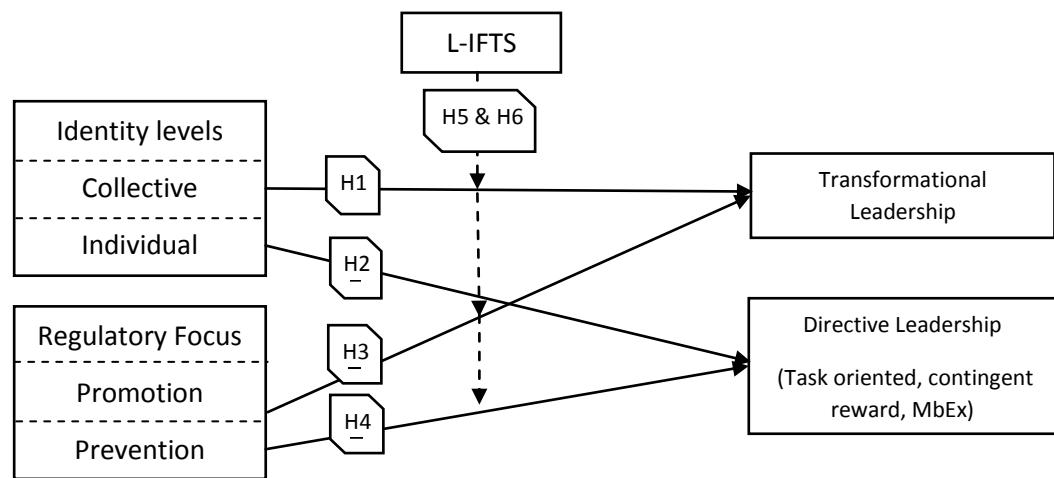
Figure 1 the first study theoretical framework

This study contributes to answering two main questions as follows;

- o How does the variation in leaders' psychological orientations (i.e., identity levels, regulatory focuses) influence their manifestation of different leadership behaviours?

- o How do leaders' prototypical views of their followers interact with their individual characteristics (i.e., levels of self, motivational orientation) to induce different leadership behaviours?

Importantly, the ultimate results significantly supported the role of leaders' different psychological orientations in inducing leadership behaviours. The results indicated a positive association between the salience of leaders' collective and promotion orientation and their engagement in transformational leadership behaviours –

conversely, the salience of leaders' individual levels of identity and prevention orientation positively induced directive forms of leadership behaviours. Importantly, the results indicated significant interactions between leaders' and followers' identities as represented by the interaction between leaders' individual differences and their prototypical view of their followers. Specifically, the estimation did not support the moderation role of L-IFT on the relationships between leaders' individual differences and leadership behaviours, or in other words, the independence of L-IFT from leaders' individual characteristics. Instead, the results supported a mediation of L-IFT on the relationships between leaders' psychological orientation and their manifestation of different leadership behaviours. This supports the predictions of identity and regulatory theories that one's knowledge or self-conceptions define one's perceptions and behaviours.

The second study was conducted using a sample of 100 team members, to examine the interactions between the perception of leadership behaviours and followers' chronic regulatory focuses, and how these interactions influence the formation of followers' attitudes and work-
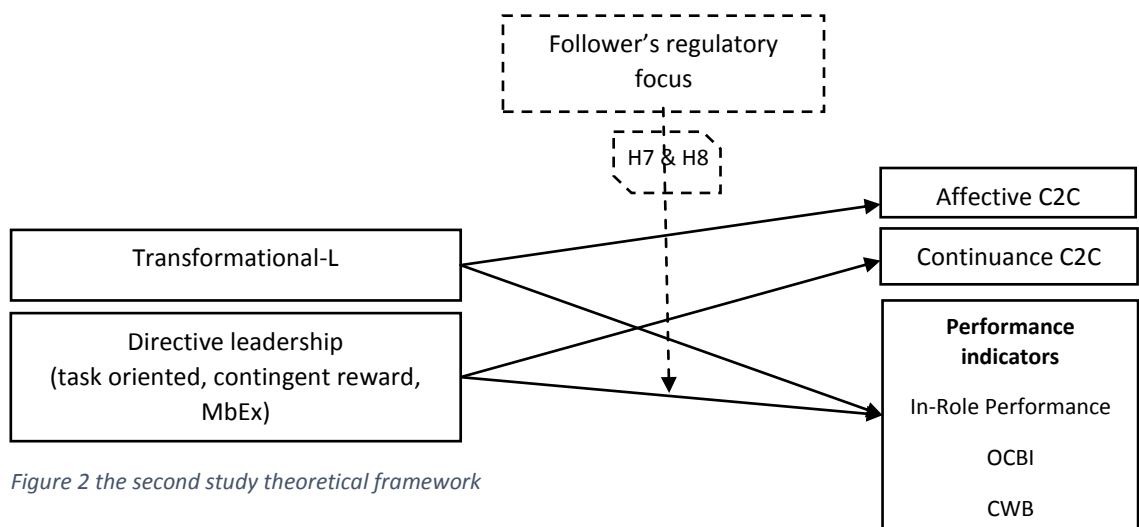
Figure 2 the second study theoretical framework

related behaviours. Figure-2 presents the second study's variables and their hypothesised relationships:

The estimation results for this study contributes to anwering the following research questions:

o How do followers' regulatory orientations interact with their perception of different leadership behaviours to influence their work-related attitudes and actions?

Importantly, the results obtained from testing the hypothesised relationships in H7 & H8 did not support any moderation role of followers' regulatory focus on the relationships between the perception of different leadership behaviours and work-related attitudes and outcomes. Instead, the results supported a higher order influence of individuals' chronic regulatory focus on their perception of leadership behaviours and the formation of their attitudes and work-related behaviours.

The third study was conducted using a sample of 20 teams from the University of Hull; this included surveying both the team leaders and their team members. Thus, the final sample comprised 20 team leader and 52 team members. The primary purpose of this study is to find out more about the relationships between leaders' traits, followers' attitudes and work-related behaviours, independent of or complementary with leadership behaviours. The following framework presents the third study's variables and their hypothesised relationships:

This study is mainly concerned with answering the following research question:

o How do leaders' individual characteristics and prototypes interact with the perception of leadership behaviours, followers' attitudes and work behaviours?

The results for examining the above hypotheses indicated positive association between leaders' characteristics and the formation of followers' attitudes and work-related
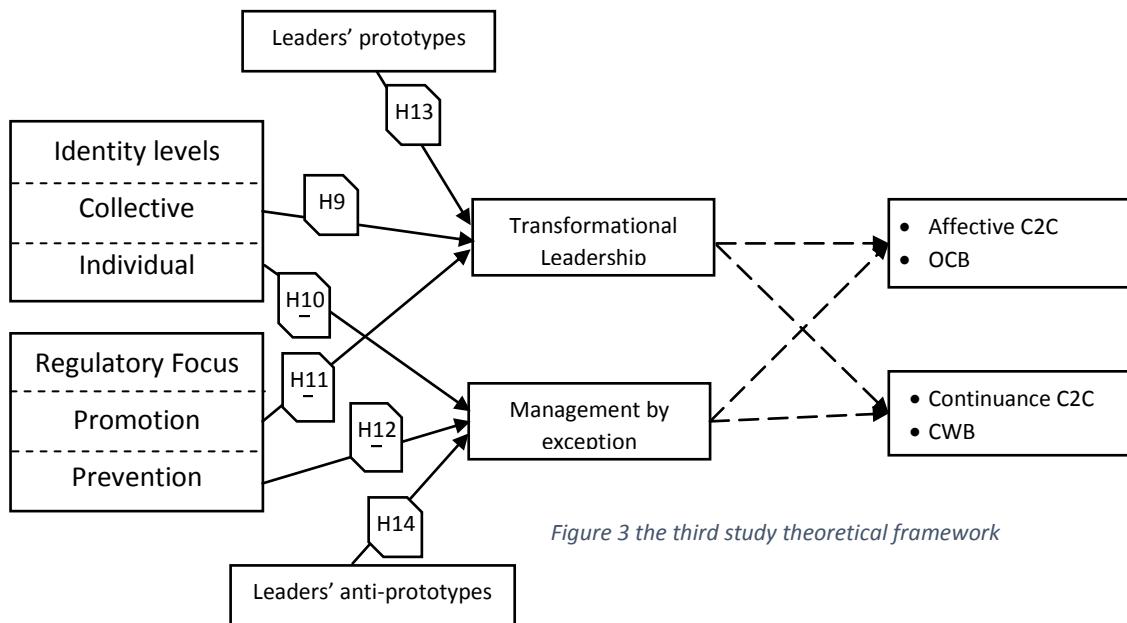
Figure 3 the third study theoretical framework

behaviours through the perception of leadership behaviours. Particularly, the salience of leaders' collective promotion orientations, and prototypical views of followers, is positively associated with the followers' perceptions of transformational leadership behaviours, which increase their affective C2C and OCB and reduce their CWB. Conversely, the salience of a leader's individual identity, prevention orientation and anti-prototypical view of followers is positively associated with the followers' perception of management by exception leadership behaviours, which results in increasing the followers' continuance of C2C and CWB, and reducing their OCB.

7. Data and Data Analysis

Both online and hard copy survey forms were used for the purpose of data collection. The required information for both the first and second studies was collected through an online survey designed on "Online Surveys" and published on M-Turk. Two different questionnaires were used the: the first one was designed to obtain information about leaders' individual characteristics, assumptions and leadership behaviours. The second survey was intended to gather information about the follower's perceptions of leadership behaviours, regulatory focuses, attitudes and work-related behaviours. Paper form

surveys were used for the conduction of the third study; this returns to the difficulty of using online forms to collect team data, including both leaders and their direct followers. Consequently, we opted to design two survey forms; the first one was complated by the team leader, including information about their individual characteristics and assumptions. The second survey was filled out by leaders' direct team members, including information about their perception of the leadership behaviours, regulatory focuses, attitudes and work-related behaviours.

The collected data was analysed using the PlS-SEM software. A various statistical examinations were conducted for each study in order to obtain rich and accurate information about the hypothesised relationships. Notably, the analysis for each study started with a description of the study variables (i.e., descriptive statistics), followed by an evaluation of the assessment model in which several issues related to the constructs' reliability, validity, heterogeneity and multicollinearity were examined. In the final stage, the estimation model was undertaken based on PLS-SEM.

Chapter 2: Literature Review

This chapter provides an overview of the theoretical foundation of the current study framework. The chapter starts by providing a summarized view of the overarching theoretical perspective for the current study, which include the underpinning theory (social cognitive) and model structure (leadership process) that explains the research framework coherence. Whereas social cognitive theory explains how individuals' characteristics interact with the environmental factors to induce their behaviours, leadership process model depicts how both leaders and followers are set to influence the leadership process and outcomes. Thus, these two theoretical views explain the study model which examines the interrelationships between leaders-followers idiosyncratic characteristics, their perceptions and behaviours. As well as, how both leaders and followers influence on the leadership process and outcomes.

Moreover, a detailed discussion of each part of the study model and its underlying theories is explained. The literatures narrative in this chapter focuses on presenting the theoretical idea of each construct in the model, the underlying mechanisms of influence on the subsequent endogenous construct, and the previous literatures findings and voids which naturally lead to the current study hypothesis. Therefore, the chapter is generally organized based on the leadership process model into: first, a discussion of leaders' individual differences (i.e., identity, chronic regulatory theories) and how they interact with their implicit assumptions of followers to induce different leadership behaviours. Second, how followers' characteristics (i.e., chronic regulatory focuses) interact with their perceptions of leadership behaviours to induce their different work-related attitudes and behaviours.

1. Social Cognitive Theory

Social cognitive theory (SCT), introduced by Bandura, provides the theoretical framework forthe current study and defines how it fits in the leadership and psychology literature. The theory emphasises understanding individuals as active actors in the context of social forces (i.e., micro and macro social and economic conditions) (Carducci, 2009). SCT explains how individuals' behaviours are formed through the interactions with their personal and environomental elements. A central notion in Bandura's cognitive theory is the triadic reciprocal process that describes the interactions between three sets of influence: personal aspects (i.e., beliefs, cognitions, and skills), and behavioural and social environmental factors (Schunk; and Usher., 2012).
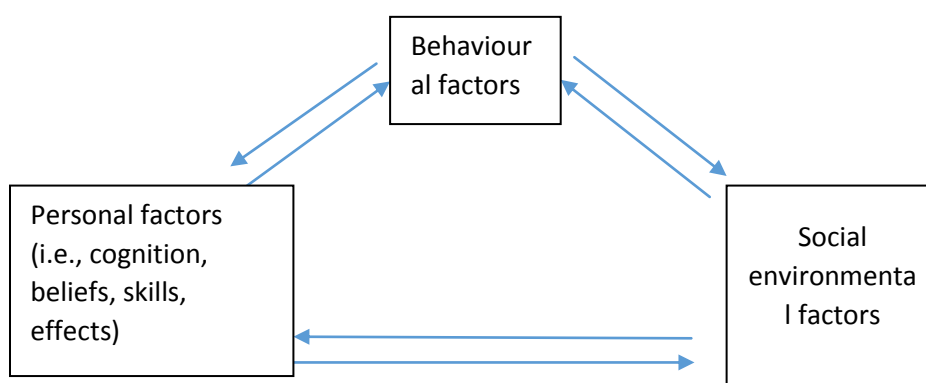
Figure 4 Reciprocal interactions in social cognitive theory

Based on the assumption of self-system and reciprocal process, Bandura acknowledges the participation of both external stimuli and cognitive process on the formation of individuals' behaviours. Accordingly, the theory combines learning and cognition in order to explain how they combine in explaining the operation of human behaviours. The main assumptions of this theory are self-system and triadic reciprocal cognitions. In self-system, Bandura assumes that individuals do not act and react randomly, but rather that they are active information processors who perceive and analyse their environment's stimuli and behave accordingly. When processing their environment's

information, individuals rely on their self-systems (i.e., a set of cognitive function/knowledge structures within individuals that helps with the perception and evaluation of the environment and the regulation of behaviours). The second assumption, the triadic or reciprocal assumption, addresses the reciprocal influence between the environmental factors and the individual's self-system in the regulation of their behaviours and reactions (Carducci, 2009). This substantial knowledge of individuals' behaviours in the context of social forces and how one's behaviours are induced by the triadic interaction between his/her own self-aspects and contextual forces, helps with the understanding of the current study's framework. Mainly, SCT, via the two main assumptions regarding the self-system and triadic reciprocal cognitions, provides a logical base for understanding how identity, regulatory focus, leadership behaviours, attitudes theories integrate to form the current study's framework for examining leadership effectiveness.

2. Leadership as a process model

Leadership research has recently moved towards integrating leadership theories into process type models (Tuncdogan et al., 2017, Antonakis et al., 2012, Zaccaro, 2012). The purpose of this arising stream of literatures is to provide a more consistent conclusion about the leadership phenomenon through corrlating leadership outcomes with a more consistent leaders' traits (Tuncdogan et al., 2017). Instead of the widely used models in leadership literature that rely on the investigation of leadership phenomena on endogenous regressors, the process model of leadership urges the use of distal determinants or "exogenous predictors" such as traits in order to reach a consistent conclusion about the leadership phenomenon (Antonakis et al., 2012).

According to Antonakis et al. (2012) model of leadership process, leadership researchers can provide a more consistent conclusion about leadership phenomena by theorising comprehensive models that integrate the three elements of the leadership process together (as shown in (Figure 2.1). The distal predictors refer to leaders' individual characteristics, which are assumed to predict leaders' behaviours. These differences refer to the idiosyncratic characteristics that feature leaders and are assumed to remain constant in different situations and time for a particular leader (Tuncdogan et al., 2017, Antonakis et al., 2012). The proximal predictors depict followers' effects (e.g., attitude, perceptions, and or behaviours), which are assumed to be influenced by leaders' behaviours and followers' traits. Together with leaders' behaviours, according to the follower-centred approach, followers' behaviours and attitude can shape leadership effectiveness (Oc and Bashshur, 2013, Tuncdogan et al., 2017). The multilevel outcomes refer to the consequential effects of both distal and proximal predictors at different levels of analysis. Figure 2.2, Tuncdogan et al. (2017) presented a revised model of (Antonakis et al.)'s leadership process, where they highlighted the importance of two main points to be considered in the future research. Firstly, they suggest that leaders' traits can cause followers' effects and that these traits can influence followers directly, independent of or at least complementary to leaders' behaviours. It has also been argued that leadership research has overly emphasised the direct effect that leaders have on followers. In other words, the indirect impact of leaders on leadership outcomes through followers has led to a lack in understanding the direct association between leaders' traits and leadership outcomes independent of or complementary with leadership behaviours. Second, they address the importance of examining the contextual forces influences on the leadership process, which is believed to provide a better understanding of the boundary conditions of the effects of leaders' traits on the leadership effectiveness.

3 Leaders' individual differences: the distal predictors of leadership

Research on leaders' individual differences goes back to the very beginning of leadership literature. Despite this, it still represents one of the main focuses of leadership scholars (Zaccaro, 2012, Tuncdogan et al., 2017). Historically, individual differences research has evolved over three stages (Zaccaro, 2012). Early literature focused on identifying the attributes that differentiate leaders from non-leaders Zaccaro et al. (2013a), and these attributes were categorised into seven sets, namely, cognitive
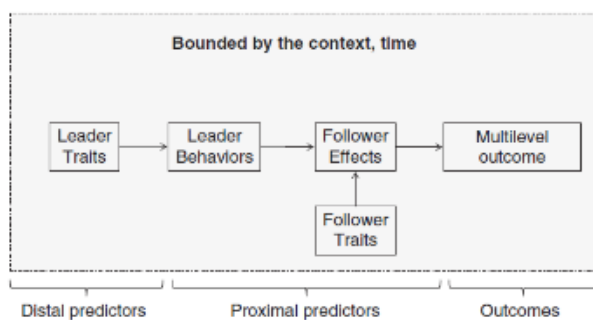
Figure 6 the leadership process model by (Antonakis et al., 2012)
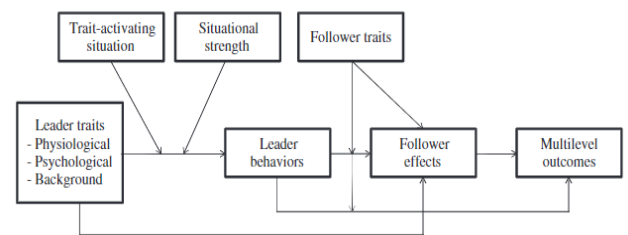
Figure 6 Revised Leadership Process Model by (Tuncdogan et al., 2017)

capacities, social capacities, personality, motivational qualities, core beliefs, knowledge, and other. In the second tipping point, researchers tended to re-examine prior-era studies using advanced methodological techniques. Their main concern was to answer important questions about cross-situational constancy in trait-based behaviours, and the importance of cross-ssssituational behavioural variation (situational contingencies) (Kenny and Zaccaro, 1983, House, 1971). Subsequent studies have come to solve what appeared to be a contradiction between trait-based behaviour constancy and the importance of cross-situational behavioural variation. These studies tended to focus on examining individual differences that foster cross-situational variability such as social intelligence (Zaccaro et al., 1991b), self-monitoring (which indicates an ability to monitor and control one's expressive behaviours) (Zaccaro et al., 1991a), and complex problem-solving skills (Mumford et al., 2000). Scholars during this era have introduced leader traits in an information-processing perspective that refers to leaders' tendency to adapt

their behaviours and responses to the interpretation of their social situation (Zaccaro et al., 1991a, Zaccaro et al., 1991b, Zaccaro, 2012). So far, the accumulated knowledge and cognition of the considerable role of individual differences in understanding the leadership phenomenon has induced several recent calls for further research into individual attributes, using more complex models that move away from using bivariate models towards examining multivariate models (Tuncdogan et al., 2017, Zaccaro, 2012, Antonakis et al., 2012, Van Iddekinge et al., 2009). It is believed that understanding the function of leaders individual differences in the leadership phenomena, as with any complex behaviour pattern, requires the adoption of a multivariate approach (Zaccaro et al., 2004). This returns to the variety of individual different characteristics that explains the leadership phenomenon, therefore focusing on only one or a few individual differences to explain the leadership phenomenon could result in omitted variable bias (Kim and Frees, 2006). Importantly, applied research on trait-induced behaviours must pay attention to the simultaneous modelling of different traits as well as contextual factors, so that we can understand the most influential individual characteristics on leadership behaviours and how they interact with the contextual factors (Tuncdogan et al., 2017). Modelling a variety of individual differences in a process type models (or multistage models) provides a better explanation of how and why individual characteristics influence the leadership process and outcomes (Zaccaro, 2012).

However, estimating the effects of leaders traits on the leadership process requires answering an important question concerning which set of leaders personal attributes are to be includedin the analysis model (Zaccaro, 2012). To answer this question, performance requirement approach could be used. This approach determines the main activities and functions necessary for effective leadership (Zaccaro and Klimoski, 2002, Zaccaro et al., 2013a). Zaccaro et al. (2013a) linked the requirements of effective leadership

(i.e., cognitive, social, self-motivational) with various sets of individual attributes (i.e., cognitive, social, personality, and motivational). In this study, both personality and motivational attributes are represented by identity and motivational orientation (chronic self-foci). Importantly, leadership studies have addressed the importance of leader's ability to show equal consideration for both individual and collective levels (Wang and Howell, 2010, Wu et al., 2010). According to Zaccaro et al. (2013b), the social requirements of effective leaders are related to their ability to exert the necessary influence on others. This requires leaders who are capable to perceive their subordinates' skills and qualities in order to provide them with the required training and development, instructions, strategies and vision communications. Leader's social ability also includes the possession of interpersonal skills that enable them to perceive others' emotions and motives. In this study, leaders identity levels are believed to play a significant role in driving leaders' behaviours and performance through its correlation with the social skills of effective leaders (Epitropaki et al., 2017). Such that, the variation in ones' identity from the individual to collective level positively associate with their tendency to identify with other social categories which positively associate with their ability to exert social influence on them. Additionally, the self-motivational determinants of leaders effectiveness mainly relate to their ability to work eagerly, sometimes under very stressful conditions, and to exert power and influence in order to achieve the intended goals (Zaccaro et al., 2013b). Accordingly, the study also includes the chronic regulatory focus of leaders, which defines the ways in which individuals approach pleasure or avoid pain.

3.1 Identity theory and leaders view of self

Scholars in organisational psychology and organisational behaviour have considered identity as the main factor behind most work-related behaviours (Miscenko and Day, 2016). Research in leadership has shown that leaders' identity is a central component of leaders' development process and that the deeper levels of mental structures such as self-perception define leaders' behaviours and skills (Day and Harrison, 2007, Day et al., 2012). Day and Sin (2011) discussed how the growing interest in the study of leaders' identity in leadership research stems from its substantial influence on leadership effectiveness. Leaders' identity represent a structure of information and knowledge related to a particular leadership role that direct leaders behaviours and interactions in the leadership process (Lord and Hall, 2005, Day et al., 2012). Importantly it is believed that an individual's identity plays an active role in determining individual's motivations (Cooper and Thatcher, 2010, Johnson and Lord, 2010), situation perception, and behaviours (Ashforth and Schinoff, 2016). Accordingly, scholars have recently called for a deeper understanding of the role of leaders' levels of self in the formation of the leadership process and outcomes (Tuncdogan et al., 2017, Epitropaki et al., 2017). This requires a better understanding of what constitute one's identity and the mechanisms that underlie its influence on behaviours.

3.1.1 Identity definition and origin

Psychologists have defined identity as traits and characteristics, role relations, and group membership; together these explain who we are (Leary and Tangney, 2011). One's identity is constructed at three levels: individual, role or relational, and collective. *Individual identity* refers to distinctive characteristics that differentiate the one from others. *Relational and social identities* define the aspects of one's self-concept that

represent the association with other important social category (Brewer and Gardner, 1996). Both relational and collective identities are similar as they share the same source of social construction. Yet, they differ in their types of social connections. Whereas the relational-self stems from the interpersonal identification/relationship with significant other, collective-identity proceeds from the belongings to or identification with set of values and norms that characterise a particular social category or group of people (i.e., team, organization, and or society) (Leary and Tangney, 2011). Out of these different levels of self-definition, one's self-concept is constructed (Brewer and Gardner, 1996). Self-concept refers to what comes to mind when one thinks of oneself (Leary and Tangney, 2011). Research in psychology refers to self-concept as construction of three broad classes of individual attributes, namely self-referring disposition (i.e., the abstraction categories that individuals accumulate over their life experiences, that determine their tendencies), physical characteristics, and identities (Owens et al., 2010). Most studies in psychology use the terms 'identity' and 'self-concept' interchangeably to refer to the three levels of identity (i.e., individual, relational and collective).

Where do our identities come from? Two leading psychological theories have identified the source or basis of our identity: Social Identity Theory (SIT) and Identity Theory (ITr) (Swann, 1990, Owens et al., 2010). According to these theories, the self is a reflexive object that can categorise and classify differently in relation to other social categories. These processes of rating oneself are known as *categorisation* in SIT, and *identification* in Identity theory(Stets and Burke, 2000). One's identity then is formed as a result of this process of self-categorisation and identification. Social-self (identity) refers to the person's definition of him/herself depending on the belonging to a particular social category or group. According to SIT, social identity formation results from two processes: self-categorisation and social comparison (Hogg and Abrams, 1988). In self-

categorisation, individuals tend to classify themselves with those who hold similar attributes (known as the in-group) and to de-categorise themselves with those who hold different characteristics (the out-group). In social comparisons, people tend to categorise themselves with those with whom an association will result in self-enhancing outcomes, especially for self-esteem. Eventually, individuals end up by classifying themselves with different groups, from which one forms one's unique identity (Stets and Burke, 2000).

According to Identity Theory, individuals are active actors in the context of social interactions in which they define themselves and others based on their social position (or role). Accordingly, all the meanings, expectations and factors that sustain the person's and interactions associated with that role are internalised into one's self-concept (Stets and Burke, 2000). The incorporation of these expectations and meanings into one's self-concept guides their behaviours.

3.1.2 Identity interaction with individuals' behaviours

Scholars in psychology have introduced several theoretical and empirical explanations of social behaviour intuition. Out of these rich efforts, theories of self-enhancement and self-consistency provide a deep understanding of the mechanisms by which one's self-knowledge influences his/her behaviour. Both theories can produce two different explanations for how individuals' cognitions of self-concepts organise their behaviours and reactions (Shrauger, 1975). The core idea of self-enhancement theory is that individuals are generally inclined towards inducing others to think favourably of them. This desire to have a favourable image spark individuals' tendency to promote and preserve a positive image of themselves. Individuals are either inclined to promote the perception that they are worthwhile persons or they tend to resist and overcome the negative image about them to retrieve the positive perceptions that they hold about

themselves and make it salient to others (Swann, 1990). Scholars have indicated the significant role of self-enhancement in determining individual's ability to tackle threats and challenges (Taylor and Sherman, 2008). However, it is unclear whether people's reactions are more related to hedonic rather than cognitive considerations.

Cognitive dissonance theory (CDT) by Festinger (1957) defines dissonance as a negative affective state that individuals experience as a result of cognition discrepancy. The prime aspects of CDT are that individuals are continuously striving to maintain cognitive consistency and that holding two psychologically inconsistent cognitions causes dissonance. Since dissonance is an unpleasant state, individuals usually tend to reduce it by adjusting relative cognitions(Swann, 1990). Cognition has been defined as any representation that includes values, attitudes and knowledge (Harmon-Jones and Harmon-Jones, 2012). The idea of dissonance has been transformed into other different theoretical propositions. These include the self-consistency theory (Aronson, 1999) and self-affirmation (Steele, 1988). The original notion of self-consistency theory is that dissonance does not merely result from cognitive inconsistency but from the contraction of one's self-conceptions and behaviours (Aronson, 1999). Accordingly, dissonance arises when one behaves in a way that contradicts his/her self-conceptions (Harmon-Jones and Harmon-Jones, 2012). Alongside this, self-affirmation theory argues that individuals are motivated to maintain the perceived self (i.e., self-worth and integrity) (Steele, 1988). The prime concern in self-affirmation is not about promoting the perceived self, but rather about acting in ways that confirm one's self-conceptions(Cohen and Sherman, 2014). The main difference between self-enhancement and cognitive dissonance approaches is that, in the former, an individual's motivation to change or react arises when their positive image of self is threatened. That is, individuals are assumed to have more tendency towards holding a positive image of

themselves. Therefore any negative feedback or perceptions by others are resisted (Shrauger, 1975, Swann, 1990). Conversely, in self-consistency, individuals are more motivated to act when their self-consistency is threatened, as such even when one holds negative perceptions of self, he/she prefers consistent negative feedback rather than inconsistent positive feedback (Swann, 1990). (Aronson, 1999) stated, "when a person holds a bad image of the self (e.g., schnook), then he/she will expect to show a poor behaviour (e.g., schnook)". Thus, the self-consistency theory precisely separates the effects of dissonance from other hedonic effects (Swann, 1990). Although most of the writings and studies related with these theories are mainly associated with self-worth and self-esteem concepts, the same notion could be used to drive the relationship between individuals' identity (levels of self) and leadership behaviours. Moreover, in times of change, it is more probable that some threats are imposed on one's self-concept, which induces one's motivation to act in a way that enhances and affirms his/her self-knowledge.

However, the idea that people would seek to confirm their negative conceptions just for the reason of consistency was not convincing enough to the scholars. Therefore, Swann (1990) introduced the self-verification theory in order to answer an important question: *under which conditions do people become so invested in their negative conceptions of self that they work to confirm these conceptions?*. According to the self-verification theory Swann (1990), people are generally directed by verifying their self-views, and this tendency does not represent an end in itself, but a means to prove their perception that the world is predictable and controllable. According to this theory, an individual's pursuit of self-verification stems from prediction and control desires rather than self-enhancement. Moreover, people in their endeavour to control their current situation rely heavily on their genuine belief in self.

The tendency to maximise one's perception of control and predictability stems from two primary sources: interpersonal (pragmatic) considerations and intrapsychic (epistemic) ones. According to the epistemic view, the stability of one's self-conceptions provides security and confidence in his/her ability to navigate through the acts of everyday life. Accordingly, events that match an individual's self-conception induce a feeling of security, and those do not match one's self-conception engender the feeling of fear and insecurity. Based on pragmatic or interpersonal desires, individuals tend to ensure that they are perceived by others in a self-congruent manner. In social interactions, people might form overly negative (positive) appraisals of their abilities. The exaggeration (or discounting) of one's capabilities results in unexpected demands that exceed (fall short of) their ability to act. Being perceived in an in-congruent manner, therefore, induces individuals' sense of inability to control and predict their situation, which brings psychological and interpersonal anarchy. Consequently, people are motivated to ensure that others see them as they see themselves, or in a congruentmanner – even if it necessitates inviting others to conceive the flaws and limitations in one's self. Research has supported the notion that people possess a clear preference and quest for self-confirmatory feedback (Swann and Read, 1981, Swann, 1990).

The question now is how do people translate these preferences into thoughts and actions?

3.1.3 Strategies for self-verification

Several cognitive and motivational processes have been identified in the psychological literature that provides a profound understanding of identity-based behaviours. In SIT, the cognitive process is centrally based on the idea of depersonalisation; that is, when individuals attach themselves to a particular group, they tend to see themselves in line

with the in-group prototype (the meanings and norms of the person associated with the social category) rather than seeing their unique individual attributes. By doing so, individuals tend to act in accordance with these norms. This depersonalisation process is the leading operator in group phenomena such as collective action, cooperation and group cohesiveness (Swann, 1990).

In Identity Theory, the central cognitive process is self-verification. This includes individuals thinking of themselves based on the stored role in their identity standards (i.e., the representation of a role containing the meanings and norms of the person associatedwith the role). Consequently, a persontends to behave according to the meanings and norms of a role in order to maintain consistency with the identity standards. People engage in two types of activities, which reflect their pursuit of self-verifying feedback. The first category includesactions that an individual enacts in order to influence other people's reactions (feedback) by creating a social environment around them that supports their self-views. The second category, includes a cognitive process that instils bias in individuals' perceptions of social reality so that they tend to interpret their social environment in a way that is more supportive of their view of self (Swann Jr et al., 2003). Moreover, people tend to construct their social environment in a way that provides satisfactory self-verification feedback (George J. McCall and Simmons., 1966). In their tendency to do so, individuals engage in three distinct sets of activities: firstly, they tend to establish an interaction relationship and social settings that provide them with self-confirmatory feedback. Several studies have supported the notion that people tend to engage in interactions that offer them self-verification confirmation even in a hostile way (Swann Jr et al., 1989, Swann, 1990). People tend to establish a relationship with others in order to verify their self-concept; in doing so, individuals tend to intensify their interactions when they feel that they are misconstrued.

Self-concept

Creating self-confirmatory social environment

1. Selective interaction
2. Displaying identity cues
3. Creating allies or interpersonal

Biased information processing

1. Selective attention
2. Selective encoding and retrieval
3. Selective interpretation
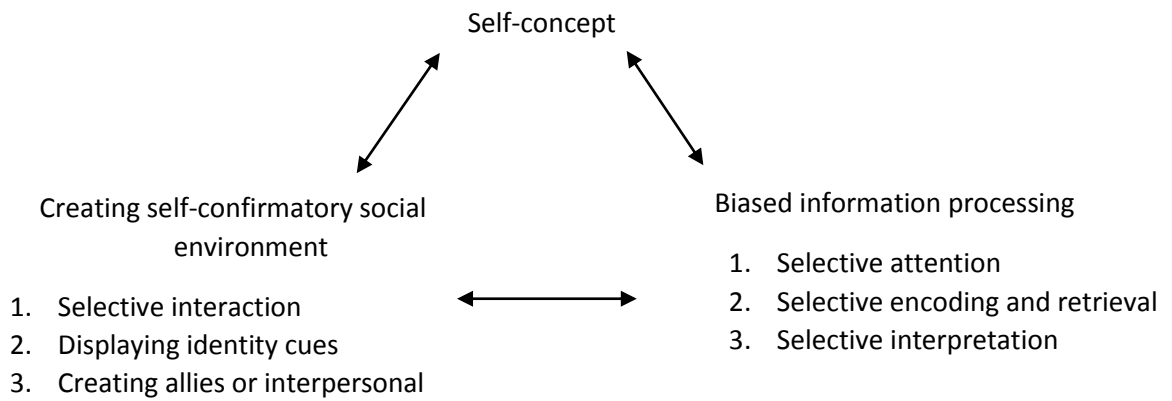
Figure 7 Self-verification process (Swann Jr et al., 2003)

Individuals may also be cognitively biased towards their self-conception; research results show that individuals are inclined to give more attention to remarks that provide self-confirmatory feedback (Swann and Read, 1981- study 1). Moreover, people tend to be selective in recalling information and experiences that confirm their self and ignoring information that does not provide such confirmation. This is also supported by other research results that show individuals' tendency to interpret others' feedback in a way that promotes their conception of themselves. Moreover, leaders tend to construct their life experience narrative in a way that provides them with self-knowledge and self-concept clarity and strong convictions (Shamir and Eilam, 2005). This persevered construction of reality (individual experience) does not affect the reality of what has happened but has more to do with the meanings of these experiences. Leaders' tendency to be selective in their interpretations of their life experiences reflects their self-concept. Life stories not only form one's self-concept but also justify a person's actions (Simmons, 2002).

Whether individuals tend to identify with a social group or a particular role, we tend to reaffirm social structural arrangements. That is, we tend to determine the structure of the categories and relationships that we belong to, and we act according to their norms and expectations (Thoits and Virshup, 1997). Research in psychology has shown how a

leader's self-knowledge influences their leadership behaviours (Shamir and Eilam, 2005, Shamir et al., 2005). Leaders who have self-clarity are more capable and motivated to embrace the leadership role than others who experience self-ambiguity (Shamir and Eilam, 2005). This self-knowledge provides the self-relevant meanings, which in turn form leaders' behaviours (Shamir and Eilam, 2005). The extent to which we accommodate a particular identity influences our cognition, attitude and actions. Importantly, people tend to maintain congruency between their acts and theirpersonality(Johnson et al., 2012).

Individuals tend to manifest themselves at multi-levels (i.e., individual, relational and collective), each of which has its distinct effects on individuals' motivations (Cooper and Thatcher, 2010, Johnson and Lord, 2010), situation perceptions and behaviours (Ashforth and Schinoff, 2016). Therefore, it is believed that examining leaders' identity levels and how they interact with followers, and contextual factors are of particular importance to understand leaders' behaviours and their interaction with followers (Epitropaki et al., 2017, Tuncdogan et al., 2017). Interestingly, the majority of empirical leadership research has focused on followers' identity, with very few studies adopting *a leader-centric* view, especially at the intrapersonal and interpersonal levels of analysis (Epitropaki et al., 2017). Most of the existing research that links leaders' identity and behaviour is either conceptual or laboratory-based, with little applied research that focuses on studying one level of the self (except(Johnson et al., 2012) (e.g., (Van Dick et al., 2006, Wieseke et al., 2009, Rus et al., 2010). Therefore, scholarsurge more applied research to examine leaders' identity in a real organisational context (Epitropaki et al., 2017).

The only available empirical study on identity level effects on leadership behaviours by Johnson et al. (2012), has indicated that identity levels positively relate to different leadership behaviours. Collective identity positively correlatesto the frequency of daily

transformational leadership and is negatively associated with the variance in transformational leadership. Similarly, relational and individual characters have positive relationships with the frequency of consideration and abusive leadership behaviours respectively. Johnson et al. (2012) indicated that different levels of identity are not independent in their influence on one's behaviours, that is, the results indicated that the positive relationship between individual-focused identity and abusive leadership becomes stronger when an individual is less collectively oriented and vice versa. The current study builds on that of Johnson et al. (2012) by examining how leaders' identity levels correlate with different forms of leadership behaviours, with a simultaneous examination of identity levels and regulatory orientation. It also investigates how leaders' identity interacts with their assumptions about followers to induce different leadership behaviours. Mainly, we examine the following hypotheses:

H1: Leader's collective identity is positively associated with transformational leadership behaviour.

H2: Leaders' individual identity is positively associated with directive leadership behaviours (i.e., H2.1 task-oriented; H2.2 contingent reward; H2.3 management by exception).

Importantly, applied research on trait-induced behaviours must pay more attention to the simultaneous modelling of different traits as well as contextual factors, so that we can understand the personality characteristics that have the most influence on leadership behaviours and how they interact with the contextual factors (Tuncdogan et al., 2017).

3.2 Chronic self-regulatory theory

Regulatory focus indicate how individuals seek to aligne themselves (i.e., their conceptions and behaviours) with a particular goals or standards (Brockner and Higgins,

2001). Building on the idea that individuals have a general tendency to approach pleasure and avoid pain, (Higgins, 1997, Higgins, 1998) proposed two different processes through which this occurs. That is, people's motivation to act is derived from one or two distinct motivations or self-regulatory systems; namely, promotion focus (approach pleasure) and prevention focus (avoid pain). These two different foci are independent constructs and differently influence ones' behaviours and performance (Lanaj et al., 2012, Gorman et al., 2012). The difference between these two systems is illustrated through three elements, the first of which is the type of needs that individuals are trying to satisfy. Brockner and Higgins (2001) indicate that people, in their pursuit to approach pleasure or avoid pain, are driven by two different fundamental needs. Whereas promotion-focused individuals attempt to satisfy the requirements for growth and development, prevention-focused individuals seek to meet the requirements for security and safety. Second is the type of goals that individuals attempt to achieve. Whereas, promotion-oriented people are prone to achieve their ideal self or standards by continuously seeking inspirational growth and developmental prospective; prevention-oriented people, on the other hand, are trying to fulfil their ought-self which reflects individuals' feelings of duty, obligation, and responsibility. Third, is the psychological situation that matters to people; whereasindividuals with promotion-focus are more concerned with the presence or absence of the desired positive results, prevention-focused ones focus on the presence or absence ofnegativeoutcomes. Accordingly, promotion-oriented people experience the pleasure of gain or the pain of non-gain, depending on their success or failure to achieve positive outcomes. Similarly, prevention-oriented people experience the pleasure of a non-loss or the pain of loss depending on their progress or failure to prevent adverseresults(Brockner and Higgins, 2001).

When individuals experience promotion focus they tend to: 1) use all possible means to ensure achieving the desired end-state or goals, and to ensure against errors of omission (Crowe and Higgins, 1997); 2) recall information about events related to success stories and positive outcomes, or be more sensitive to events that reflect their psychological situation (Higgins and Tykocinski, 1992); and 3) adopt more promotional strategies in their interpersonal relationships (i.e., they tend to be more generous, supportive, loving and attentive) (Higgins et al., 1994). Those with prevention focus tend to 1) use the appropriate means to prevent adverse outcomes or undesired end-states (Crowe and Higgins, 1997); 2) be more sensitive to events that reflect their psychological state (fair of failure), or recall information related to unsuccessful stories (Higgins and Tykocinski, 1992); and 3) adapt more conservative strategies in their interpersonal relationships (i.e., they tend to avoid losing contact, avoid negligence and to keep secrets) (Higgins et al., 1994).

The regulatory foci are believed to work separately through different levels of motivation: system, strategic, and tactical (Scholer and Higgins, 2008). At the system level of motivation, people hold a general goal or end-state preference, which works as a reference point for their actions. At this level, organisational studies have conceptualised regulatory focus as a chronicle orientation (i.e., promotion focus or prevention focus) depending on an individual's tendency to approach pleasure or avoid pain, which remain stable over time and situations. The strategic level refers to the general means used by individuals to attain goals. Most commonly, people are either prone to using eagerness or vigilant strategies in their pursuit of achieving the desired outcomes, which reflects their motivational orientation (i.e., promotion and prevention focus respectively). This level refers to individuals' general preferences for means that match with their orientation, rather than a specific mean that is suitable for their

orientation. Consequently, individual choice of a particular way remains independent of his/her orientation. The tactical level refers to tactics used by individuals in a specific situation during their pursuit to achieve their desired end-state or goals. At this level, people tend to adapt their actual action to fit with the situational requirements. Thus, they either use risky tactics or conservative tactics depending on the situation. As such, when the situationrequires maximising profits or goals, the promotion-oriented individual will be more risk taking and increase their promotion strategies (having more tasks to finish), while prevention-oriented people are more inclined toward risk-taking strategies by alleviating their vigilant strategy (i.e., decreasing their attention to regulations and details). Conversely, when the situation requires minimising losses, individuals will tend to be tactically conservative. Such that, a promotional individual tends to take less tasks to finish, and prevention individuals will tend to increase the attention paid to regulations and details. Accordingly, individuals might act or behave in a way that matches or mismatches their chronic regulatory orientation, depending on the situational forces that affect their regulatory state (Johnson et al., 2015). This alignment between state regulatory focus (strategic and tactic level) and chronic regulatory focus (system level) is theoretically known as *regulatory fit* (Higgins, 2000, Higgins, 2006). This fit between situational behaviours and individuals' chronic regulatory focus provides increased motivational strength and activation (Johnson et al., 2015).

3.2.1 Regulatory foci and individuals' behaviours

The idea of regulatory focus has been rooted in the *utility* approach of decision making. In this regard, Higgins (2000) posits that what makes a decision *right* is the expected outcomes of this decision. As such, people's decisions to pursue a particular course of action stem from an evaluation of its costs and benefits. A rightdecision, therefore, is

the one that achieves relatively higher "benefits" or lower "costs" than other alternatives. However, the means used to obtain the outcomes have also been considered as an important moral determinant of the good decision. Therefore, the righteousness of a decision depends on the expected outcomes and/or the suitability of the means used to achieve the outcomes. Psychologically, suitability of means refers to the fit between individuals' orientation towards an activity and the used means to pursue that activity. Thus, the value of something or a decision does not only stem from the value of "utility", but also from the value of fit. Accordingly, Higgins proposed that people vary in their orientation and means used to conduct the same goal activity. Importantly, it is believed that individuals value their activity more when they experience a *regulatory fit* (i.e., the usage of goal pursuit means that matches one's regulatory orientation). Individuals' perceptions of value stem from three mechanisms: 1) *outcome value*, in this case, individuals' experience of the importance of their decisions and actions depends on the extent to which the outcomes of such decisions and actions are associated with their regulatory orientation; 2) the *value from fit*, one experience of value from fit is contingent on the extent to which the means used to achieve a particular goal or action are congruent with an individual's regulatory orientation; and 3) the *value from proper methods*, one can experience this kind of value when the means used are congruent with traditional rules and principles (Higgins, 2002b, McMullen et al., 2009).

The mechanism that underpins the influence of individuals' chronic regulatory focus on their behaviours and attitudes is centralised on the idea of *regulatory fit* (Higgins, 2000). The concept of **fit** refers to the relationship between an individual's regulatory focus or orientation towards activity and the means used to pursue such action(Higgins, 2002b). Regulatory fit increase individuals feeling of being right about what they are doing, and become more engaged in activities that maintain that feeling (Higgins, 2000). As such, it

widely influences individuals' judgements, decisions, attitudes, behaviours and task performance (Higgins, 2005). The extent to which people experience a match between their regulatory focus and their environment increases people's sense of "feeling right", which increases their persuasion, motivation, engagement and evaluation of the situational elements that sustain their regulatory foci (Stam et al., 2016). The higher value associated with regulatory fit has several significant effects on individuals' attitudes and behaviours. That is, a) people show a preference for goal pursuit means that maximise their sense of regulatory fit; b) those who experience higher regulatory fit are more motivated and involved in goal pursuit than others; c) a higher regulatory fit magnifies people's positive (negative) feelings towards the desirable choices (undesirable choices); d) people assign a higher value to evaluations of their previous decisions over goal pursuit and objects with a higher regulatory fit (Higgins, 2000).

Several theoretical and empirical evidence have supported the influence of leaders' regulatory orientation on their behaviours and performance (Tuncdogan et al., 2015, Schuh et al., 2016, Wallace and Chen, 2006). Tuncdogan et al. (2015) discuss how individuals with different regulatory foci engage in various exploration and exploitation activities. Individuals with a promotion focus who look to achieve maximal goals tend to execute more exploration activities compared with those with a prevention focus. On the other hand, those with a prevention focus are more concerned with the flawless execution of their tasks or security, and they tend to engage more in exploitation activities than promotion-focused individuals (Tuncdogan et al., 2015). Exploration activities refer to going beyond routine activities to look for new possibilities, variation, risk-taking and innovation. Exploitation activities relate to doing regular activities that individuals know precisely how to conduct appropriately using their current knowledge (Tuncdogan et al., 2015). These two different activities relate positively to the

performanceof the individual, team, and unit levels, yet in different environmental conditions. Whereas exploration activities are more effective in a changing environment, exploitation activities suit a stable organisational environment (Tuncdogan et al., 2015). The environmental effects have also been addressed by (McMullen et al., 2009), where they argue that in uncertainty conditions, expected threats give the regulatory focus of individuals superiority in guiding managers' attention rather than organisational rules and regularities. Wallace et al. (2010) state that environmental dynamics have been found to moderate this relationship such that in a dynamic environment, promotion orientation of leaders relates more positively with firm performance and prevention focusorientationrelates more negatively with firm performance. This relation was reversed in less dynamic environments.

Schuh et al. (2016),in their efforts to link self-regulatory theory with identity theory, proposed that individuals with promotion focus are more likely than others to identify with organisations. This proposed relationship is based on the argument that individuals identify with a particular group or organisation when they perceive a similarity between their personal desires and the group or organisation's goals and values. These goals and benefits represent a desirable end-state for both organisations and individuals to achieve. Individuals with a promotion focus are more oriented towards growth, accomplishment and achieving positive outcomes, and therefore they have a strong identification with their organisation. Empirically, several studies have revealed a positive matching relationship between individuals' regulatory foci and different forms of performance and behaviours. That is promotion-oriented leaders positively affect firms' operational performance and risk-taking behaviours. On the other hand, leaders with prevention foci positively affect safety performance and risk-avoiding behaviours (Gino and Margolis, 2011, Wallace and Chen, 2006, Hamstra et al., 2011a, Rietzschel, 2011).

Individuals' variation in their regulatory orientation influences their tendency to be a risk taker and creative problem solver. Whereas promotion focus elicit a riskier response and novel solutions to problems, prevention cues induce a risk aversion response and lower creative solutions to problems(Friedman and Förster, 2001).

The results of Scholer et al. (2010) show that individuals with prevention focus tend to show a higher level of risk-seeking behaviours in threatening situations in comparison with promotion focused individuals. In other words, individuals turn to risk taking under three conditions: a) when they experience a state of loss; (b) when they hold a prevention orientation; (c) when eliminating losses depends only on the risky choice. This returns to prevention-focused individual's sensitivity to negative rather than positive changes in the status quo. According to Johnson et al. (2017), a leader's regulatory focus predicts their leadership behaviours which in turn prime their followers' regulatory foci. Whereas promotion-oriented leaders tend to adopt transformational leadership behaviours, prevention-focused leaders tend to manage by exception, contingent reward behaviours are predicted by both regulatory foci. These behaviours mediate the relationship between leaders' regulatory orientation and followers' foci. Interestingly, the results show that the weakness of a leader's regulatory focus increases laissez-fair leadership.

In their theoretical model Kark and Van Dijk (2007) indicate that, leaders' chronic regulatory focus relates to leadership behaviours through direct and indirect relationships. Promotion- focused leaders, who hold values of growth, accomplishment and development, are more likely than others to engage in transformational or charismatic leadership behaviours, which are concerned with changing the status quo and transforming the current situation towards a more desirable one. On the other hand, transactional leaders, who seek to preserve the status quo and stability in the workplace

through monitoring and authority, relate positively to a prevention focus, which is more concerned with security, safety and obligation. Moreover, chronic regulatory focus indirectly influences leadership behaviours through the leader's motivation to lead.

Based on the above discussion we can hypothesise that:

H3: promotion-oriented leaders positively associate with transformational leadership behaviours.

H4: Prevention-oriented leaders are positively associated with directive leadership behaviours (i.e., task-oriented H4.1; contingent reward H4.2; and management by exception H4.3).

Moreover, regulatory focus as a situational orientation is crafted by both stable personal traits (e.g., personality, basic needs and values) and resilient situational attributes (e.g., leadership, task demands and work climate) (Wallace et al., 2009). Both promotion and prevention focus are independent motivational systems and therefore one can display a high level of any or both of them at the same time depending on the situational circumstances (Brockner and Higgins, 2001). Situational characteristics and individuals' differences are believed to define the salience of a particular psychological orientation (Cooper and Thatcher, 2010), and are thus essential factors for traits to be expressed in work behaviour (Tett and Burnett, 2003). Consequently, understanding the influence of the situational forces on one's traits-behaviours relationships requires the inclusion of more dynamic notions of traits and the context within which the leadership phenomena occurs (Antonakis et al., 2012, Uhl-Bien et al., 2014). According to Tuncdogan et al. (2017), researches must give much attention to the moderators that could inhibit or facilitate the effect of leaders' traits on their behaviours. Epitropaki et al. (2017), Tuncdogan et al. (2017) urged future research to study leader-follower identity interactions and how they

influence leaders' behaviours. This is analogous with the recently emerging stream of leadership studies interested in examining the influence of followership theory on the leadership process (Uhl-Bien et al., 2014).

4. Leader Implicit Followership Theory (L-IFT)

Despite the substantial importance of followers and followership in leadership, its study in leadership has not received enough attention from leadership scholars (Carsten et al., 2010, Sy, 2010, Uhl-Bien et al., 2014). Researchers have mostly considered followers as either the recipients or moderators of leaders' effects (leader-centric view, Bass, 2008) or as creators of leaders and leadership (follower-centric view) (Uhl-Bien et al., 2014). As a result, studying followers' influence on the leadership process has been primarily missed by leadership studies (Uhl-Bien et al., 2014). Scholars believe that understanding of the leadership phenomenon is incomplete without a deliberate recognition of the role of followership in the leadership process (Uhl-Bien et al., 2014). The study of followership in the context of the leadership process model helps to understand *following behaviours* and how they combine with *leading behaviours* to construct leadership and its outcomes (Uhl-Bien et al., 2014).

Followership theory is concerned with understanding the influence of followers and their followership behaviours on the process of leadership (Uhl-Bien et al., 2014). Role-based approach of the study of followershipconsiders how followers influence leaders' attitudes, behaviours and outcomes. This approach concentrate on examining the influence of followers' characteristics and behaviours on leaders' attitudes, behaviours and effectiveness (Uhl-Bien et al., 2014). The leader implicit followership theory (LIFT) developed by Sy (2010) refers to leaders' assumptions about the traits and behaviours of followers. The study of L-IFT can fill an important gap in our understanding of the interpersonal dynamics between leaders and followers, by explaining how leaders'

conceptions shape their judgements of and behaviours towards their followers (Whiteley et al., 2012). Sy (2010) classified leaders' assumptions about followers' traits and behaviours into positive (prototype) and negative (anti-prototype). The positive conceptions of leaders about their followers combine three main attributes: industry (hardworking, productive, goes beyond), enthusiasm (excited, outgoing and happy), and good citizen (loyal, reliable, team player). On the other hand, the negative conceptions of followers by their leaders are related to three main attributes: conformity (easily influenced, follows trends, soft-spoken), incompetence (uneducated, slow and inexperienced) and insubordination (arrogant, rude and bad tempered) (Sy, 2010, Whiteley et al., 2012).

L-IFT theory relies on the idea of sense-making Weick (1995), with which leaders can interpret, realise and respond to their followers (Sy, 2010). Accordingly, leaders' conceptions about their followers define the way they treat or act towards them (Whiteley et al., 2012). Moreover, researchers have tended to rely on perception-behaviour model for Bargh et al. (1996), Bargh (1997) to explain the relationship between L-IFT and leaders' behaviours (Whiteley et al., 2012). According to the perception behaviour link, the cognitions that underpin a particular behaviour stem not only from internal sources but also from external sources (i.e., the perception of another peoples' behaviour). That is, individuals tend to behave in one way or another, corresponding to their perception of other people (Bargh et al., 1996). Importantly it is believed that perception directly influences one's behaviours (Bargh, 1997). As such, it is an unconscious, unintentional, and passive influence (Bargh et al., 1996, Carver et al., 1983).

> "Although it may typically seem as if we are consciously directing our behaviours, the reality of the situation is that frequently we are not" (Macrae and Bodenhausen, 2000. p.107).

Scholars demonstrate that, human behaviours developefrom implicit forces of cognitive structures that specify various schema-related behavioural tendencies (Bargh, 1997, Macrae and Bodenhausen, 2000), and that the activation of relevant cognitive representations unconsciously primes the relative action tendencies that shape one's behaviour accordingly (Bargh, 1997, Macrae and Bodenhausen, 2000). Thus, when a particular perception (or conceptual representation) is activated it increases the likelihood that individuals will behave in a consistent ways with these cognitions (Bargh et al., 1996).

The cognitive schemas that leaders hold about their followers are shaped through a long time of interaction and prior experience; these schemas are stored in one's memory and activated during interactions (Gawronski et al., 2006, Epitropaki et al., 2013). Implicit process means that individuals' action tendencies are unconsciously influenced by their prototypical schemas about followers. Importantly, this does not mean that leaders lack content awareness (i.e., phenomena that are accessible to conscious introspection), but rather that leaders' actions are influenced by these schemas without full awareness of their influence (Gawronski et al., 2006). Prototypes represent a central concept in L-IFT theory, defined as the abstract conception of the most common attributes of a particular group/category (Sy, 2010). Leaders, therefore, might have a positive or negative prototypical view of their followers, which defines their interpersonal outcomes (Sy, 2010), performance expectations, relationship quality and liking (Whiteley et al., 2012). Scholars believe in a direct auto/unconscious relationship between perception of others (i.e., cognitive representation of others) and behaviours (Bargh, 1997, Bargh et al., 1996, Gawronski et al., 2006, Macrae and Bodenhausen, 2000). However, the literature on identity reveals that individuals' self-knowledge defines the way in which they interpret their social environment, interactions and behaviours (Johnson et al., 2012, Shamir and

Eilam, 2005, Stets and Burke, 2000, Swann, 1990, Swann Jr et al., 2003). Therefore, it is more probable that leaders' prototypes about their followers moderate the relationship between leaders' identities, chronic regulatory focus and leadership behaviours. Accordingly, we hypothesise that:

H5: Leaders' implicit prototypes of their followers moderate the relationship between leaders' identity levels and behaviours.

H 5.₁ the relationship between leaders' collective identity and transformational leadership behaviours will be stronger when leaders hold positive prototypes about their followers.

H 5.₂ The relationship between leaders' individual identity and directive leadership behaviours (i.e., H.5.2.1 contingent reward, H.5.2.2 task-oriented behaviours, and H.5.2.3 management by exception) will be stronger when leaders hold negative rather than positive prototypical views of their followers.

H 6 Leaders' implicit prototypes of their followers moderate the relationship between leaders' regulatory focus and behaviours.

H 6.₁ the relationship between leaders' promotion focus and charismatic behaviours will be stronger when leaders hold positive/prototypcial view about their followers.

H 6.₂ The relationship between leaders' prevention focus and directive behaviours (H.6.2.1 task-oriented, H.6.2.2 contingent reward, and H.6.2.3 management by exception) will be stronger when leaders hold positive rather than negative prototypical view of their followers.

5. Leadership behaviours as a proximal determinant in the leadership process

Leaders in contemporary organisations are required to tackle several complex problems and preserve their organisational performance while positioning their organisations to adapt to today's' ever-changing environment (Mumford and Connelly, 1991, Mumford et al., 2000).To do so, leaders tend to adopt various leadership behaviours in their way to influence their followers' behaviours and situational goals[1](Bettencourt, 2004). These behaviours range from the most transformational (i.e., transformational leadership) to non-leadership behaviours (i.e., management by exception) (Bass, 2000). The manifestation of these behaviours induces different effects on followers' attitudes and behaviours (Shamir et al., 1993, Yammarino et al., 2005) and on leadership effectiveness (Antonakis and J. House, 2002).

Transformational leadership is considered to be one of the main factors for the success of today's organisations and one that defines leaders' capability to develop their organizational situation (Eisenbach et al., 1999). Transformational leaders are capable to transform the needs, values and aspirations of their followers from the self-interest to the collective interest. Thus, they are able to attain their followers' commitment and to inspire them to exert extra efforts and behaviours necessary for the organisation's success (Shamir et al., 1993). Various transformational leadership behaviours including vision articulation, intellectual stimulation, individualised support, idealized influence, and high performance communications (Podsakoff et al., 1990), positively influence followers commitment and performance at both organizational and individual levels (Herold et al., 2008, Wang et al., 2011).

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[1]Situational goals refer to the outcomes of interest of the interacting parties (i.e., completing an activity, or persuading interacting party to act in a manner you desire) (Mokros, 1996. p. 403).

Leaders in their everyday practices do not follow a particular leadership style; rather they tend to show different behaviours (Bettencourt, 2004). According to Bass (2000), leaders engage in different leadership behaviours that relate differently to leadership effectiveness and outcomes (Antonakis and J. House, 2002). Importantly, both task and contingent reward are considered a part of leaders' initiating structure behaviours, where leaders directly define and allocate responsibilities, goals, roles and performance expectations for their followers (Fleishman, 1998), as well as communicate the value of compliance with or deviation from expectations (Neubert et al., 2008). In this study, we mainly focus on measuring task-oriented behaviours, contingent reward and active management by exception (MbEx). The study refers to these three sets of practices as *directive leadership* (i.e., representing a manifestation of leaders' exercise of power and reliance on his/her individual identity). Leaders' exhibition of these behaviours positively influences their followers'performance and decreases their deviant behaviours (Neubert et al., 2008). The inclusion of these three sets of behaviours is substantially important for this study; from one side, it provides the necessary coherence between prior leader traits (i.e., individual self & prevention focus) and subsequent followers' attitudes (i.e., commitment and work engagement). Additionally, contingent reward and MbEx represent a well-known and researched theory in leadership literature (transactional leadership) which has been considered as integral behaviour for effective leadership (Bass, 2000, Wang et al., 2011). Moreover, the inclusion of task-focused behaviours also implies the inclusion of individual-focused behaviours, which represent a significant behaviour for leader's effectiveness in helping their followers to perform and adapt (Wu et al., 2010, Wang and Howell, 2010).

Scholars have provided empirical and theoretical evidence for the significance of these behaviours in affecting followers' attitudes and work-related behaviours. However,

leaders' ability to influence is determined by their ability to tap into the motive base of their followers (Nohria and Khurana, 2010). Chronic regulatory theory explains the central motivational orientation systems of individuals' actions so that individuals are assumed to act in a particular way depending on their type of needs, the nature of goals or standards, and the desired psychological situation (Brockner and Higgins, 2001).

6. The moderating role of follower's goal orientation

6.1 Leadership behaviours and followers' attitudes

Scholars have indicated that individuals vary in their responses to different motivational forces. Whereas individuals who experience a positive role model become more motivated to pursue a similar route, those who experience negative role models become more motivated to avoid such negative outcomes (Lockwood et al., 2002). Positive role models inspire people by highlighting the ideal self and the expected achievement that one can strive for, and illustrating the way to achieve them. Negative role models, on the other hand, possess the ability to motivate individuals by highlighting a feared self, illustrating possible difficulties and bad consequences that must be avoided in order to prevent such a feared self (Lockwood et al., 2002). Accordingly, scholars believed that individuals vary in their response to contextual forces depending on the type of goals they seek to achieve (Stapel and Koomen, 2001). Whereas people who hold promotion goal orientation (i.e., approaching preferred outcomes) are more likely to be motivated by positive role models who underline the strategies for attaining success, negative role models are more effective in inspiring prevention focused individuals by providing strategies for avoiding failure (Lockwood et al., 2002). In the work context, leadership behaviours are seen as main contextual forces that influence followers' attitudes and work behaviours (Meyer and Parfyonova, 2010, Wang and Howell, 2010, Meyer and

Herscovitch, 2001, Hamstra et al., 2011b). However, based on the regulatory theory, individuals' receptiveness to these behaviours depends on the extent to which they fit with their chronic regulatory orientation (i.e., motivational orientation) (Hamstra et al., 2011b, Higgins, 2002a, Higgins, 2005).

Hamstra et al. (2011b) provided significant support to the notion of fit, such that transformational leadership behaviours negatively affected turnover intention for promotionally oriented individuals compared with those with low promotion foci. Similarly, individuals with high prevention focus have shown more preference for transactional leadership, illustrated in a lower turnover intention compared with those low in prevention focus. Cesario et al. (2004) studied how the "feeling right" that stems from regulatory fit influences persuasion. The results revealed that feeling right about the argument used in support of the proposed position is used by individuals to evaluate message persuasiveness and opinions of the topic. Importantly, it is believed that feeling right works as a relevant source of information suitable for evaluation and decision making.

The relevancy of feelings for evaluation is not limited to effectivereactionsbut could reflect a non-effective reaction evaluation, particularly when the evaluation process is associated with uncertainty. Feeling right has been considered an important determinant of persuasion and attitude. When persuasion context attributes (i.e., source, message, advocated subject, etc.) match one's regulatory orientation, people will use the "feeling right" that results from this match as relevant information to evaluate any of the persuasion attributes. As such, when a message (the argument in support of a specific way or mean to attain a particular goal) fits the recipient's regulatory orientation, the recipient of the message will feel right about it, which in turn enhances his evaluation of the message's perceived persuasiveness. This feeling right experience could also

transfer directly to individuals' assessment of the topic of the message (i.e., the advocated position or goals to attain). Moreover, the effectiveness of nonverbal messages in persuading individuals is mainly related to the fit between nonverbal message cues and individuals' motivational orientation.(Joseph and Higgins, 2008).

Overall, Cesario et al. (2004) propose that the match between the strategic means or argument used in persuasive communication and an individual's regulatory focus enhance individuals' feeling right about what they are doing as a result of their experience of regulatory fit. This feeling right influences an individual's receptiveness to the message, and their attitude towards the message's advocated position or goal. Hamstra et al. (2014) followers' sense of being valued by their leaders is enhanced when they experience a fit between their leaders' behaviours and their own regulatory focus. That is, promotion-focused individuals feel valued when leaders exhibit transformational leadership, but not transactional. Conversely, prevention-focused individuals feel significantly valued when leaders exhibit transactional leadership behaviours compared to transformational behaviours. Higgins (2005) states that regulatory fit increase individual's feeling right about what they are doing, and become more engaged in activities that maintain that feeling.

Effective leadership practices is considered as important antecedent of employees development of commitment-to-change (Choi, 2011). A common consensus exist between leadership scholars about the effective role of transformational leadership practices in the formation of followers' work attitudes and beliefs in a way that increase their organizational performance (Podsakoff et al., 1990, Fugate, 2012). Transformational leaders through various leadership behaviours including; the creation and sharing of competitive vision with all followers, providing individualised consideration,

encouraging rational thoughts that challenge the status quo, idealized influence, and the communication of high performance (Carter et al., 2014, Kirkbride, 2006, Podsakoff et al., 1990), positively influence individual's commitment to change through the activation of its underlying mechanisms. For example, intellectual stimulation activities encourage the employees to be more creative in solving their work problems, which make them more engaged in the change initiative and develop affective commitment-to-change (Bommer et al., 2005, Meyer and Herscovitch, 2001). Scholars provided several empirical evidence that support a positive association between transformational leadership and affective commitment to change (Chou, 2013, Herold et al., 2008).

Whereas, transformational leadership prime one's affective mind-set and their affective commitment to change, transactional leaders positively associated with the development of continuance commitment–to-change. Transactional leadership, through contingent reward and management_by_exception depends on inducing their follower's sense of cost. Individuals development of continuance commitment to change is associated with their recognition of the costs that they might hold and the accumulated benefits that they might lose as a result of their inability to support the proposed changes (Meyer and Parfyonova, 2010, Bycio et al., 1995). In relation to this, in task-oriented leadership behaviour, leaders work to allocate specific task goals and performance expectations, as well as identifying the expected benefits of meeting task goals and performance standards (Neubert et al., 2008). Accordingly, we hypothesise that:

H.7 Individuals' regulatory focus moderates the relationships between the perception of leadership behaviours and commitment-to-change.

    H7.1 The positive correlation between transformational leadership and affective commitment-to-change is moderated by an individual's regulatory focus

such that the positive relation will be stronger when individuals hold promotion than prevention motivational orientation.

H7.2 The positive relationship between directive leadership behaviours and continuance commitment-to-change will be stronger for individuals with prevention than promotion orientation.

6.2 Leadership behaviours and followers' performance

Employees' perceptions of leaders' effectiveness and their receptiveness to inspirational role models depend on the extent to which leaders' communications are congruent with their followers' goal orientation (motivation foci) (Stam et al., 2010, Stapel and Koomen, 2001). This explains the variation in leaders' ability to motivate their followers (Stam et al., 2010). Individuals' performance has been found to be a function of the congruency between situational and depositional regulatory focus, and the effect of this congruency on performance is mediated by motivation. That is, people who experience a fit between their dispositional tendencies (chronic promotion and prevention focus) and the framing of situational factors (incentive system) are highly motivated, and therefore perform better than those who experience a lack of fit between their dispositional regulatory focus and situational factors (Shah et al., 1998). Incentives will be more influential and motivational for people when they are congruent with individuals' needs and strategic orientations (Brockner and Higgins, 2001). People with a promotion focus should be highly motivated when they are exposed to a so-called "positive incentive system" that gives them the opportunity to eagerly use all possible means capable of advancing them towards their desired end-state (or achieving their goals) and to ensure against non-gain outcomes. Alternatively, prevention-focused individuals should be highly motivated by a so-called "negative motivation system" that gives them the

opportunity to attain their goals by being vigilant and attentive to the details and to ensure against loss (Shah et al., 1998).

The regulatory orientation of individuals determines their attention allocation to different stimuli of potential strategic importance (McMullen et al., 2009). Individuals tend to identify with entity goals that are similar to their goal orientation. That is, when individuals perceive a similarity between their personal desires and the group or organisation's goals and values, they tend to identify with these groups or entities, which reflects positively on their organisational behaviours (Elliot and Thrash, 2010, Schuh et al., 2016). Accordingly, the variation in individuals' regulatory orientation relates differently to their performance (Wallace and Chen, 2006). Whereas promotion-oriented individuals hold values of growth, accomplishment and development, prevention-oriented individuals hold values of security, stability and preserving the status quo (Kark and Van Dijk, 2007). The fit between leaders' behaviours and followers' regulatory focus increases followers' motivation and involvement in achieving their organisational goals and activities (Higgins, 2000, Cesario et al., 2004).

Followers who perceive high promotional leadership behaviours tend to be more creative at work than those who experience a high level of prevention-focused leadership behaviour. This is reflected in the subordinates' perceptions of such practices as an organisational endorsement of promotion or prevention concerns, which elicit a corresponding state of regulatory focus (Wu et al., 2008). Stam et al. (2010) disclose that followers' regulatory focuses determine the effectiveness of promotion and prevention appeals. Particularly, Stam et al. (2010) experiments indicated that the performance of prevention oriented individuals is enhanced by prevention than promotion appeals, while the reverse is true for promotion oriented individuals. Over decades of research,

several studies have provided substantial support for the relationship between different leadership behaviours and employees' work-related behaviours and outcomes (Banks et al., 2017, Nohe et al., 2013, Wang et al., 2011, Wang and Howell, 2012a). In this study, however, we focus on understanding the moderating role of employees' motivational orientation on the relationship between different leadership behaviours and employees' behaviours and performance in a more process type model, which is believed to provide more consistent conclusions about these relationships.

Transformational leaders induce followers to focus on the long-term inspirational vision, focusing their attention on achieving ideals, optimism and growth, not only for their own selves but also for the best interest of their group or organisation (Podsakoff et al., 1990, Wang et al., 2011, Wang and Howell, 2012b). Promotion-focused individuals are more concerned with accomplishment, development and growth (Higgins, 2002b, Higgins, 2005). Therefore, scholars have unveiled the significant role of leaders' behaviours in priming different forms of followers' motivational orientations (Neubert et al., 2008). Importantly, the regulatory focus could be studied either as a situation-induced state (work regulatory focus) or as stable traits (chronic regulatoryfoci) (Neubert et al., 2008, Wallace et al., 2009). This study focuses on examining individuals' regulatory foci as stable traits or characteristics. Accordingly, it assumes a moderating effect of individual's motivational orientations on the relationship between leadership behaviours and followers' work-related behaviours. Particularly, the study hypothesises that:

H.8 Individuals' regulatory focus moderates the relationship between leadership behaviour perceptions and work-related behaviours.

H 8.$_1$ Followers' regulatory foci moderate the relationship between transformational leadership and followers' OCB, such that this relationship is stronger for promotion-oriented individuals than for prevention-oriented individuals.

Directive leadership behaviours (DLB) include task-oriented behaviours, contingent reward and management by exception. These behaviours work to define task roles, the relationshipsbetween team members, and performance expectations and standards. Moreover, contingent reward makes the performance expectations clear, as well as the rewards for meeting these expectations (Derue et al., 2011). Management by exception reflects the extent to which leaders interfere to re-direct or re-correct the work process. The active form of management by exception behaviours indicates leaders' continuous monitoring of their followers' performance and progression in order to anticipate mistakes and deviations, and take corrective actions (Howell and Avolio, 1993, Judge and Piccolo, 2004). Prevention-oriented people are more concerned with achieving stability and security and avoiding losses (Higgins, 2002b, Higgins, 2005). Thus, it's expected that thus who hold prevention orientation are more eager to fulfil their in-role performance activities when they perceive directive leadership behaviours.

We, therefore, hypothesise the following:

H.8.2 The positive relationship between directive leadership (task-oriented H.8$_{2.1,}$ contingent reward H.8.$_{2.2,}$ and management by exception H.8$_{2.3}$) behaviours and in-role performance will be stronger for prevention-oriented individuals than promotion oriented.

H.8.3 The negative relationship between directive leadership behaviours (task-oriented H.8$_{3.1,}$ contingent reward H.8.$_{3.2,}$ and management by exception H.8$_{3.3}$) and

counter work behaviour will be stronger for prevention than promotion-oriented individuals.

7. Leaders' characteristics and followers' proximal effects

Leadership researchers have tended to study leadership effectiveness by examining the causal relationships between followers' perceptions of different leadership behaviours and a wide variety of work-related indicators (Wang et al., 2011, Wang and Howell, 2012a). Several contextual factors are assumed to influence how followers perceive different leadership behaviours and the formation of their attitudes and work-related outcomes accordingly. In addition, followers' perceptions do not reflect the actual leadership behaviours but rather the followers' subjective evaluations of their leaders' behaviours (Humphrey et al., 2007, Hansbrough et al., 2015). The excessive reliance on followers' perceptions in the study of the leadership phenomenon has, therefore, led to inconsistent conclusions about leadership effectiveness (Tuncdogan et al., 2017, Hansbrough et al., 2015). Consequently, leadership scholars confirm the significance of relating the followers' proximal effects (attitudes) and leadership outcomes with stable leaders' traits (Tuncdogan et al., 2017).

Recent studies have started to examine the leadership phenomenon based on a process type model (Antonakis et al., 2012). Importantly, the process type model allows the inclusion of more distal (stable) predictors in the model so as to avoid the endogeneity problem (i.e., the variation in the endogenous constructs as a result of external factors). This is believed to enable leadership scholars to reach more consistent conclusions about leadership effectiveness (Tuncdogan et al., 2017). Individual differences (traits) represent the main stable predictors in the study of leadership (Mumford et al., 2000, Antonakis et al., 2012). Leaders' individual characteristics significantly determine their

social interactions and performance (Mumford et al., 2000). Therefore, it is believed that studying the direct relationships between leaders' individual traits, followers' effects and work-related outcomes will provide new insights into the current accumulated knowledge of leadership effectiveness (Tuncdogan et al., 2017).

Based on the self-verification process McCall and Simmons (1966), individuals tend to engage in different activities that verify their views of self. This process happens either through bias in information processing or by creating a social environment that supports their aspects of self. Therefore, this study infers that leaders' individual characteristics cause followers' effects and leadership outcomes via leadership behaviours or leaders' implicit assumptions about their followers. The salient self in leaders' identity significantly determines their behaviours and performance (Johnson et al., 2012). Scholars have theoretically supported the fact that leaders' psychological orientation identity levels and regulatory orientation have a significant influence on their leadership behaviours and performance (Johnson et al., 2012, Tuncdogan et al., 2017, Tuncdogan et al., 2015, Schuh et al., 2016, Wallace and Chen, 2006, Higgins, 2000). The underlying communal motive of collective identity induces leaders to adopt group-focused behaviours, which characterise transformational leadership behaviours (Johnson et al., 2012). Leaders' adoption of transformational leadership behaviours significantly influences different forms of individuals' attitudes and work-related outcomes (Herold et al., 2008, Choi, 2011, Wang and Howell, 2010).

Specifically, transformational leaders present work-related goals in the form of values and ideologies endorsed by most of the workgroup/organisation members; this leads to the internalisation of these goals by the followers, and therefore their actions and subsequent activities are believed to be induced by their internal values system instead

of sacrificing their interest for the collective well (Bono and Judge, 2003). Consequently, several studies have supported the positive relationships between transformational leadership behaviours and individuals' development of effective forms of commitment to change and their engagement in organisational citizenship work behaviours (OCB) (Herold et al., 2008, Chou, 2013, Hill et al., 2012, Carter et al., 2013). Based on the notion of self-verification, and the findings obtained from the previous studies concerning the relationships between leaders' individual characteristics, leadership behaviours, and followers' attitudes and work-related outcomes, this study hypothesises the following:

H9 The perception of transformational leadership significantly and positively mediates the relationships between leaders' collective identity and followers' affective commitment to change (H11.1) and OCB (H 11.2), and it negatively mediates the association with CWB (H11.3).

H10 the perception of management by exception positively mediates the relationship between leaders' individual identity and followers' continuance commitment to change (H10.1) and negatively mediates the relationships with CWB (H10.2) and OCB (H10.3).

Regulatory theory significantly contributes to our understanding of the individual's motivational system (Higgins, 1998). The variation in individuals' motivation systems significantly influences their interpersonal interactions (Johnson et al., 2012). As such, when individuals experience promotion focus they tend to: 1) use all possible means to ensure achieving the desired end-state or goals, and ensure against errors of omission (Crowe and Higgins, 1997); 2) recall information about events related to success stories and positive outcomes, or be more sensitive to events that reflect their psychological situation (Higgins and Tykocinski, 1992); and 3) adopt more promotional strategies in their interpersonal relationships (i.e., they tend to be more generous, supportive, loving, and

attentive) (Higgins et al., 1994). Those with prevention focus tend to 1) use the appropriate means to prevent adverse outcomes or undesired end-states (Crowe and Higgins, 1997); 2) be more sensitive to events that reflect their psychological state (fear of failure), or recall information related with unsuccessful stories (Higgins and Tykocinski, 1992); and 3) adopt more conservative strategies in their interpersonal relationships (i.e., they tend to avoid losing contact, avoid negligence, and avoid keeping secrets) (Higgins et al., 1994). Leaders, therefore, are believed to behave in ways that match with their salient motivation orientation (Kark and Van Dijk, 2007). Notably, the means associated with the promotion (prevention) orientation are consistent with leaders' adoption of transformational leadership (management by exception) behaviours.

Leaders' employed strategies (behaviours) are assumed to stimulate different mindsets that underlie individuals' development of different forms of commitment–to-change and work-related behaviours. According to Herscovitch and Meyer (2002) model of commitment-to-change, individuals tend to develop effective commitment based on the stimulation of their *desire to do*. This stems from them being more involved in particular actions, recognising the value-relevance of their activities, and becoming more identified with particular conduct relative to achieving an objective. Similarly, the development of individual's continuance commitment-to-change is associated with the activation of their fear of losing something valuable as a result of their inability to pursue a particular action/behaviour. Consequently, promotion-oriented leaders are assumed to positively influence individuals' development of an effective mind-set and involvement in OCB, and to negatively influence their adoption of CWB. Similarly, the salience of a leader's prevention orientation is believed to positively influence followers' continuing commitment to change and to negatively correlate with their

adoption of counter work behaviours (OCB). Therefore, this study is designed to test the following hypotheses:

H, 11 Transformational leadership behaviours positively mediates the relationships between leaders' promotion focus, affective commitment to change (H 11.1); OCB (H11.2), and negatively mediates the relationship with CWB (H11.3).

H 12 The perception of management by exception positively mediated the relatinoships between leaders prevention orientation and individual continuance commitment to change (H12.1), CWB (H12.2), and negatively associate with OCB (H12.3).

The role of followers and followership has recently attracted the interest of leading scholars who have investigated leaders-followers' interpersonal dynamics. Leaders, through their everyday interactions with their followers, form different assumptions about their characteristics and work behaviours (Sy (2010). As explained in previous sections, Sy (2010) classified these assumptions into positive (prototypes) and negative (anti-prototypes). Importantly, research in psychology has provided several theoretical bases on which we could infer how leaders' assumptions influence followers' effects in the leadership process model. The Emotions as Social Information Model (EASI), which stem from the social function approach of emotions (Van Kleef, 2009), explains how the expression of emotions of a focal individual could provide a valuable source of information to the observer, which directs their attitudes and behaviours (Van Kleef, 2009, Van Kleef et al., 2012, Van Kleef et al., 2015). Importantly, individuals' attitudes and behaviours are prone to be influenced by affective reactions to others' emotional expressions. Affective reactions arise via two processes. The first of these is emotional contagion, which refers to individuals' unconscious and automatic adoption of others' emotional states. For instance, an individual happiness may instil positive feelings in

others (Van Kleef, 2009). The second of these is the interpersonal liking; for example, being confronted by someone who expresses anger may decrease the liking of that person and vice versa (Koning and Van Kleef, 2015, Van Kleef, 2009). Accordingly, based on the EASI model, the assumptions that the leaders hold about their followers are expected to participate in the formation of the attitudes and behaviours that the followers develop in the workplace, through their effect on different leadership behaviours. Furthermore, individuals' behaviours are induced not only by internal sources of motivation but also from external motives resulting from the perceptions of others' behaviours and characteristics.

Therefore, this study aims to test the following hypotheses:

H.13 The perception of transformational leadership behaviours positively mediaated the realtionships between leaders prototypes and followers affective commitment to change (H13.$_1$), OCB (H13.$_2$), and negatively mediates the realtionship with followers CWB (H 13.$_3$).

H 14 the perception of management by exception leadership behaviours positively mediates the relationships between leaders' anti-prototype and followers' continuance commitment to change (H 14.1) and negatively mediates the relationship with followers' OCB (H14.$_2$) CWB (H14.$_3$).

8. Research framework and hypothesis

8.1 Research framework

In order to understand the mutual influences of leaders and followers on the leadership process and outcomes, this study includes theories from different domains including psychology and leadership to form the relationships between several exogenous and

endogenous variables in an integrated leadership process model. This model depicts how the leadership process starts from distal variables of leaders' individual differences (i.e., identity levels & chronic regulatory focus) and their interactions with contextual forces to form the more proximal variables of leadership behaviours (i.e., transformational, DLB), which in turn interact with other contextual forces to form followers' attitudes, behaviours and performance. This process and the hypothesised relationships can be shown as in the following framework:
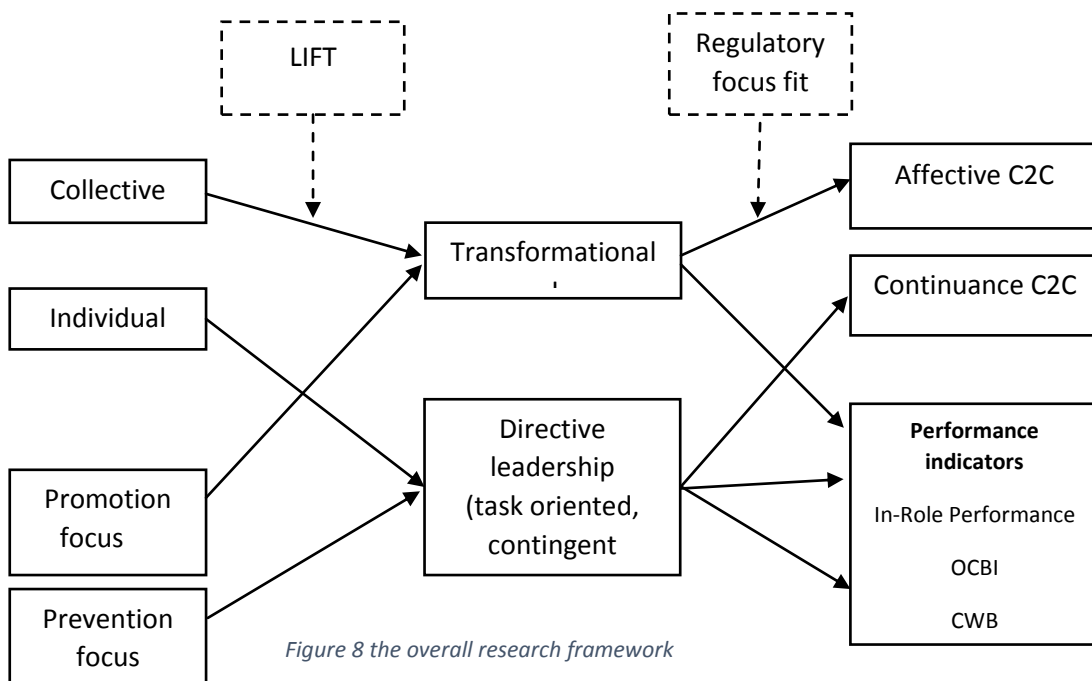
Figure 8 the overall research framework

8.2 Research Hypothesis

H.1 Leaders' collective identity is positively associated with transformational leadership behaviour.

H.2 Leaders' individual identity is positively associated with directive leadership behaviours (i.e., H2.1 task-oriented; H2.2 contingent reward; H2.3 management by exception).

H.3 Promotion-oriented leaders are positively associated with transformational leadership behaviours.

H.4 Prevention-oriented leaders are positively associated with directive leadership behaviours (i.e., task-oriented H4.1; contingent reward H4.2; and management by exception H4.3)

H.5 L-IFT moderates the relationships between leaders' levels of identity and leadership behaviours.

H5.1 The relationship between leaders' collective identity and transformational leadership behaviours will be stronger when leaders hold positive than negative prototypes about their followers.

H5.2 The relationship between leaders' individual identity and directive leadership behaviours (i.e., H.5.2.1 contingent reward, H.5.2.2 task-oriented behaviours, and H.5.2.3 management by exception) will be stronger when leaders hold negative rather than positive prototypical views of their followers.

H.6 L-IFT moderates the relationship between leaders' motivation orientation and leadership behaviours.

H6.1 The association between leader's promotion orientation and charismatic behaviours will be stronger when leaders hold positive rather than negative prototypical views about their followers.

H6.2 The relationship between leaders' prevention focus and directive behaviours (H.6.2.1 task-oriented, H.6.2.2 contingent reward, and H.6.2.3 management by exception) will be stronger when leaders hold positive rather than negative prototypical view of their followers.

H.7 Individuals' regulatory focus moderates the relationships between the perception of leadership behaviours and commitment-to-change.

H7.1 The positive correlation between transformational leadership and affective commitment-to-change is moderated by an individual's regulatory focus such that the positive relation will be stronger when individuals hold promotion than prevention motivational orientation.

H7.2 The positive relationship between directive leadership behaviours and continuance commitment-to-change will be stronger for individuals with prevention than promotion orientation.

H.8 Individuals' regulatory focus moderates the relationships between leadership behaviour perceptions and work-related behaviours

H 8.1 Followers' regulatory foci moderate the relationship between transformational leadership and followers' OCB such that this relation is stronger for promotion-oriented individuals than for prevention-oriented individuals.

H.8.2 The positive relationship between directive leadership (task-oriented $H.8_{2.1}$, contingent reward $H.8._{2.2}$ and management by exception $H.8_{2.3}$) behaviours and in-role performance will be stronger for prevention-oriented individuals than promotion oriented.

H.8.3 The negative relationship between directive leadership behaviours (task-oriented $H.8_{3.1}$, contingent reward $H.8._{3.2}$ and management by exception $H.8_{3.3}$) and counter work behaviour will be stronger for prevention than promotion-oriented individuals.

H 9 The perception of transformational leadership behaviours positively mediates the relationships between leaders' collective identity and followers' affective commitment to change (H.9.1), OCB (H9.2), and negatively mediates the relationship with CWB (9.3).

H10 the perception of management by exception positively mediates the relationship between leaders' individual identity and followers' continuance commitment to change (H10.1) and negatively mediates the relationships with CWB (H10.2) and OCB (H10.3).

H11 Transformational leadership behaviours positively mediates the relationships between leaders' promotion focus, affective commitment to change (H 11.1); OCB (H11.2), and negatively mediates the relationship with CWB (H11.3).

H 12 The perception of management by exception positively mediated the relatinoships between leaders prevention orientation and individual continuance commitment to change (H12.$_1$), CWB (H12.$_2$), and negatively associate with OCB (H12.$_3$).

H.13 The perception of transformational leadership behaviours positively mediaated the realtionships between leaders prototypes and followers affective commitment to change (H13.$_1$), OCB (H13.$_2$), and negatively mediates the realtionship with followers CWB (H 13.$_3$).

H14 the perception of management by exception leadership behaviours positively mediates the relationships between leaders' anti-prototype and followers' continuance commitment to change (H 14.1) and negatively mediates the relationship with followers' OCB (H14.$_2$) CWB (H14.$_3$).

Chapter 3

Overview of Research Methodology

This chapter address several methodological aspects in relation to conducting the current research. This overview starts by explaining the underlying research philosophy, approach and design, followed by a detailed discussion of the research methodology, targeted population, sampling, measurements and data analysis.

1. Research philosophy and Ethics

1.1 Research Philosophy

Research philosophy, according to Saunders et al. (2016) is defined as "a system of beliefs and assumptions about the development of knowledge". At every stage of research, different philosophical assumptions exist. These include assumptions about the nature of social reality (ontological assumptions), about human knowledge and what constitutes acceptable and valid knowledge (epistemological assumptions), and the role of our values and ethics in the research process, which include questions about how a researcher deals with the values of himself and his research participants (axiological assumptions) (Reed, 2009, Saunders et al., 2016, Yeung, 1997). Accordingly, the chosen philosophy formulates researchers' views of the world (i.e., research phenomenon) which in turn affects their choices of research approach, strategy and methods and even the interpretation of the findings (Saunders et al., 2016). According to Sarantakos (2012), ontology provides the logical base of epistemology, epistemology structures the nature of the research methodology, and methodology describes the appropriate type of research design, methods and instruments. However, different epistemic fields have contributed to the development of the business and management discipline, ranging from natural science to social and humanities science, which means that business and management research philosophies are scattered along a continuum between two extremes, namely, objectivism and subjectivism (Saunders et al., 2016). Table 1 shows how different philosophical assumptions, as stated above, are scattered between these paradigms.

Table 1 Philosophical assumptions as a multidimensional set of continua

Assumption type	Questions	Continua with two sets of extremes		
		Objectivism	⇕	**Subjectivism**
Ontology	• What is the nature of reality? • What is the world like? • For example: – What are organisations like? – What is it like being in organisations? – What is it like being a manager or being managed?	Real External One true reality (universalism) Granular (things) Order	⇕ ⇕ ⇕ ⇕ ⇕	Nominal/decided by convention Socially constructed Multiple realities (relativism) Flowing (processes) Chaos
Epistemology	• How can we know what we know? • What is considered acceptable knowledge? • What constitutes good-quality data? • What kinds of contribution to knowledge can be made?	Adopt assumptions of the natural scientist Facts Numbers Observable phenomena Law-like generalisations	⇕ ⇕ ⇕ ⇕ ⇕	Adopt the assumptions of the arts and humanities Opinions Narratives Attributed meanings Individuals and contexts, specifics
Axiology	• What is the role of values in research? How should we treat our own values when we do research? • How should we deal with the values of research participants?	Value-free Detachment	⇕ ⇕	Value-bound Integral and reflexive

Adapted from Saunders, M., Lewis, P., and Thornhill, A. (2016) Research Methods for Business Students. 7th Edition. Essex, England: Pearson Education Limited.

Objectivism holds the assumptions of natural science. Ontologically, it assumes that social reality exists independently of social actors; that is, reality is un-problematically available and could be known through the systematic application of the practical

techniques common to positivism. Thus, adequate knowledge (epistemologically) exists only in observable and measurable facts through which the truth about the social world can be discovered, and law-like generalisation can arise, which also necessitates keeping the research, axiological, value-free (Ackroyd and Fleetwood, 2000, Saunders et al., 2016). In contrast, subjectivism holds the assumptions of the humanities. Ontologically, it assumes that social reality's existence depends on social actors' interactions. Therefore, subjectivist researchers are, epistemologically, interested in studying the situational details to discover different social realities created by different social actors in different contexts. Thus, accurate knowledge exists in different opinions and narratives, with which it is difficult to run axiological, value-free research (Sarantakos, 2012, Saunders et al., 2016).

Based on the above, several research philosophies have emerged, each with its own assumptions about reality and the way to discover this reality. Positivism is one of these philosophies holding an objective view of the world. Positivist researchers seek to find out the facts rather than impressions or speculation. Positivists see that reality exists only in physical and observable objects and that the social world could be discovered by utilising the same techniques as in natural science (Ackroyd and Fleetwood, 2000, Saunders et al., 2016). Thus, positivist social science researchers presume the possibility of investigating social phenomena objectively, and that social phenomena legitimacy exists with a reasonable degree of certainty (Brand, 2009). Positivists assume that social phenomena exist independently of our minds and that the whole reality can be discovered (Robson, 2011). However, post-positivism holds the same ontological assumptions as positivists as they assume that only one reality exists, but they consider that this really could be only imperfectly discovered because of human bounded rationality and the intractable nature of phenomena (Brand, 2009, Robson, 2011).

Realism is another philosophical position, and it ontologically supposes that reality exists externally to our minds. Two primary forms of realist epistemology adopt different ways to discover the underpinning reality of social phenomena (Bryman, 2015). Direct realism asserts that reality is what we see and experience through observation/sensation. Critical realism, conversely, argues that what we observe is the result of structures and mechanisms that produce the empirical evidence (Reed, 2009); thus they are a reflection of reality, but not the exact reality(Saunders et al., 2016). In other words, whereas direct realism implies that sensation is enough to discover socialtruth, critical realism argues that social phenomena are not amenable to direct observation, and thus two steps are required to discover social reality: sensation and mental processing (Bryman, 2015, Saunders et al., 2016). Accordingly, for critical realists to understand a particular social phenomenon, it is important to look for the social structure that governs that phenomenon (Reed, 2005). Although critical realists assume the external existence of reality as positivists do, the way in which critical realists discover the reality is different from positivists (Saunders et al., 2016). Critical realists argue that the world combines different heterogeneous systems with their mechanisms, which may have a countervailing or equivalenteffect(Houston, 2001). Therefore, critical realists seek not to provide empirical evidence (or prediction), but rather to give more explanation and understanding of the observed evidence, as they distinguish between real and empirical domains (Tsang and Kwan, 1999). Critical realists posit both human beings and social structures as two primary objects of social science knowledge (Reed, 2005). While critical realists acknowledge the importance of conducting value-free research, they recognise the difficulty of entirely separating ourselves from the research, and therefore acknowledge that a degree of bias could be found (Saunders et al., 2016).

Interpretivists, on the other side from positivism, hold a subjective view of the world. Ontologically, they assume that reality does not exist independently of our minds and that social phenomena are created by social actors or are socially constructed (Dessler, 1999, Robson, 2002b, Saunders et al., 2016). Interpretivists criticise positivists' attempts to condense social phenomena into some definite or generalization law. For interpretivists, social phenomena are dynamic and interactive, thus in their view any attempt to limit the truth about the social world to certain laws would result in losing rich insights and knowledge (Robson, 2002b, Saunders et al., 2016). Interpretivists also reject positivists' epistemology, arguing that it is not admissible to use natural science methods to discover the reality about the social world. This rejection has been attributed to the different nature of social phenomena subjects – people. Unlike natural science objects, people are conscious, active actors who consciously observe the world around them and attach meanings to what is going on in this world, behaving accordingly (Robson, 2011). Interpretivists, thus, ontologically assume that all meanings are contextual. Epistemologically, interpretivists hold that no fixed or unchangeable reality can be identified and that social reality is spatial and provisionally exists or is context dependent. Thus, the way to know the reality is to study its context (Brand, 2009, Bryman, 2015). Interpretivists actively try to find new, rich understandings and interpretations of social phenomena and their context. Thus they are challenged to enter the world of social actors to understand this world from their point of view (Saunders et al., 2016). This necessitates adopting an empathetic stance, where researchers' values and beliefs are essential directors of the research process (Saunders et al., 2016).

In contrast to the previous philosophies, each of which sees the world from its own point of view, pragmatism asserts that no single point of view could give the entire picture and that there may be multiple realities (Saunders et al., 2016). Accordingly,

pragmatists view the research questions as the most crucial determinant of the research position, which might combine different philosophies (Saunders et al., 2016).

Based on the above discussion, we can disclose that positivism is the most suitable philosophical approach for this study. Firstly, the research questions are focused on the relationships between leaders' psychological differences, leadership behaviours and followers' work-related attitudes and behaviours. These relationships are based on a fundamental knowledge of leadership theories and models, which have proven their credibility in different contexts and times, from which we can infer the existence of reality independently from social actors. Secondly, deliberate and validated constructs that possess the ability to objectively measure the subjects of study with a reasonable degree of certainty have been developed by leadership and organisational studies over a longperiod. Thirdly, social science has methods for conducting value-free research or at least for decreasing the degree of bias (Saunders et al., 2016).

1.2 Research Ethics

Ethics debate and thinking could be classified into three wide categories: meta-ethics, normative ethics and practical ethics. Meta ethics discusses the nature of morals, whether morals are imposed by society's standards or based on each individual choice. Normative ethics addresses the best way to live or to act. Practical ethics states how we should behave in a particular situation (LaFollette and Persson, 2013, GARIMA, 2014). Others add descriptive ethics, which is concerned with studying what people or society actually believes to be right or wrong, and considering it acceptable or not acceptable in law or custom (Icheku, 2011).

Scholars consider the ethical justification as an essential part of conducting the research. Researchers in their everyday practices confront different ethical concerns that they

should be able to defend and provide an ethical justification of its treatment in their research (Guillemin and Gillam, 2004). Throughout the following sections, we provide an ethical justification of the current study of leadership behaviour and how it affects followers' attitude and performance. This justification is a continuous process of that starts from the very beginning of doing research until the final stages of reporting and publishing the research findings (Bell and Bryman, 2007).

Research ethics discussion should expand beyond the conventional issues covered in ethical codes in business and social science disciplines, to include presuppositions of social researchers (Payne, 2000). These assumptions have moral consequences on both community of practices 'that rely on commitment to a specific domain or body of knowledge for its evolution' (Bell and Bryman, 2007), or whole society (Payne, 2000). Importantly, the current study aspires to provide a better understanding of the leadership phenomena that contribute to the current accumulated knowledge in leadership literatures. As such, normative-consequentialist theory of ethics provides the ethical justification for purpose of conducting the current study. Consequentialist, consider the acts to be right or wrong based on the goodness or badness of their actual consequences (LaFollette and Persson, 2013).

At the short and medium terms, this study, through a deliberate critical reading, challenges the dominant view of leadership studies, and adds to other studies in order to provide a better understanding of leadership effectiveness in times of change. Thus, it holds an act-utilitarianism ethical view, which states that an ethical act is 'the one that produces at least as much overall happiness in the circumstances as any other alternative' (Rowan and Zinaich, 2003). In the long term, this study aspires to add new knowledge to leadership and organisational change research that would help in better

understanding of the phenomena under research, in addition to providing the community of professionals- managers in practice- with a better understanding of the consequential effects of their adopted behaviours in their organisational unit performance, and how to achieve the contemporary challenges of balancing between efficiency and adaption in their work unit. This is analogous to rule-utilitarianism ethics which calls for a closer look at the long term consequential effects of an act (Rowan and Zinaich, 2003). However, utilitarianism in general has received severe criticism, together with concerns about the possibility of putting their ethical theory into effect (Van Staveren, 2007). (Rowan and Zinaich, 2003) provided four main criticisms, among them the difficulty to assess other people's happiness and to predict the future consequences of actions have been taken against both act and rule utilitarianisms. However, it is pointed out that such a moral theory represents a foundation or starting point for ethical analysis (Rowan and Zinaich, 2003), which extends over the different research stages (Van Deventer, 2009).

Ethical issues in human centred research has two dimensions A) procedural ethics, which involves getting a relevant ethics committees' approval to undertake a particular research; and B) practical ethics, which relates to daily ethical concerns that come to light when doing research (Guillemin and Gillam, 2004). In terms of procedural ethics, an integral part of the current study is to get the University of Hull ethical approval before proceeding to the remaining study processes. Practical ethics spreads over the research process which consists of four main research stages: designing/developing the research design, implementing the research design, data analysis and publishing the research results (Van Deventer, 2009). Before we proceed towards discussing each specific set of ethical principles in these four steps, it's worthy to note that there is a theoretical base for these principles. That is, different ethical principles in practice could be attributed to

one or more theories of ethics - or have its origins in moral philosophy (Nikku and Eriksson, 2006).

During the research design stage, ethical considerations should be carefully examined in order to choose the proper research design, where we can avoid any form of potential harm that is reasonably avoidable during this stage (Van Deventer, 2009). An important issue to decide at this stage is whether to follow overt or covert research design. The former is used by the current study. Thus, the participants or objects of the study will be provided with all relevant information sufficient to make them aware of the research purposes, their participation nature and any potential harm. Such information should be honestly provided whatever the consequences (Van Deventer, 2009). This is analogous to non-consequentialism or Kant's ethics, which in contrast to utilitarianism, has been built on the notion of treating humans as end-in-themselves rather than a means to maximise utility (Kamm, 2013).

In the implementation stage, or field study, actual communication occurs between the researchers and the study subjects, and it's ethically important to get informed consent from the research participants (Saunders et al., 2016, Van Deventer, 2009). This is analogous to contractarianism or social contract theory of ethics, which considers moral rules as a kind of agreement between rational individuals, and that such agreement represents the source of authority (Baggini and Fosl, 2007). Thus, an action is to be said ethical only if the contractors in the original position would agree to act in a certain way (Rowan and Zinaich, 2003). However in practical ethics, informed consent does not represent any kind of authority over the participants, as they have the right to withdraw from the study at any time and that should be respected by the researcher (Saunders et al., 2016). It is also important during this stage which includes data gathering to ensure

enforcement of several ethical principles such as privacy, objectivity, confidentiality and anonymity (Saunders et al., 2016). These principles could also be attributed to Kant's ethics - as described above.

After implementing the research design and gathering data, data analysis starts. In this stage, because of the underlying positivist philosophy of the current study, the issue of objectivity during data analysis becomes critically important and thus should be ethically respected (Saunders et al., 2016). It also ethically important to avoid data manipulation and misinterpretation, and using inappropriate analytical methods should also be avoided (Van Deventer, 2009). These principles could be applied to Kant's ethics, where an ethical action is the one that stems from moral law rather than our desires (Rowan and Zinaich, 2003).

By the time we finish data analysis, the study results will be available for disseminating. During this stage, it is ethically important to maintain the privacy of the research participants' identity and it is also important to consider the research participants' right to request omission of their information from the results. Research participants also have the right over their provided information, so that their provided data can not be used in any other research activities without getting their approval (Van Deventer, 2009). Another important ethical issue during the research process is the researcher's responsibility towards other researchers and their copyrights (Saunders et al., 2016). This could be related to the virtue theory of ethics. Unlike other normative theories which focus on whether an action is morally right or wrong, the virtue theory of ethics is concerned with the inherent characteristics of a good person or being a morally good Person (Rowan and Zinaich, 2003). Being a good person or good researcher is to

successfully perform the research, which according to virtues, is to have a good reason and good motivation to do something (Van Staveren, 2007).

2. Research approach

Two research approaches are mostly used to design the research process. The choice between these approaches depends on the ultimate goal of the study. That is, an inductive method is used to develop or modify a theory, while a deductive approach is used to test a theory(Saunders et al., 2016). Deduction defined as "the process by which we arrive at a reasoned conclusion by logically generalise from known fact" (Sekaran and Bougie, 2016). This study aims to understand the leadership process and the role of leader-followers' interactions and individual differences in this process. To achieve these targets, this study has developed several hypotheses based on existing theories of leadership and psychology for empirical testing. Accordingly, a deductive approach is considered to be most appropriate to design the current study process.

Based on the deductive approach, the research process should follow several essential steps. Firstly, the relationships between variables should be explained based on a literature review. Secondly, testable research hypotheses should be developed. Thirdly, the appropriate form of data should be collected and a highly structured methodology should be used to facilitate hypothesis testing and findings replication. Fourth, operationalised concepts are required in a way that enables facts to be measured. Finally, the appropriate sample size must be carefully considered for analysis and generalisation purposes.

3. Research design and strategy

The research design represents the general plan of how a researcher will go about answering the research questions (Saunders et al., 2016). To decide between qualitative

and quantitative design, it is important to acknowledge the chosen research philosophy and approach. Since a quantitative research design is generally associated with positivism and a deductive approach (Robson, 2011, Saunders et al., 2016), the quantitative design has been chosen to guide the next steps. Quantitative research focuses on measuring behaviours rather than meanings, deriving quantitative data from an appropriate sample size. It follows the same general principles as natural science, adopts deductive logic, requires accurate measurement in terms of reliability and validity, and uses statistical analysis techniques in order to reach generalizable findings (Robson, 2011, Sarantakos, 2012).

Two research strategies could be used with a quantitative design: experiment and survey. These strategies represent the methodological link between a research philosophy and the later choice of data collection and analysis methods (Saunders et al., 2016). Among these strategies, the survey is the most commonly used strategy in business and management research. The survey technique is easier to explain and understand and facilitates respondents' participation in the study. The questionnaire is the most used tool to collect standardised data from a large population in an economical way, it has a greater ability to collect quantitative data suitable for quantitative research, gives a high level of control over the research process and delivers more representative results suitable for generalisation purposes (Robson, 2002b, Saunders et al., 2016). Thus, in order to collect data from a large and representative sample with economic cost and time, the survey is considered to be the most suitable strategy for data collection.

4. Survey design

This research is organised over three different studies, and the data required for conducting the analyses are collected using different surveys from various sources.

Importantly, the first two studies aim to examine the correlation between individuals' characteristics, attitudes and work-related behaviours. On the other hand, the first study survey is designed to collect data from the leaders about their psychological characteristics, assumptions and leadership behaviours, while the second survey is designed to collect data about the followers' perceptions of leadership behaviours, attitudes and work behaviours. An Online Survey website (formerly known as BOS[2]) was used to design the surveys. The University of Hull provided access to the online survey. Several elements were considered in the design of the survey, including research information, consent form, validation items, and identification codes to ensure the accuracy of the provided information. Participants were provided with information about the research objective, survey purposes and their participation responsibilities. Based on this information each participant had to provide his/her consent of participation. Validation items were also included in each questionnaire to ensure the accuracy of the participants responses. Furthermore, participants were allowed to provide their comments about the survey. The participants feedback about the survey significantly participated in producing a simple and straightforward design.

The third study aims to examine the interplay effect of both leaders and their followers on the leadership process. The required data for this study, therefore, should be at the team level. Consequently, two different survey forms were usedfor data collection from both followers and their line managers. Whereas the first survey was designed to collect data about leaders' characteristics and their prototypes of their followers, the second survey was designed to collect data from the followers about their line managers' behaviours, attitudes and work-relatedpractices. Given that an online survey does not provide the tools that guarantee successful collection of simultaneous data from both

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[2] Bristol Online Survey

leaders and their direct followers, we relied on the paper surveys that had been provided with an identification code for each team. To control the ordinary method bias, this study collected data from different sources, and differently located the scale items along the questionnaire (Podsakoff et al., 2012).

5. Population and sampling

5.1 Targeted population

The targeted population is defined as "a complete group with a specific population elements relevant to the research project" (Zikmund et al., 2000). Two critical issues should be considered when defining the sources of data collection (i.e., population); first, determining the essential characteristics of the population is critical foridentifying the targeted elements (Zikmund et al., 2000). Second, researchers should consider the issue of homogeneity in the chosen population (Robson, 2002a). Importantly, this research is conducted via three separate studies each with its own objectives. The first two studies are performed at the individual level with the aim of examining the correlation between individuals' psychological orientations, attitudes and work behaviours. Accordingly, the targeted population for these two studies included individuals (i.e., leaders and followers) working in a full-time position. The third study aims to examine the interplay between leaders and followers in the formation of the leadership process. Thus, the targeted population included working teams in UK higher education where both leaders and their followers substantially participate in the formation of the leadership results (Buller, 2015).

Concerning the homogeneity issue, this study aims to examine human interaction phenomena at the individual and dyadic levels, rather than at the organisational level; therefore, considering the problem of homogeneity would be much more appropriate in

the sampling rather than in the population definition. Due to considerations of cost and time, this study depends on the sample selection rather than on total enumeration.

5.2 Sampling

Two major alternative sampling plans are known: probability sampling where every element in the population receives equal/known opportunities to be selected in the sample; and non-probability sampling, where the probability of any particular member of the population being chosen is unequal/unknown (Saunders et al., 2012, Zikmund et al., 2000).

Given the difficulty of finding a complete sampling frame of individuals and organisations suitable for the research criteria, non-probability sampling has been used (Saunders et al., 2012). Accordingly, this research relies on a purposeful sampling strategy. Purposeful sampling depends on the researcher's judgements in selecting the most suitable cases to answer the research questions and achieve its objectives. This research is conducted via three different studies; the first two relied on online samples from the M-Turk database combining 200 leader and follower participants (100 each). The first sample of 100 full-time followers was asked to provide their answers to several questions that evaluated their perceptions of their leaders' behaviours, their regulatory focus, attitudes and work behaviours. In the second sample, 100 managers were asked to fill in the online survey about their individual characteristics, perceptions of followers, and engagement in various leadership behaviours. To guarantee the accuracy of the collected information from the online sample (i.e., the data collected via M-Turk) several conditions were set to ensure both the reliability and homogeneity of the participating sample. Thisincluded limiting the survey availability to UK and USA employees, the specification of work experience (i.e., full time), occupation (i.e.,

managerial, non-managerial positions) and the accuracy in task compilation (i.e., HIT approval rate).

The third study relied on a sample of 20 teams from the University of Hull (with 52 individuals). To guarantee the homogeneity of the sample, we selectively focused on surveying teams at the middle hierarchical levels. The sampling process at the university started by contacting different faculty business managers all over the University of Hull for a short interview. The purpose of these interviews was to provide initial information about the research objectives and obtain the faculties' approval for conducting the survey within their business units with their administrative members of staff. Another important objective of conducting these interviews was related to defining the participating teams relevant to the research objectives. Given that the study included measuring employees' commitment to change, it was important to ask the person in charge to decide which teams were experiencing changes in their work context. Based on that, an initial list was made for each faculty team and it was used for disseminating the surveys.

Table 2: Sample demographics

Variable	Category	Leaders Sample		Followers Sample	
		Frequency	Percent	Frequency	Percent
Age	20-29	17	17.0	32	32
	30-39	33	33.0	45	45
	40-49	19	19.0	16	16
	50-59	24	24.0	7	7
	60 & over	7	7.0		
work experience	<=10	23	23.0	46	46
	>10<20	34	34.0	53	53
	>=20	43	43.0		
Gender	Male	58	58.0	66	66
	Female	42	40.0	34	34
Level of Education	Level 5 or lower	32	32.0	17	17
	Level 6	43	43.0	65	65
	Level 7 or higher	23	23.0	18	18
Total	200	100		100	

Table_2 provides a summarized description of the main samples of the current study. The first sample consists of 100 managers who has successfully completed the survey. This after the exclusion of a number of surveys that did not match with the data quality standards for this study (i.e., field to provide the survey special code, and or, filed to answer the checking-up questions accurately). It's apparent that the majority of the participants are aged 30th and over which matches the nature of the targeted population (i.e., managers level) with 50% of them are aged 40 and over. A large percentage of 77% of the participants have more than 10 years of work experience, 43% of the samples' participants work experience is over 20-years. The sample is distributed between 58% male and 42% female, out of them 66% hold Bachelor degree (i.e., level 6 or higher). Similarly, the second sample, consists of 100 followers who successfully completed the survey. The statistics figures indicate that, the participants ages of 30 to 39 were the most dominant category 45% of the sample. 32 percent of the sample were in twenties or between 20 and 29. 46% of the team-members sample have work experience lower than 10% and 53% of them their experience is over 53%. Based on gender Male sample was the dominant one by 66% whereas female percent is 34%. Regarding the level of education, the majority of the team members sample is located on level-6 with 65% of the participants, the remaining percent is distributed between level-5 17% and level-7 18%.

6. Data sources: mechanical Turk database

To conduct the first two studies in this research we relied on M-Turk to collect the required data. Mechanical Turk is an online labour market created by Amazon in 2005; it represents an excellent source for efficient, inexpensive data collection (Berinsky et al.,

2012). As a source for data collection, it includes a large and diverse community comprising around 500,000 individuals from 190 countries, the majority of whom are located in the USA and India (Paolacci and Chandler, 2014). Based on a comparison between M-Turk, students and community samples, the results have disclosed that the quality of the collected data is almost the same, yet M-Turk reaches a broader and more diverse population (Goodman et al., 2013). M-Turk as a means of data collection is composed of two populations: the requesters who launch the work/tasks to be completed, and workers who opt to complete the "HITs" (Human Intelligence Tasks). M-Turk usage in data collection has started to become more popular in social science and experimental studies (Berinsky et al., 2012, Rand, 2012). Although there is no known study about the determinants of the participation in M-Turk, research refers to some notable differences compared with other sources (i.e., community and student samples). Mainly, M-Turk workers possess lower levels of extroversion, emotional stability and openness (Goodman et al., 2013). Furthermore, the M-Turk population shows a higher need for cognition and evaluation than others in traditional sources (Berinsky et al., 2012).

Despite the increasing popularity of using M-Turk in data collection, several concerns have been raised concerning the quality of the collected data, the consistency of such a population and related issues of cognition and attention (Berinsky et al., 2012, Buhrmester et al., 2011, Goodman et al., 2013, Paolacci and Chandler, 2014). This has resulted in researchers doubting the quality of the data gathered via such an online platform (Paolacci et al., 2010). Several studies have examined these concerns, and these researchers have provided several positive indicators and conclusions about the quality and reliability of the data collected via M-Turk (Paolacci et al., 2010, Paolacci and Chandler, 2014), Buhrmester et al. (2011). The results show that M-Turk respondents are not mainly driven by financial consideration and that payment/compensation levels do

not appear to affect data quality, but might only influence the speed of data collection. In this study, therefore, we started by conducting several exploratory launchings of the survey to ensure against any error or confusion over the questions' wordings and the general survey design. Moreover, the participants were asked to provide their feedback and comments on the survey, based on which, the final survey was revised, resulting in a more simplified survey. As described before, the required data for the third study were collected from the University of Hull using a paper survey.

7. Research instruments

When deciding on the appropriate construct measurement, it is essential to consider both reliability and validity issues. Reliability is broadly defined as the degree to which measures are free from error and therefore yield consistent results. Validity refers to the ability of a measuring instrument to measure what is intended to be measured (Zikmund et al., 2000). In the following section, several research instruments are identified from previous studies. Notably, some of the scales' items were reduced for survey simplification purposes (e.g., making the survey easy to fill and understandable). This has not affected the quality of the scales' as it indicated in the confirmatory factor analysis[3].

Individual differences

7.1 Self-identity

The levels of self-concept scale (LSCS) Selenta and Lord (2005) has been used in different studies to measure levels of identity (Johnson et al., 2006, Johnson et al., 2012). The LSCS measures each level of an individual's identity using different subscales. In this study, we focus on two levels of identity (collective, and individual), measuring

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[3] Refer to the assessment models in the analysis section-chapter 4.

each of them with the first subscale in the LSCS measure (Johnson et al., 2006). Accordingly, a comparative identity that depicts one's distinctive features in comparison to those of others is used to measure individual identity (α=0.90). This includes five items (e.g., I thrive on opportunities to demonstrate that my abilities or talents are better than those of other people). Group achievement focus measures collective identity or group achievement focus scale (α=.74; e.g., "I feel great pride when my team or group does well, even if I'm not the main reason for its success" (Johnson et al., 2006, Johnson et al., 2012).

7.2 Chronic regulatory focus

We used the 10-item scale developed by (Lockwood et al., 2002) to measure the chronic regulatory focus of both followers and leaders (Lockwood et al. (2002). A construct is a composite of two dimensions, promotion and prevention focus, with 7 items to measure each (α= 0.81; 0.75 respectively). Sample items include promotion (I frequently imagine how I will achieve my hopes and aspirations) and prevention (I am more oriented towards preventing losses than I am towards attaining gains). We excluded 4 items from the questionnaire as they were closely related to the students' questionnaire (Haws et al., 2010). Several measures have been developed to assess individuals' regulatory focus (Gorman et al., 2012); among them the General Regulatory Focus Measure (GRFM) by (Lockwood et al., 2002) has mostly been used in prior studies (Johnson et al., 2015, Gorman et al., 2012). The regulatory focus has been studied both as chronic individual differences, which are supposed to be stable over time, and as a work-related chronic focus that is a temporary or situational induced state (Johnson and Yang, 2010, Neubert et al., 2008, Schuh et al., 2016). In this study, however, we rely on measuring regulatory foci as a chronic state that is assumed to be stable over time. This

is believed to be much more relevant for the process type models of leadership (Tuncdogan et al., 2017, Antonakis et al., 2012), and to have a longer lasting effect on stable attitudes like commitment than temporary shifts in regulatory orientations (Johnson and Yang, 2010).

7.3 Leader implicit followership theory L-IFT

Following Whiteley et al. (2012), we measure leaders' conceptions of their followers using an 18-item scale by (Sy, 2010). Sy (2010) classified leaders' prototypes of followers into two kinds. A positive prototype, which includes three sub-dimensions, each of which are measured by three items, including Industry (hard working, productive, goes above and beyond) and Enthusiasm (exited, outgoing, happy) (α= 0.87;0.85), and an anti-prototype, which measures leaders' negative conceptions of their followers, including Incompetence (uneducated, slow, inexperienced) and Insubordination (arrogant, rude, bad temper) (0.83; 0.82; 0.85 respectively).

7.4 Leadership behaviours

We collected follower's evaluations of different leadership behaviours presented by their direct leader. Transformational leadership is measured using three dimensions: Inspirational Motivation with 4 Items (e.g., articulate a compelling vision of the future), Idealised Influence-Behaviour with 4 Items (e.g., specifies the importance of having a strong sense of purpose), and Idealised Influence-Attributes with 4 Items (e.g., goes beyond self-interest for the good of the group). These behaviours represent a considerable part of MLQ for (Bass and Avolio, 1995), and they have been widely used in prior studies to measure group- or unit-focused behaviours (Wu et al., 2010), and charismatic leadership behaviours (Sosik, 2005) with α= 0.80; 0.75; 0.74 respectively. Following (Neubert et al., 2008, Northouse, 2010), task-oriented behaviours are measured

using 8 items from (Stogdill, 1963) (e.g., decides what shall be done and how it will be done α= 0.92). Management by exception is measured using 4 items from MLQ (e.g., keep track of all my mistakes. α= 0.73) (Birasnav, 2014).

7.5 Followers' attitudes

Three dimensions of commitment to change have been developed by (Herscovitch and Meyer, 2002). Based on their definition of commitment to change as a force (mindset) that binds an individual to a course of action deemed necessary for the successful implementation of a change initiative, they defined three forces that bind individual behaviour to a specific course of action. These forces reflect an individual's desire to do (affective commitment – AC), a sense of costs associated with not supporting change (continuous commitment – CC), and a sense of obligation to supportchange (normative commitment – NC). Herscovitch and Myer's instrument has been widely used in several studies to measure one or more dimensions of commitment to change. The reliability and validity of scales havebeen proved in these studies (Herscovitch and Meyer, 2002, Herold et al., 2008, Hill et al., 2012, Meyer et al., 2007) (α= .94, 94, and .86 for AC, CC, and NC respectively). Therefore, in this study, 12 items were used to measure the followers' Affective and Continuance commitment (6 items each). Sample items were effective (e.g., I believe in the value of this change) and continuance (e.g., I have no choice but to go along with this change). The respondents were required to provide their answers on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

7.6 Work-related behaviours

This study adopts three indicatorsto measure work-related behaviours and outcomes. In-role performance is assessed using 7 items derived from (Williams and Anderson, 1991).

Employees were asked to indicate the extent to which they, for example, adequately completed the assigned duties and tasks (e.g., I adequately complete assigned duties. α=0.82). This way of evaluating task performance views performance as a behaviour rather than an outcome, and therefore "performance as in the doing, not in the result of what has been done"(Menges et al., 2011). Organisational Citizenship Behaviour directed towards co-workers (OCBI) is assessed using (Lee and Allen, 2002). Previous research has reported good reliability for this measure with α = 0.84 (Herman and Chiu, 2014, Menges et al., 2011, Lee and Allen, 2002). Followers are asked to provide their answers on 7-point Likert scale (1=never, 7=always). A sample item is "help others who have been absent". Following Menges et al. (2011), this study relies on followers' rather than managers' ratings of individuals' OCBI. OCBI is more about discretionary, extra, or non-task behaviour, and therefore followers are supposed to be most knowledgeable about this kind of behaviour. Previous research has provided evidence for the construct validity of performance self-rating (Conway and Lance, 2010, Menges et al., 2011, Lance et al., 2008). Deviant behaviour is measured using 7 items from the Work Counterproductive Work Behaviours (CWB) scale by (Spector et al., 2006). These represent two dimensions of CWB; production deviance (i.e., failure to perform tasks effectively) and withdrawal (i.e., obstacles that lead to time restrictions and dedicating fewer efforts to work). An example item is Came to work late without permission, α= 0.78 (Spector et al., 2010).

7.7 Control variables

Previous research has tended to control several demographic characteristics (i.e., gender, group/team size, employees' tenure, and level of education) that are believed to influence individuals' assumptions, behaviours and attitudes (Wu et al., 2010, Carter et

al., 2013, Sosik, 2005). Alongside these, social desirability has been considered as one of the main forces that should be controlled, especially with self-reported responses (Reynolds, 1982). Social desirability refers to an individual's tendency to answer in a socially favourable way (Reynolds, 1982). We measured social desirability using 5 items from Reynolds (1982) short form of the (Crowne and Marlowe, 1960). Both leaders and followers were asked to provide their answers on a scale ranging from 1-strongly disagree to 7-strongly agree (e.g., sometimes I feel resentful when I don't get my way. α=0.70) (Sosik, 2005).

8. Data Estimation

Over the past three decades, structural equation modelling (SEM) has been widely used in social science research (DiLalla, 2000). These studies have used SEM as an analytical method that simultaneously combines factor analysis and a linear regression model for theory testing (Williams et al., 2009). In this model, theory concepts are represented by latent variables (Factors), and the collected data of measures (Indicators) are used as inputs to run a statistical analysis to provide evidence about the relationship between latent variables (Williams et al., 2009). SEM models include both factor and path analysis: factor analysis entails assessing the latent factors that are operationalised by measured variables (indicators), while path analysis refers to determining the causal relations between a series of independent and dependent variables (Byrne, 2013, DiLalla, 2000). By using SEM, we can identify the non-directional influence of factors (latent) on observed variables, in addition to identifying both non-directional and directional influences among factors (Fabrigar and Wegener, 2009). That is, latent factors could be assumed to be antecedents and consequences of other elements in the model. This assumption exists in our research model about leadership behaviours (Fabrigar and Wegener, 2009). SEM possesses the high capability to run a simultaneous regression,

and assess the effects of moderator and mediator variables ([DiLalla, 2000](#)). The appropriate sample size for SEM is an important issue to consider; however, there is no definite rule, as it might depend on several issues, like the number of indicators or observed variables, and the multivariate normality of the measures. However, a sample size of 150 or higher is suggested to be adequate ([DiLalla, 2000](#)). Given that this study aims to identify the causal relationships between several exogenous and indigenous variables depicted in the research framework (section, 1.6), with several mediators and moderator variables, SEM will be the appropriate analysis method. Two well-known techniques are used in SEM analysis: covariance-based SEM (CB-SEM) and partial list square PLS-SEM. Importantly; the choice between these two techniques mainly depends on the objectives of the research. Whereas CB-SEM is used for testing an existing theory, PLS-SEM is used for developing a theory. Moreover, PLS-SEM in comparison to CB-SEM requires a smaller sample size, and does not impose any conditions concerning data distribution (or normality assumptions). As this study aims to test and predict various relationships based on different theories rather than testing one particular theory, we rely on PLS-SEM, which provides better results for predicting the relationships between variables.

PLS analysis provides a greater ability to predict the modelled relationships and understand the formation and relationships among the constructs. Therefore, it is considered to be a more appropriate tool when the main concern is prediction, as it works to maximise the explained variance in the dependent variable. For sample size considerations we rely on the bootstrapping technique, mostly at the 5000-subsample level. The available options for the bootstrappingprocedureare no significant changes, individual level sign changes, and construct level sign change options. With the no-significant change option, the results from the bootstrapping estimation are not revised.

Individual-level change reverses the sign if the bootstrapping result in different estimation coefficient from those obtained from the original sample. Construct-level changes consider a group of coefficients simultaneously and compare them with the coefficients obtained from the original sample. The comparison could result in a significant shift in the estimation sample from the original example; in this case the estimations are reversed to match with the original one. In fact, if there is no significant difference from the original sample then no changes happen. As such, the construct level change is considered as a compromise solution between the two prior ones if the estimation provides different results.

9. Ethical issues

Achieving the code of ethics when conducting social science research refers to the guarantee that the wellbeing and welfare of the participants are not compromised at any level because of the process or the outcomes of the research study. Alongside, the previously discussed ethical consideration and its theoretical foundations, the following paragraphs spot the light on some main ethical aspects that are vitally important for a successful conduction of this research. In this study, the code of ethics is applied throughout the research stages; this ranges from the early stages of choosing the research idea and how it contributes to knowledge, to the final stages of the data analysis, discussion of results, data storage and publishing. Some essential ethical concerns are presented below alongside the applied procedures in this research to ensure that they have been well respected.

Clarity of information and participants' consent form

An essential element of obtaining the prospective participants' approval to participate in this study is related to providing them with clear and detailed information about the

research objectives and the nature of their participation. Thus, detailed information sheets that identified the purpose of the research, the type of data required and the participants' rights. Consent forms were also provided for every participant in this study. These forms identified the limits of their participation and data usage, and gathered their consent to participate in the study. The researcher's and the university Research Ethics Committee's contact information were clearly available for the participants, in addition to stating their right to withdraw from the research at any stage.

Confidentiality

Considering the issue of confidentiality is extremely important when conducting social research. Accordingly, the participants' anonymity was strictly respected at all stages of this research. This included the anonymity of the surveys, data analysis and publications. To do so, we used coding instead of personal information for the purpose of questionnaire identification. Importantly, some concerns were raised by the participants pertaining data discloser. This issue was instantly treated by providing more information and reassurance that the research purpose did not include any kind of private or classified information. In addition, the participants were assured that revealing the participating personal information was not possible as it was prohibited by the university code of ethics.

<u>Chapter Four: Data Analysis</u>

This chapter presents the analysis and estimation results of the research model. Using the collected data, we started the results presentation by providing a summarised view of the main features of the study variables through a detailed descriptive analysis. Following that, a more advanced examination of the modelled relationships, using the partial least square structural equation modelling (PLS-SEM), is conducted. This chapter is organised in four sections: the first section presents *"study-one"* which aims to provide a further understanding of the underlying motives of different leadership behaviours based on studying leaders' individual characteristics. As such, we start this chapter by examining how different leadership behaviours are induced by the interactions between leaders' identity levels, regulatory focuses, and followership assumptions. In section two; the second study is conducted, which focuses on studying team/staff members influence on the leadership process, through examining their attitudes and work-related behaviours. Specifically, how team members' attitudes and behaviours result from the interactions between their perception of leadership behaviours and individuals' characteristics (i.e., motivational orientation). The third section, analyses the relationships between leaders individual differences and followers proxemal effects in the leadership process (i.e., attitudes and work related behaviours). The fourth section, is dedicated for hypothesis testing in which we provide an exact estimation conducted solely for hypothesis testing, as well as, further refinement and evaluation of the unsupported hypothesised relationships. Importantly, each of the first two sections starts by providing a clear view of the study variables, followed by the assessment, and the estimation model at the end.

Section One

Leaders' individual differences, implicit followership theory and leadership behaviours.

This study aims to examine the interrelationships between leaders' levels of identity, motivational orientations, and their engagement in different leadership behaviours. This section starts by providing a summarised description of the full sample and its variables, of which, we can get a better understanding of the main features of the study variables and define the necessary analysis techniques. Following that, the assessment model is conductedto validate the study variables before running the estimation model (SEM).

1- Descriptive Statistics.

Table-3: Descriptive Statistics-First Study

Statistics Variables	Descriptive Statistics							Skewness		Kurtosis	
	Mini mum	Max imu m	Mean	Med ian	Mode	Sign	Std. Deviat ion	Statis tic	Std. Error	Stati stic	Std. Error
	1	2	3	4	5	6	7	8	9	10	11
Leader positive prototype	3.33	10	7.62	7.67	6.83	0.11	1.22	-0.52	0.24	1.00	0.47
Leader negative (anti) prototype	1.0	8.0	2.75	2.25	1.0	0.00	1.67	1.05	0.24	0.50	0.47
Individual identity	1.4	6.6	4.12	4.2	3.6	0.20	1.29	-0.20	0.24	-0.81	0.47
Collective identity	3.2	7.0	5.73	6	6.0	0.00	0.96	-0.78	0.24	-0.16	0.47
Social Desirability	1.4	6.6	3.72	3.5	3.2	0.00	1.13	0.34	0.24	-0.61	0.47
Regulatory F Prevention	1.2	6.8	3.86	3.7	2.8	0.03	1.27	0.20	0.24	-0.76	0.47
Regulatory F promotional	2.4	7.0	5.29	5.4	5.0	0.06	1.08	-0.16	0.24	-0.70	0.47
Charismatic Leadership	1.71	7.0	5.58	5.71	5.43	0.00	0.99	-1.35	0.24	2.82	0.47
Task Oriented L	1.75	7.0	5.79	6	6.23	0.00	0.92	-1.15	0.24	2.65	0.47
Contingent Reward L	2.0	7.0	5.82	6	6.0	0.00	0.96	-1.17	0.24	2.01	0.47

Management by Exception	1.0	7.0	3.66	3.5	2.0	0.00	1.64	0.27	0.24	-0.94	0.47

Table-3 providesdetailed statistical figures for a sample of 100 participants from those who hold a full-time managerial position. Out of these figures, the minimum and maximum values vary between 1 and 10 which indicates that respondents mostly used the whole measure scale values. Thisprovides an initial indication of the accuracy of the collected data, and that respondents were paying enough attention to the survey instruction and carefully answered the questions. Columns 8-11, show the Skewness and Kurtosis of each variable. Both of them explain the data asymmetric and centralisation respectively. Whereas, a zero value indicates a normal distribution, a value higher than 1 or lower than -1 indicate a high level of the skewness and kurtosis or a deviation from normality. It is apparent that most of the variable's skewness are stable or in the moderate between 0 and +-1, however, leaders' negative prototypes score a skewness value of 1.058 which refer to pile up on the left side of the data distribution or in other words leaders tend to give low scores for the prototypical negative description of their subordinates. On the other hand, leadership behaviours including charismatic, contingent reward, and management by exception show high negative skewness scores (-1.35, -1.151, -1.173 respectively) which indicates pile-up in the data distribution to the right side or respondents tend to score high on these scales. Kurtosis scores also are almost stable for all variables, except the leaders' positive prototypes, transformational, contingent reward, and management by exception leadership behaviours which score (1.006, 2.823, 2.653, 2.009 respectively) indicating a pointy and heavy-tailed data distribution.

Columns 3-5 present the central tendency statistics for the study variables; out of these figures it is notable that leaders tend to hold a highpositive view of their subordinates

(median value 7.67) in comparison with the negative prototypes or assumptions which scores a mean 2.75. Regarding the identity scale, the figures show that respondents are more inclined to hold collective identity (mean value 5.73) than individual-self or identity (mean value 4.12). The figures also indicated that most of the respondents score high in promotion orientation (mean value 5.4) than prevention orientation (Mean value 3.7). The figures for the leadership behaviours indicate a high median value for each of transformational, task-oriented, contingent reward behaviours (5.58, 5.79, and 5.82 respectively). Conversely, respondents are less involved in management-by-exception behaviours with a mean value of 3.66. This visualised description of the variables' distribution helps us to define not only the proper analysis technique for the data at hand but also the type of analysis that can provide a better conclusion about the variable's relationships. Thus, a more advanced and detailed analysis is requiredto test these relationships and the study hypothesis. Accordingly, the following section provides a description of the structural equation modelling of the study relationships. Before conducting the analysis, it's important to make sure that the stop criterion of the algorithm achieved before the maximum number of iterations. From table-47 we can notice that the algorithm converged after iteration-9. Algorithm stop criterion refers to the number of mathematical operations that are required to get an acceptable solution.

a. Structurer Equation Modelling.

Estimating the proposed relationships necessitate conducting *assessment model estimation* in order to ensure that the constructs at hand are suitable for accurate statistical evaluation of the proposed relationships. That is to assess variables reliability and validity, in addition to defining any possible problems in data distribution such as heterogeneity

2.1 Evaluation of The Measurement (assessment) Model.

The first step in assessing the measurement model is to examine the reliability and validity of the model constructs. This analysis mainly focuses on the relations

Table 4 results summary of the reflective measurement model							
Assessment criteria Variables	Indica tor	Loadi ng	Indicator reliability	Cronbach' s Alpha	rho_A	Composit e Reliabilit y	Average Variance Extracted (AVE)
Regulatory Focus Promotion	1	0.80	0.65	0.84	0.86	0.89	0.68
	2	0.83	0.68				
	3	0.85	0.72				
	4	0.81	0.66				
Regulatory Focus Prevention	1	0.85	0.74	0.76	0.84	0.89	0.81
	2	0.94	0.87				
Individual Identity	1	0.67	0.46	0.76	0.79	0.85	0.58
	2	0.85	0.72				
	3	0.76	0.57				
	4	0.76	0.58				
Collective Identity	1	0.80	0.65	0.78	0.83	0.86	0.62
	2	0.64	0.41				
	3	0.87	0.76				
	4	0.80	0.64				
LIF_positive	1	0.78	0.61	0.90	1.08	0.92	0.69
	2	0.79	0.64				
	3	0.91	0.84				
	4	0.85	0.73				
	5	z	0.69				
LIF_Negative	1	0.77	0.59	0.90	0.94	0.92	0.66
	2	0.82	0.67				
	3	0.84	0.72				
	4	0.71	0.51				
	5	0.83	0.68				
	6	0.87	0.76				
Transformational leadership	1	0.80	0.65	0.88	0.89	0.91	0.63
	2	0.83	0.70				
	3	0.70	0.49				
	4	0.84	0.71				
	5	0.82	0.68				
Management-by-Exception	1	0.85	0.73	0.90	0.92	0.93	0.78
	2	0.92	0.85				
	3	0.85	0.74				
	4	0.88	0.78				
Task oriented	1	0.91	0.83	0.71	0.78	0.81	0.51
	2	0.77	0.60				
Contingent reward	1	0.88	0.77	0.82	0.87	0.88	0.64
	2	0.73	0.53				
	3	0.85	0.72				
	4	0.74	0.55				

hip between each construct and its indicators (i.e., measurement items). Therefore, the

systematic evaluation of a reflective measurement model requires the assessment of several criteria including Internal consistency (composite reliability), indicator reliability, convergent (average variance extracted - AVE) and discriminant validity.

Internal consistency, the first criterion in assessing the measurement model is to examine the internal consistency reliability commonly known as Cronbach's alpha which evaluates the reliability of a construct based on the inter-correlations for its observed indicators[4]. Composite reliability is another measure of a constructs internal reliability which is less conservative in comparison with Cronbach alpha measure[5]. Table-4 Figures indicate high levels of constructs internal consistency measured by both Cronbach's alpha and composite reliability, most of the variables composite reliability exceed 0.85, whereas Cronbach's α range between, 0.76 to 0.90.

Convergent Validity: which assess the extent to which a construct correlates with its alternative measures. Having that, the reflective constructs are measured based on different indicators, then these indicators should share a high proportion of variance. Accordingly, to establish the convergent validity of a construct of both the outer loading and the average variance extracted (AVE) should be considered. The outerloadingdetermines an item's absolute contribution to its assigned construct. From table-4 figures, it's apparent that most of the included indicators are within the acceptable range (over 0.7). Although, some items are still below the threshold of 0.7 such as individual identity item-1 (0.679) and collective identity item-2 (0.638), the deletion of these items negatively affected the AVE and composite reliability. The overall results present a reasonable level of the items loading ranging from 0.638 to

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[4] In the reflective models all the variation in different indicators is assumed to be caused by the same construct and therefore they should be highly correlated to each other.
[5] Cronbach alpha assumes that all the indicators have equal loading and more sensitive to the number of indicators and therefore underestimate the internal consistency reliability.

0.935. The figures also presenta reasonable level of indicators reliability which indicates the amount of variation in an item that is explained by its associated construct. AVE is calculated by getting the mean value of the square loading of construct indicators. From table-3 we can notice that all constructs recordhighvalue of AVE ranging from 0.583 to 0.805, which means that all model constructs explain a high percent of the variation on its indicators (this is known as construct communality).

Discriminant Validity This measure the independency of different constructs in the model, or in other words that a specific construct is a unique and captures phenomenon not represent by other latent variables in the model. To examine the discriminant validity, two methods could be used, one through examining the cross loadings of indicators (i.e., the loading of indicator on the associated construct should be greater than all of its loadings on other constructs "cross loading"). Table-48 presents good levels of the variables cross loading, that is none of the items' loadings on the other constructs exceeded its loadings on its own construct.

Fornell-Larcker criterion is a more conservative way for the assessment of discriminant validity than cross loading. This method assumes that, a construct should maintain a high correlation with its indicator than with any other constructs. As shown in table-5 the AVE value of each construct is higher than its correlation with any of the other variables.

Table 5 Fornell-Larcker discriminant validity criterion test

Variables	ID_Coll	ID_Ind	LIF_Neg ative	LIF_posit	MbEx	RF_PRO	RF_PRV	TrF
ID_Coll	0.784	0	0	0	0	0	0	0
ID_Ind	0.205	0.763	0	0	0	0	0	0
LIF_Negative	-0.424	0.045	0.812	0	0	0	0	0
LIF_positive	0.389	0.09	-0.49	0.836	0	0	0	0
MbEx	-0.173	0.305	0.293	-0.153	0.882	0	0	0

RF_PRO	0.414	0.154	-0.279	0.341	-0.068	0.824	0	0
RF_PRV	-0.216	0.158	0.459	-0.281	0.185	-0.178	0.898	0
TrF	0.715	0.254	-0.397	0.493	-0.078	0.416	-0.243	0.804

ID_COLL= collective identity; ID_IND= individual identity; LIF_NEGATIVE= leaders prototypes views of their followers; LIF_NEGATIVE= leaders' anti-prototype views of their followers; MBEX= management by exception leadership; RF_Pro= promotional orientation; RF_PRV=prevention orientation; TRF= transformational leadership.

Both Heterogeneity and Multi-collinearity are two important issues to be considered before running the estimation model, the existence of the heterogeneity problem in the n

Table 6 MGA test for heterogeneity

Groping demographic Variable	Gender based MGA		Work Experience Based MGA		Age based MGA		Education based MGA	
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Variable	Path coefficient DIFF (|G1-G2)	P-Value (G1-G2)	Path coefficient DIFF (|G1-G2)	P-Value (G1-G2)	Path coefficient DIFF (|G1-G2)	P-Value (G1-G2)	Path coefficient DIFF (|G1-G2)	P-Value (G1-G2)
ID_Coll -> TrF	0.272	0.134	0.103	0.667	0.321	0.913	0.361	0.111
RF_PRV -> TrF	0.217	0.15	0.387	0.048	0.259	0.106	0.076	0.587
RF_PRO -> MbEx	0.177	0.185	0.067	0.368	0.051	0.366	0.192	0.746
LIF_P -> MbEx	0.228	0.185	0.059	0.607	0.214	0.878	0.237	0.214
ID_Ind -> MbEx	0.187	0.244	0.183	0.172	0.1	0.283	0.263	0.087
LIF_N -> TrF	0.04	0.577	0.137	0.307	0.068	0.393	0.003	0.506
ID_Ind -> TrF	0.238	0.81	0.074	0.613	0.06	0.41	0.024	0.462
RF_PRV -> MbEx	0.413	0.901	0.104	0.692	0.024	0.537	0.155	0.283
RF_PRO -> TrF	0.305	0.925	0.111	0.324	0.079	0.367	0.205	0.254
ID_Coll -> MbEx	0.52	0.98	0.132	0.249	0.128	0.22	0.308	0.893

PLS MGA (based on Gender; column 1&2) G1= Meal and G2 Female; PLS MGA (based on work experience; column 3&4) G1=1-20 years; G2= over 20 years; MGA (Based on Age; columns 5&6) G1=lower than 40; G2=higher than 40; MGA (based on level of education, columns 7&8) G1=level 5 or lower; G2=level 7 or higher.

ID_COLL= collective identity; ID_IND= individual identity; LIF_P= leaders prototypes views of their followers; LIF_N= leaders' anti-prototype views of their followers; MbEx= management by exception leadership; RF_Pro= promotional orientation; RF_PRV=prevention orientation; TRF= transformational leadership; Tor= task oriented; CNr= Contingent reward

observations could threaten the validity of the regression results. Heterogeneity refers to the fact that two or more subgroups exist and pursue different patterns or relationships with the constructs, but the ultimate results do not consider that variation. Therefore, it's substantially important to check for the existence of possible influences of any external factors that might affect the modelled relationships. As such, based on the previous research on the phenomenon under investigation, this study anticipates for several

demographic factors that might lead to a variation on the ultimate results; namely, gender, work experience, level of education, and age. PLS Multi-Group analysis has been conducted for this reason, which provided the results presented in table-6. The figures does not support the existence of any variation within the overall sample that returns to external socio-demographic aspects. For example, from column-2 it is apparent that the correlation between collective identity (ID_Coll) and transformational leadership (TrF) does not significantly differ between males and females. Thus, we can infer that there is no observed heterogeneity problem in the sample data.

Multicollinearity is another important issue to be considered for consistent regression analysis. Although the high correlation between a reflective construct indicators does not affect the estimation, the existence of a high correlation between the latent variables influences the accuracy of the estimation results. Table-7 presents a correlation matrix for the inner model (latent variables), the figures in table-7 don't show any high correlation between the latent variables (almost below 0.5). The existence of a high correlation between collective identity and transformational leadership won't affect the estimation results; this returns to the fact that multicollinearity causes a problem only when it presents between exogenous variables, which also does not represent any problem in terms of the discriminant validity as discussed in the previous section.

Table 7 Latent variable corrélations matrix

Variables	ID_Coll	ID_Ind	LIF_N eg	LIF_pos	RF_PR O	RF_PRV	TrF	MbEx	Tor	CNr
ID_Coll	1.00	0	0	0	0	0	0			
ID_Ind	0.202	1.00	0	0	0	0	0			
LIF_Negative	-0.421	0.049	1.00	0	0	0	0			
LIF_Positive	0.388	0.087	-0.49	1.00	0	0	0			
MbEx	-0.172	0.306	0.293	-0.15	0	0	0			
RF_PRO	0.415	0.146	-0.277	0.34	1.00	0	0			
RF_PRV	-0.217	0.164	0.463	-0.28	-0.180	1.00	0			
TrF	0.733	0.215	-0.388	0.49	0.434	-0.234	1.00			
MbEx	-0.172	0.306	0.293	-0.15	-0.07	0.187	-0.093	1.00		
Tor	-0.172	0.306	0.293	-0.15	-0.07	0.187	-0.093	0.21	1.0	
CNr	-0.172	0.306	0.293	-0.15	-0.07	0.187	-0.093	0.23	0.45	1.0
ID_COLL= collective identity; ID_IND= individual identity; LIF_NEGATIVE= leaders prototypes views of their followers;										

LIF_NEGATIVE= leaders' anti-prototype views of their followers; MBEX= management by exception leadership; RF_Pro= promotional orientation; RF_PRV=prevention orientation; TRF= transformational leadership; Tor= task oriented; CNr= Contingent reward

Further analysis is conducted via Variance Inflation Factor (VIF), VIF provide more robust analysis for the existence of multicollinearity between the model predictors. Importantly, the existence of multicollinearity between a model's exogenous variables magnifies the standard estimation error. Thus, VIF assesses the degree to which the standard error has been increased due

Table 8 *Variance inflation factor VIF*

Variables	CNr	MbEx	Tor	TrF
ID_Coll	1.3	1.58	1.3	1.67
ID_Ind	1.1	1.18	1.1	1.12
LIF_N_				1.74
LIF_P		1.33		
RF_PRO	1.24	1.33	1.24	1.35
RF_PRV	1.11	1.56	1.11	1.74

ID_COLL= collective identity; ID_IND= individual identity; LIF (p) positive= leaders prototypes views of their followers; LIF_ (N) egative= leaders' anti-prototype views of their followers; RF_Pro= promotional orientation; RF_PRV=prevention orientation; TRF= transformational leadership; Tor= task oriented; CNr= Contingent reward; MBEX= management by exception leadership.

to the existence of a multicollinearity problem in the data set. As a rule of sumb, a VIF value of (5) and higher indicate a multicollinearity problem. This value means that 80% of the variance in a latent variable returns to the other constructs on the model. Table-8 shows the results of VIF analysis; the figures indicate that all the constructs' VIF values are reasonably below the critical value of 5. As such, we can conclude that the multicollinearity problem does not exist in the data set.

The following diagram presents the assessment model of the latent variables. The figure showcases the assessment model indicators presented in table 4 in more simplified way.
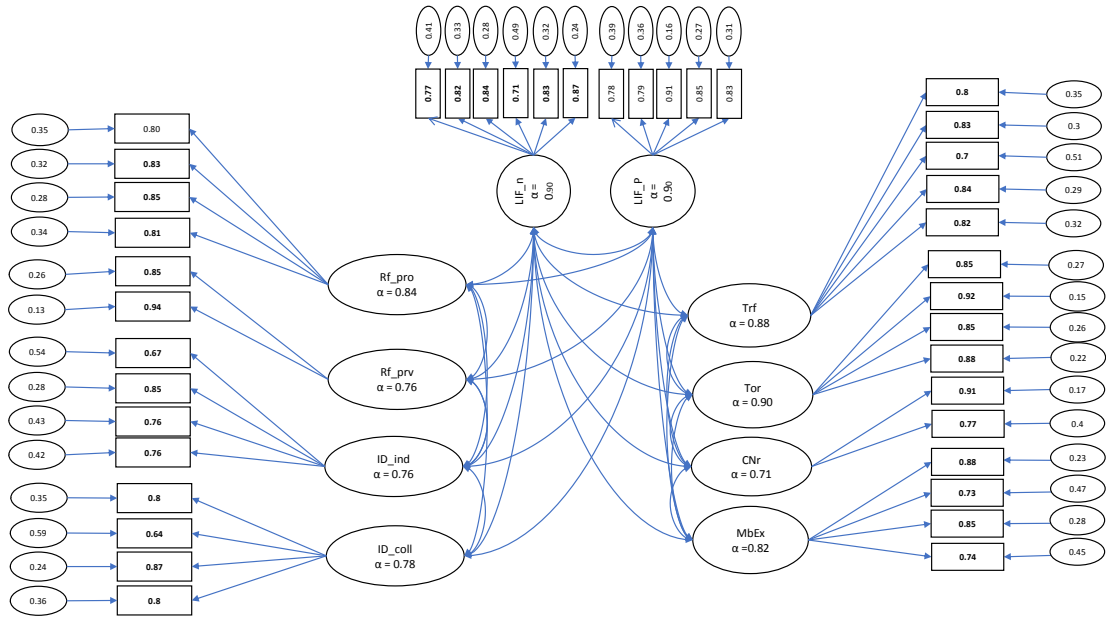
Figure 9 the assessment model diagram of the latent variables: leaders' individual traits, implicit perceptions and leadership behaviours

2.2 Estimation Model

An important step after assessing the measurement model is to conduct the estimation model. The following sections present the estimation results of the structural equation model. The results are presented in three tables: the first two tables, present different estimation models for both Identity and motivational orientation (regulatory focus) theories, the third table presents the results of the simultaneous estimation of these two theories together and how they interact to induce different leadership behaviours.

A- Leaders' Identity levels and leadership behaviours.

Table-9 presents the results of three estimation models; these three models provide a detailed analysis of the relationship between leaders' levels of identity and leadership behaviours according to different scenarios. In the first model, identity levels are regressed on the two extremes of leadership behaviours from the most transformational state (i.e., represented by transformational leadership) to the non-transformational leadership (i.e., management by exception). The second model, presents the results after

adding two more forms of leadership behaviours; namely, task oriented and contingent

rewards, these two forms would help us not only to understand how different levels of

Model Variables	M1				M2				M3			
	Coefficient	T-Stat	P-Value	f²	Coefficient	T-Stat	P-Values	f²	Coefficient	T-Stat	P Values	f²
ID_Coll -> TrF	0.57	7.46	0.00	0.59	0.560	7.23	0.00	0.55	0.52	5.57	0.00	0.4
ID_Coll -> Tor_					0.510	6.38	0.00	0.39	0.51	6.51	0.00	0.39
ID_Coll -> CNr					0.540	7.98	0.00	0.41	0.54	8.14	0.00	0.41
ID_Coll -> MbEx	-0.20	2.00	0.05	0.04	-0.21	1.96	0.05	0.04	-0.15	1.2	0.23	0.02
ID_Ind -> TrF	0.14	1.75	0.08	0.05	0.140	1.85	0.06	0.04	0.18	1.79	0.07	0.06
ID_Ind -> Tor_					0.230	3.27	0.00	0.08	0.23	2.78	0.01	0.08
ID_Ind -> CNr					0.070	0.66	0.51	0.01	0.07	0.65	0.52	0.01
ID_Ind -> MbEx	0.35	3.30	0.00	0.14	0.350	3.27	0.00	0.13	0.32	3.05	0.000	0.11
LIF_p M ID_Ind->MbEx									0.16	1.36	0.18	0.03
LIF_p M ID_Coll->MbEx									0.02	0.15	0.88	0
LIF_n M ID_Coll-> TrF			The moderaion of LIF's						0.08	0.62	0.53	0.01
LIF_N M ID_Ind-> TrF									0.08	0.81	0.42	0.01
LIF_N -> TrF									-0.06	0.62	0.54	0
LIF_P -> MbEx									-0.08	0.51	0.61	0.01
Social Desirability -> MbEx	0.07	0.63	0.53	0.01	0.080	0.64	0.52	0.01	0.08	0.69	0.49	0.01
Social Desirability -> TrF	-0.3	2.93	0.00	0.12	-0.26	2.93	0.00	0.12	-0.26	2.85	0	0.11

Table 9 Estimating the relationships between Leaders' Identity Levels and Leadership behaviours

ID_Coll= Collective Identity; ID_Ind= Individual Identity; LIF_P (N) = Leaders prototype/ ant prototype assumptions; TrF= Transformational Leadership; Tor= Task Oriented Leadership; CNr= Contingent Reward; MbEx= Management by Exception leadership; LIF_P M ID_Ind->MbEx = the moderation of LIF_P on the relationship between ID_Ind and MbEx (i.e., the same role apply for other similarly modelled relations).

leader's identity relate with a wider forms of leadership behaviours but also how the

salient self or identity could explain the hierarchy in a leader's behavioural focuses. In

the third model we anticipate for the contextual influences, particularly we focus on

presenting different leaders' prototypical views of his/her followers and how it

influences the relationship between the levels-of-self and leadership behaviours.

The figures from model-1 disclose that, whereas leader's collective-self strongly and positively correlate with transformational leadership behaviours (Trf), it maintains a negative and weak relationship with management by exception leadership behaviours (Coeff; 0.57, - 0.21 respectively). Individual identity, on the other hand, shows a high and positive correlation with a management-by-exception form of leadership behaviours, and a weak relationship with transformational leadership behaviours (Coeff; 0.35, 0.14 respectively). In terms of the significance of these relationships, we can notice that all of these relations are significant with p-value<=0.5%, yet individual identity has an insignificant effect on transformational leadership behaviours (p-value>0.5%). Importantly, f^2 figures indicate the importance of each construct in the model prediction capacity (R^2), that is, to what extent the R^2 of the model is to be influenced by the exclusion of each variable[6]. From the figures, we can notice that the effect of collective identity on transformational leadership is the strongest in the model by f^2 =0.59, followed by individual identity effect by 0.14. Importantly, it's apparent that albeit the significant effect of collective identity on management by exception behaviours this relation has a small effect on the ultimate predictive ability of the model by 0.04.

In model-2 we add two more forms of leadership behaviours, task oriented (Tor) and contingent reward (CNr), this to show how leaders gradually move from embracing a more inspirational and collectivistic form of leadership behaviour (Trf) to a more power-relying[7] form of leadership behaviours (contingent reward, and management by exception (MbEx)). Table-9 figures unveil that, leader's collective identity maintain a strong and significant relationship with the four forms of leadership behaviours (TrF,

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[6] The role of thumb here is that a ratio of 0.02, 0.15, and 0.35 refer to small, medium, and large effect respectively.
[7] Power-relying, authoritarian, and directive leadership terms are used exchange-ably in this text to refer for the same set of behaviours (contingent reward, management by exception, and task oriented)

Tor, CNr, and MbEx), and that these relations gradually move from a strong and positive relation with transformational leadership (Coeff 0.56, P-value 0.00) to a negative relationship with management-by-exception leadership (Coeff, -0.210). In terms of individual identity, the figures show a reversed hierarchy, that is, whereas it maintains a strong and positive relationship with management by exception behaviours (Coeff: 0.35), this relation gradually weakens until it turns to an insignificant relationship with transformational leadership behaviour (Coeff 0.14). This variation in the relationship between a leader's levels of identity and different leadership behaviours is also confirmed by f^2 values. Collective identity f^2 ranges from a strong effect for TrF (f^2=0.55) to a small effect for (MbEx 0.04). Conversely, for Individual identity f^2 ranges from (0.13 to 0.04).

In model-3, we consider the interaction between leaders' prototypical views of their followers, their identity levels, and leadership behaviours. Importantly, the estimation results don't provide any statistical support for the moderation of leaders' implicit assumptions of their followers. Apparently, neither leaders' negative assumptions (anti-prototype), nor positive assumptions (prototypes) have any significant moderation effects on the modelled relationships between identity levels and leadership behaviours. The results in table-9 also reveal the importance of controlling social desirability aspects, particularly when modelling the relationship with transformational leadership behaviour.

B- Leaders' motivational orientation and leadership behaviours

Table-10 presents the estimation results of the relationships between the leaders' motivational system (chronic regulatory focus) and their leadership behaviours. For a more detailed analysis of these relations, the study estimates three different models. The first model, depicts the relationship between both leader's promotion-focus (RF_Pro) and Prevention-focus (RF_Pro) and two leadership behaviours on the extreme continuum (TrF & MbEx), followed by model-2 estimation in which more leadership behaviours are included in the analysis (i.e., task oriented and contingent reward) in order to identify the hierarchy of the relationships between motivational orientation and leadership behaviours. Model-3 estimation anticipates for the contextual influences (i.e., leaders' variations in their prototypical views of their subordinates). Importantly model-1 figures show that leader's promotional orientation maintains the highest relationship with transformational leadership behaviours (Coeff, 0.32; P-value 0.00; f^2 0.14), this relationship turns to a negative insignificant relation with MbEx leadership behaviours (Coeff -0.03; p-value 0.8; f^2 0.14). Leader's prevention orientation, on the other hand, possesses a weak and insignificant relationship with both transformational and management-by-exception leadership behaviours (Coeff 0.08, 0.12; p-value 0.5, 0.32 respectively). From f^2 values it becomes apparent that the most influential factor in the model predictive ability is the social desirability by 0.22 followed by promotion orientation relationship with TrF (f^2 0.14), which unveiled an important fact that modelling the relationships between leaders' motivational systems and leadership behaviours necessitate considering more contextual and wider range of leadership behaviours.

Table 10 leaders' motivational orientation and leadership behaviours.

Statistics Variable	M1				M2				M3			
	Coeff icient	T Stat	P Valu es	F^2	Coeff icient	T-Stat	P-Valu es	F^2	Coeffi cient	T Stat	P Value s	F^2
RF_PRO -> TrF	0.32	2.82	0	0.14	0.31	2.73	0.01	0.14	0.28	2.47	0.01	0.12
RF_Pro->Tor					0.37	3.26	0	0.16	0.37	3.37	0	0.16
RF_PRO->CNr					0.51	5.41	0	0.39	0.51	5.55	0	0.39
RF_PRO -> MbEx	-0.03	0.25	0.8	0.00	-0.03	0.24	0.81	0	-0.01	0.14	0.89	0
RF_PRv->TrF	0.08	0.67	0.5	0.01	0.08	0.64	0.52	0.01	0.09	0.77	0.44	0.01
RF_PRv->Tor					-0.19	1.93	0.05	0.04	-0.19	1.92	0.05	0.04
RF_PRv->CNr					-0.22	2.36	0.02	0.07	-0.22	2.42	0.02	0.07
RF_PRV -> MbEx	0.12	0.99	0.32	0.01	0.12	0.94	0.35	0.01	0.1	0.83	0.4	0.02
Socia-> MbEx	0.11	0.87	0.39	0.01	0.11	0.89	0.38	0.01	0.11	0.86	0.39	0.01
Socia -> TrF	-0.47	3.17	0	0.22	-0.46	3.12	0	0.22	-0.42	2.84	0.00	0.18
LIF_N -> TrF									-0.18	1.62	0.1	0.03
LIF_P -> MbEx									-0.1	0.6	0.55	0.01
LIF_P M RF_Pro->MbEx	The moderation individuals' regulatory focus								0.03	0.23	0.82	0
LIF_P M RF_Prv->MbEx									-0.07	0.49	0.62	0
LIF_n M Rf_Pro->TrF									0.23	1.93	0.05	0.06
LIF_n M Rf_Prv->TrF									0.2	1.95	0.05	0.05

RF_pro=promotion orientation; Rf_Prv= prevention orientation; LIF_P (N) = Leaders prototype/ ant prototype assumptions; TrF= Transformational Leadership; Tor= Task Oriented Leadership; CNr= Contingent Reward; MbEx= Management by Exception leadership; LIF_P RF_pro->MbEx = the moderation of LIF_P on the relationship between Rf_Pro and MbyEx (i.e., the same role applies for other relations); Socia = Social desirability.

In model-2 we include both task oriented (Tor) and contingent reward (CNr) behaviours in the estimation model. From the figures of model two, leader's promotional orientation maintains a high and significant relationship with all leadership behaviours (TrF, Tor & CNr) (Coeff 0.31, 0.37, 0.51) except MbEx behaviours with which leaders' promotional orientation has an insignificant negative relationship (Coeff: -0.03, P-value: 0.81). Whereas, prevention orientation maintains insignificant relationship with the two extremes of leadership behaviours (TrF & MbEx) (Coeff: 0.08, 0.12; p-value: 0.52, 0.35 respectively), it significantly relates with both (Tor and CNr) (p-value: 0.05, 0.02), albeit a negative relationship (Coeff: -0.19, -0.22). While the

estimation of the promotional orientation relationships presented in this model matches the theoretical assumptions, the results of prevention orientation relationships are quite different from the theoretical predictions. However, this is justifiable if we consider the values of f^2 from which we can notice the insignificant effect of prevention orientation on the model's predictive capacity (f^2 range between 0.01 and 0.07).

In model three, leaders' assumptions of their followers were entered as a moderator of the relationship between the motivational orientations and leadership behaviours. Even though, the direct relations remain at the same level of significance as in the previous models. The moderation influences of Ld-IFT however, do not show any significant influence on the modelled relationships. Importantly, the significant moderation effect presented on the relationships between promotion, prevention orientation and transformational leadership behaviours (Coeff: 023, 0.20; p-values: 0.05, 0.05 respectively), neither have a significant influence on the model predictability nor a theoretical meaning. This is very apparent from the values of f^2 which show fairly low statistics of 0.06 and 0.05 respectively.

 C- The interrelationships between leaders' identity levels, motivational orientation and leadership behaviours.

Table-11 shows the estimation results for the multivariate analysis of the relationship between leader's levels of identity, motivational orientation, and leadership behaviours. The multivariate modelling of these relations assists in identifying the most influential factors of leaders' individual differences (distal predictors) in predicting leadership behaviours. As in previous sections we opt to model these relations firstly on the two extreme forms of leadership behaviours (transformational and management by exception). The figures obtained from model-1 disclose that identity levels still maintain

the same relations as shown in previous univariate estimation models (table-9), where collective identity positively and significantly correlate with TrF (Coeff: 0.53, p-value 0.00), but negatively correlated with MbEx (Coeff: -0.21; p-value 0.08). Individual identity also maintained its positive and significant relationship.

Path Analysis Results	M1				M2				M3			
	Coefficient	T-Stat	P-Values	f²	Coefficient	T-Stat	P-Values	f²	Coefficient	T Stat	P Values	f²
ID_Coll -> TrF	0.53	6.58	0.00	0.47	0.52	6.2	0.00	0.43	0.49	5.08	0.00	0.34
ID_Coll -> Tor					0.40	4.1	0.00	0.21	0.40	4.13	0.00	0.21
ID_Coll -> CNr					0.33	3.38	0.00	0.15	0.33	3.44	0.00	0.15
ID_Coll -> MbEx	-0.2	1.74	0.08	0.04	-0.21	1.75	0.08	0.03	-0.15	1.15	0.25	0.02
ID_Ind -> TrF	0.13	1.51	0.13	0.04	0.13	1.61	0.11	0.04	0.14	1.74	0.08	0.04
ID_Ind -> Tor					0.26	3.25	0.00	0.10	0.26	3.28	0.00	0.1
ID_Ind -> CNr					0.08	0.89	0.37	0.01	0.08	0.90	0.37	0.01
ID_Ind -> MbEx	0.34	3.16	0.00	0.13	0.34	3.01	0.00	0.12	0.30	2.67	0.01	0.09
RF_PRO->TrF	0.11	1.46	0.14	0.03	0.11	1.24	0.22	0.02	0.12	1.3	0.19	0.03
RF_PRO -> Tor					0.16	1.69	0.09	0.03	0.16	1.68	0.09	0.03
RF_PRO -> CNr					0.36	3.36	0.00	0.19	0.36	3.35	0.00	0.19
RF_PRO->MbEx	-0.1	0.09	0.93	0.00	-0.01	0.08	0.94	0.00	0.00	0.02	0.98	0.00
RF_PRV->TrF	0.02	0.20	0.84	0.00	0.02	0.2	0.84	0.00	0.01	0.06	0.95	0.00
RF_PRV -> Tor					-0.18	2.06	0.04	0.05	-0.18	2.12	0.03	0.05
RF_PRV -> CNr					-0.17	1.88	0.06	0.05	-0.17	1.88	0.06	0.05
RF_PRV->MbEx	0.06	0.51	0.61	0.00	0.06	0.55	0.58	0.00	0.09	0.78	0.44	0.01
Socia -> MbEx	0.04	0.29	0.77	0.00	0.04	0.32	0.75	0.00	0.04	0.31	0.76	0.00
Socia -> TrF	-0.3	2.26	0.02	0.09	-0.26	2.26	0.02	0.09	-0.26	2.16	0.03	0.09
LIF_N->TrF									-0.01	0.12	0.91	0.00
LIF_P->MbEx									-0.07	0.47	0.64	0.00
LIF_N M ->ID_Coll->TrF									0.04	0.34	0.74	0.00
LIF_N M-> Rf_Pro->TrF									0.08	0.64	0.52	0.01
LIF_P M-> ID_Ind->MbEX									0.18	1.46	0.14	0.04
LIF_P M-> RF_Prv->MbyEX									-0.04	0.31	0.76	0.00

Table 11 Leader Identity levels, motivational orientation and leadership behaviours.

ID_COLL= collective identity; ID_IND= individual identity; LIF_(p)ositive= leaders prototypes views of their followers; LIF_(N)EGATIVE= leaders' anti-prototype views of their followers; RF_Pro= promotional orientation; RF_PRV=prevention orientation; TRF= transformational leadership; Tor= task oriented; CNr= Contingent reward; MBEX= management by exception leadership; LIF_N M->ID_Coll->TrF= the moderation of leaders anti-prototypes on the relationship between ID_Coll and TrF (the same role apply for other relations such as LIF_P M-> ID_Ind->MbyEx); Socia= Social desirability.

with MbEx (Coeff: 0.34, P-value 0.00), and insignificant weak relationship with TrF (Coeff: 0.13, p-value 0.13). In terms of leaders' motivational orientations, they all shown insignificant relationships with different leadership behaviours which are apparent from the weak effect of F^2 on the model predictive capacity. These results disclose that either regulatory orientation has no effect when it's modelled with identity levels, or its effect on leadership behaviours goes through a mediator variable.

From model-2 we can notice that modelling both identity and regulatory focus theories together in one model does not make any difference in the direction of the estimated relationships as compared with those obtained from the previous estimations in tables 9 and 10 where each of these theories was modelled separately. Therefore, f^2 is considered as the most important factor to report the modelled relationships, of which, we can identify the relative importance of each predictor in the model. Accordingly, we can notice that; whereas, collective identity represents the most determinant factor in predicting transformational leadership (f^2 0.43), task-oriented leadership (f^2 0.21), and contingent reward (f^2 0.15). Promotion orientation in predicting contingent reward behaviour (f^2 0.19), and individual identity in predicting management by exception (f^2.12).

In model-3 we anticipate for the moderation influence on the estimation relationships, through examining the moderating effect of leaders' prototypes on the extreme forms of leaders' individual differences and leadership behaviours relationships. Thus, leaders' negative assumptions (anti-prototype) (LIF_N) is included as a moderator factor on the relationship between collective identity, promotion orientation, and transformational leadership behaviours. Similarly, leaders' positive assumptions about their followers (prototype) (LIF_P) moderated the relationships between individual identity levels, prevention orientation, and management-by-exception behaviours. Overall, the ultimate

results show no significant effect of the included moderators on the modelled relationships between leaders' traits and behaviours. It's also apparent that these moderators do not have any significant influence on neither the coefficient nor the significance of each of the direct relations as it remains the same as in model-2.

D- <u>Motivational orientation system and leadership behaviours: the mediation of leaders' prototypical views,</u>

The estimations in table-12 revealed unexpected results concerning the significance of regulatory focus theory in predicting individuals' behaviours. Both promotion and prevention focuses were neither significant nor hada consistent relationship with the

Table 12 the mediation of LIF_n, p on regulatory focus & leadership behaviours		Coeff	T-Statistics	P-Values
Direct	RF_PRO --> TrF	0.24	2.23	0.03
	RF_PRV --> TrF	0.12	0.97	0.33
	RF_PRO --> MbEx	0.01	0.11	0.91
	RF_PRV --> MbEx	0.05	0.38	0.7
IN-Direct	RF_PRO --> LIF_P	0.34	3.81	0
	RF_PRV --> LIF_N	0.47	6.69	0
	LIF_P --> TrF	0.28	3.05	0
	LIF_P --> MbEx	0.05	0.4	0.69
	LIF_N --> TrF	-0.01	0.08	0.94
	LIF_N --> MbEx	0.29	2.99	0
	Socia--> MbEx	0.04	0.3	0.76
	Social--> TrF	-0.4	2.88	0
Total Indirect effect	RF_PRV --> LIF_N -> MbEx		2.38	0.02
	RF_PRO --> LIF_P -> MbEx		0.37	0.71
	RF_PRV --> LIF_N -> TrF		0.07	0.94
	RF_PRO --> LIF_P -> TrF		2.07	0.04

RF_Pro= promotion focus; RF_prv= prevention focus; TrF= transformational leadership; MbEx= management by exception leadership; LIF_P= leaders' prototypes of followers; LIF_N= leaders anti-prototype view of followers; Socia= social desirability.

theoretical predictions concerning the relations between one's motivational orientation and behaviours. One of the possible explanations provided for such unusual results was the possibility of the existence of mediation on this relationship. Table 12, presents the results of estimating the relationship between regulatory focus theory and leadership behaviours with leaders' prototypical views positioned as a mediator. From the figures, it's apparent thatleader's anti-prototype completely mediates the relationship between

prevention focused individuals (RF_PRV) and management by exception (MbEx) leadership behaviours. This, appears in the insignificant direct relationship between RF_prv and MbEx (Coeff: 0.05, p-value 0.7) which turns to be highly significant via leader anti-prototype (LIF_N) (t: 2.38; p-value: 0.02).

On the other hand, leaders' prototype (LIF_P) partially mediate the relationship between promotionally oriented leaders and transformational leadership behaviours, this is apparent in the significant direct relationship between RF_pro and TrF (Coeff: 0.24, P-value: 0.03) which also remain significant via LIF_P (t 2.07; P-value 0.04). In addition to the mediation or indirect effect, table-12 figures reveal several important facts about the relationship between leaders' motivational orientations and their relationship with their team members. That is, those who are promotionally oriented tend to hold a positive view of their team members (Coeff: 0.34, p-value 0.00) which in turn induce them to embrace inspirational behaviours (TrF) (Coeff: 0.28; p-value 0.00) rather than authoritarian behaviours MbEx (Coeff: 0.05; p-value 0.69). Conversely, those who are prevention oriented tend to hold negative views of their team members (LIF_N) (Coeff: 0.47; p-value 0.00) which induce them to adopt more authoritarian forms of leadership behaviours (MbEx) (Coeff: 0.29; p-value 0.00) rather than inspirational behaviours (TrF) (Coeff: -0.01; p-value: 0.94). Last, as theoretically predicted, promotionally oriented leaders hold a lower tendency to embrace authoritarian forms of leadership behaviours (MbEx) (Coeff: 0.01; p-value: 0.91), than prevention-oriented leaders (Coeff: 0.05; p-value 0.7).

1- Evaluation Criteria of the estimation model

An important step in evaluating the estimation model's accuracy before using its results in drawing a final conclusion about the study phenomena is to calculate the models' quality criteria. Among these criteria's we depend on the calculation of R^2, adjusted R^2, and Q^2. Table-13 present detailed statistics of different quality criteria for the estimation models that previously discussed in section one. The first criteria in evaluating a specific model quality or predictive accuracy are the coefficient of determination R^2, which reflects the accuracy of the exogenous variables in explaining the variation in the model's endogenous variable/s. However, this relation is influenced by the number of variables in the estimation model regardless of their level of significance. Therefore the adjusted R^2 is also considered.

Thus, the criterion is modified based on the number of exogenous constructed relative to the sample size. From table-13, it's apparent that the models (M1, M2 & M3) possess high predictive capacity with R^2 and

Table 13 Estimation Models'' Evaluation Criteria

Model	Quality criteria	TrF	ToR	CoNr	MbEx
M1	R2	0.16			0.57
	R2 adJ	0.13			0.56
	Q	0.32			0.1
M2	R2	0.56	0.36	0.31	0.15
	R2 adJ	0.55	0.35	0.3	0.13
	Q2	0.32	0.16	0.17	0.1
M3	R2	0.57	0.36	0.31	0.19
	R2 adJ	0.55	0.35	0.3	0.14
	Q2	0.32	0.16	0.17	0.11
M4	R2	0.35			0.05
	R2 adJ	0.33			0.02
	Q2	0.19			0.02
M5	R2	0.34	0.19	0.35	0.04
	R2 adJ	0.32	0.18	0.34	0.02
	Q2	0.19	0.07	0.2	0.02
M6	R2	0.32	0.19	0.35	0.05
	R2 adJ	0.28	0.18	0.34	0.00
	Q2	0.17	0.07	0.20	0.02
M8	R2	0.58			0.16
	R2 adJ	0.56			0.11
	Q2	0.33			0.09
M9	R2	0.57	0.42	0.45	0.16
	R2 adJ	0.55	0.39	0.42	0.11
	Q2	0.32	18	0.25	0.1
M10	R2	0.58	0.42	0.45	0.19
	R2 adJ	0.54	0.39	0.42	0.12
	Q2	0.32	0.18	0.25	0.11
Indirect effect (LIF mediation role)					
		TrF	MbEx	LIF_N	LIF_P
M7	R2	0.41	0.10	0.22	0.12
	R2 adJ	0.38	0.05	0.21	0.11
	Q2	0.23	0.05	0.13	0.07

Review previous tables for the definition of each symbol in this table

R^2 adjusted values mostly above 0.2 and hits above 0.5 in some cases, which in social science research, specially that study behaviour is considered high percentage (Hair Jr et al., 2016). Models (M4, M5 & M6) show a moderate percentage of R^2 which is consistent with the weak relations shown by the estimation tables. Importantly, models (M8, M9 & M10) shows the highest percent of R^2 (adjusted) with values mostly around 0.36 which depicts a high predictive capability of these models' estimations compared with other models. Model-7 which appear at the bottom of table-13 presents the quality criteria for the mediation model, of which, it's notable that the model poses a good level of R^2 and Q^2, especially for transformational leadership.

Another important criterion beside R^2 when evaluating estimation model's predictive capability is the blind-folding procedures (Q^2). The idea of Q^2 is centralized on omitting a distance of the endogenous variables data and estimating the model by considering these omitted data as missing. Following that the estimation model is to be used in predicting these missing or (omitted) values. Thisprocesscontinues until the whole model values are omitted and predicted. The quality of the model prediction capacity, therefore, is calculated through obtaining the error term (i.e., the difference between the original and predicted data of the endogenous construct), which represent a critical element in the estimation of the value of Q^2.The value of Q^2 that differs from zero indicates that the model has a predictive relevance for a certain construct, and value of Zero or less indicate a non-predictive capacity of the model (Hair Jr et al., 2016). Similar to f^2, Q^2 values of 0.02, 0.15, and 0.35 indicate that an exogenous construct has a small, medium, or large predictive relevance for a certain endogenous construct. Table-13, we can indicate that most of the estimation models possess a good level of prediction except models (M4, M5 & M6) which present low values of Q^2.

Section two

<u>Team members' perceptions of leadership behaviours, work-related attitudes and behaviours.</u>

In this section, study two is conducted using a sample of 100 full-time participants, in order to estimate the second phase of the leadership process model. In this phase, the focus is on understanding how the perceptions of different leadership behaviours participate in the formation of team-members work-related attitudes and behaviours. Importantly, understanding the main features of the sample variables distributions, as well as, assessing its reliability and validity plays a substantial role in defining the proper analysis technique and driving a consistent conclusion about the study phenomenon. As such, the following section provides a detailed analysis of the variable's statistics and assessment model.

Statistics / Variables	Mean	Median	Mode	Std. Deviation	Skewness	Std. Error of Skewness	Kurtosis	Std. Error of Kurtosis	Minimum	Maximum
	1	2	3	4	5	6	7	8	9	10
Transformational Leadership	5.4	5.6	7.0	1.3	-1.1	0.2	1.0	0.5	1.0	7.0
Task Oriented Leadership	5.8	6.0	6.3	0.9	-0.5	0.2	-0.5	0.5	3.5	7.0
Management by Exception	4.4	4.4	2.2	1.4	0.0	0.2	-1.1	0.5	2.2	7.0
Contingent Reward	5.6	5.7	7.0	1.2	-0.9	0.2	0.4	0.5	2.0	7.0
Affective Commitment to Change	4.9	4.7	4.0	0.9	0.3	0.4	-1.1	0.7	3.5	6.5
Continuance Commitment to Change	4.7	5.0	5.0	1.5	-0.8	0.4	0.5	0.7	1.0	7.0
R_F Prevention	3.6	3.6	2.2	1.6	0.1	0.2	-0.9	0.5	1.0	6.8
R_F Promotion	5.5	5.8	7.0	1.1	-0.4	0.2	-0.7	0.5	2.8	7.0
Social Desirability	3.9	4.0	2.2	1.2	0.2	0.2	-1.0	0.5	2.0	6.6
OCB	5.3	5.4	5.8	1.0	-0.7	0.2	0.7	0.5	2.0	7.0
In role performance	5.0	5.0	5.0	0.6	0.7	0.2	1.3	0.5	3.5	6.7
CWB	2.5	1.8	1.0	1.7	1.0	0.2	-0.4	0.5	1.0	6.8

Table 14 descriptive statistics

R_F prevention= individuals prevention focus; R_F promotion= individuals promotion focus; OCB= organizational citizenship behaviours; CWB= counter work behaviours.

1- Variables descriptive statistics

Table-14 provides a full description of the study variables, out of these figures it's apparent from the minimum and maximum values (columns 9, 10) that the respondents mostly used the whole scale values which reflects a good level of respondent's attention to the survey instruction and responses accuracy. To define the appropriate central tendency measure that could be used in describing the study variables, we rely on using the skewness and kurtosis values. Columns 5-8 present the Skewness and Kurtosis of each variable. Both of them explain the data asymmetric and centralization respectively. Whereas, a zero value indicates a normal distribution, a value greater than 1 or lower than -1 indicate a high level of the skewness and kurtosis or a deviation from normality. From column 5 it appears that most of the variables are well distributed with values

almost between 1 & -1, except the transformational leadership behaviours (-1.1) which indicate a pile-up of the data to the right side, or in other words, respondents tend to score high when answering the transformational leadership behaviours. Conversely, the kurtosis values disclose that most of the variables are pointy and heavy tailed distributed. Event though, comparing the scores of the mean and median values reflects no significant differences as they almost the same, this means that any of them could be used to describe the model variables. From columns 1-3 we can notice that the mean values of leadership behaviours are fairly high with a transformational-leadership mean value of 5.4 and management-by-exception of 4.4 (the lowest). The rest of the variables score high mean value of almost 4. A notable difference in the mean value of prevention and promotion focus (3.6; 5.5 respectively) reflects the variation in the participant's motivational orientation with a higher tendency of the respondents to be promotionally oriented — another notable low median value of CWB 1.8 which reflects a lower tendency of the sample participants to engage in counterproductive behaviour. Accordingly, the following section provides a description of the structural equation modelling of the study relationships. Before conducting the analysis, it's important to make sure that the stop criterion of the algorithm achieved before the maximum number of the predefined iterations. Table-49 indicates that the algorithm achieved an acceptable solution after iteration 10.

Table 15 Assessment model statistics

Criterion Variable		Results Summary of Reflective Measurement Model					
	Indicator	Loading	Indicator reliability	Cronbach's Alpha	rho_A	Composite Reliability	AVE
Transformational Leadership	1	0.78	0.62	0.94	0.95	0.95	0.74
	2	0.90	0.81				
	3	0.80	0.64				
	4	0.90	0.81				
	5	0.91	0.84				
	6	0.86	0.74				
	7	0.84	0.71				
Task Oriented Leadership	1	0.75	0.56	0.70	0.71	0.81	0.52
	2	0.76	0.58				
	3	0.61	0.37				
	4	0.76	0.58				
Contingent Reward	1	0.84	0.71	0.78	0.79	0.87	0.70
	2	0.79	0.62				
	3	0.87	0.76				
Management by Exception	1	0.91	0.83	0.91	0.92	0.93	0.79
	2	0.84	0.71				
	3	0.89	0.79				
	4	0.91	0.83				
Affective C2C	1	0.86	0.74	0.87	0.92	0.90	0.61
	2	0.90	0.81				
	3	0.61	0.38				
	4	0.89	0.80				
	5	0.60	0.36				
	6	0.75	0.57				
Continuance C2C	1	0.80	0.65	0.87	0.91	0.90	0.64
	2	0.83	0.69				
	3	0.78	0.62				
	4	0.85	0.73				
	5	0.73	0.53				
Counter Work behaviours (CWB)	1	0.91	0.83	0.95	0.95	0.96	0.83
	2	0.92	0.85				
	3	0.91	0.84				
	4	0.91	0.82				
	5	0.90	0.81				
OCB	1	0.75	0.57	0.73	0.80	0.84	0.64
	2	0.77	0.60				
	3	0.86	0.75				
Performance	1	0.81	0.66	0.84	0.87	0.88	0.61
	2	0.83	0.68				
	3	0.73	0.54				
	4	0.86	0.74				
	5	0.66	0.43				
RF_Prv	1	0.93	0.86	0.78	0.95	0.86	0.69
	2	0.95	0.89				
	3	0.56	0.32				
RF_Pro	1	0.82	0.67	0.77	0.78	0.86	0.68
	2	0.86	0.74				
	3	0.80	0.64				

C2C=commitment to change; Rf_prv= regulatory focus prevention; Rf_pro=regulatory focus promotion.

2. Structural Equation Modelling

In order to ensure that the constructs at hand are suitable for accurate statistical estimation of the proposed relationships, an assessment model estimation is conducted to ensure the reliability and validity of the model's latent variables, this in addition to defining any additional problems in the distribution of the sample data, such as heterogeneity.

2.1 Evaluation of Measurement (assessment) Model.

The first step in assessing the measurement model is to examine the reliability and validity of the model's constructs; this mainly focuses on the relationship between each construct and its indicators (i.e., measurement items). The systematic evaluation of a reflective measurement model requires the assessment of several indicators including Internal consistency (composite reliability), indicator reliability, convergent (average variance extracted), and discriminant validity.

Internal consistency, the reliability of the constructs is assessed using Cronbach's alpha which evaluates the construct reliability based on the inter-correlations of its observed indicators. The figures in Table-15 indicate a high level of the constructs internal consistency measured by both Cronbach's-α and the composite reliability, most of the variables composite reliability exceed 0.85, whereas Cronbach's α range between 0.702 to 0.951.

Convergent validity is assessed using both the outer loading and AVE. From table-15 we can notice that most of the outer loading of the model's variables exceeds the critical threshold value of 0.7. Although some items are still below that critical value of 0.7 such as performance item-5 (0.663) and regulatory focus prevention (0.567), and task oriented (0.615) the deletion of these items negatively affected the AVE and composite

reliability. The overall results present a good level of the items loading which ranges from 0.615 to 0.94. The figures also present a good level of indicators reliability which indicates how much of the variation in an item is explained by its construct. AVE is calculated by getting the mean value of the square loading of construct indicators. From table-14 we can notice that the model constructs recordhigh value of AVE ranging from 0.527 to 0.614, which means that all of them explain a high percent of the variation on its indicators (this is known as construct communality).

Two methods could be used, To examine the *discriminant validity*, one through examining the cross loadings of the indicators (i.e., the loading of an item on its associated construct should be greater than all of its loadings on the other constructs "cross loading").Table-50 discloses a good indicator of the variables cross-loading, that is none of the items' loadings on the other constructs exceeded its loading on its own construct.

Fornell-Larcker criterion is a more conservative way of assessing discriminant validity. This method assumes that a construct's AVE square root should be higher than its' squared correlation with any other construct. The rationale behind that role is that a construct should maintain a high correlation with its indicators than with any other constructs. As shown in table-16 the AVE value of each construct is higher than its correlation with any of the other variables.

Table 16 Fornel Larcker Criterion test for discriminant validity

	Af_C2C	C-C2C	CWB	CNr	TrF	MbyEx	OCB	Perf_	RF_Pro_	RF_prv
Af_C2C	0.783									
C-C2C	-0.521	0.805								
CWB	-0.24	0.265	0.914							
CNr	0.408	-0.176	-0.202	0.839						
TrF	0.514	-0.228	-0.202	0.64	0.862					
MbyEx	-0.082	0.172	0.405	-0.076	-0.199	0.892				
OCB	0.311	0.045	-0.164	0.388	0.463	0.043	0.801			
Perf_	0.378	-0.124	-0.641	0.453	0.409	-0.338	0.458	0.784		

RF_Pro	0.47	-0.065	-0.329	0.533	0.472	-0.219	0.535	0.665	0.828	
RF_prv	-0.096	0.28	0.466	-0.003	-0.063	0.684	0.14	-0.338	-0.244	0.834
Socia	-0.213	0.293	0.755	-0.227	-0.262	0.608	-0.157	-0.649	-0.367	0.696
ToR	0.328	-0.05	-0.405	0.619	0.49	-0.083	0.394	0.647	0.685	-0.213

AF_C2C= affective commitment to change; C-C2C= continuance commitment to change; CWB= Counter Work Behaviours; MbyEx=management by exception; OCB= organizational citizenship behaviours; perf=in-role performance; Rf_prv= prevention regulatory focus; Rf_pro= promotion regulatory focus; CNr= contingent reward; TrF= transformational leadership; ToR=task-oriented leadership; Socia= social desirability.

The previous discussion indicates that the issues of heterogeneity and multicollinearity could disrupt the analysis results and lead to an inconsistent conclusion about the study phenomenon. To check for

Table 17 Variance Inflation Factor VIF

	CWB	OCB	Perf_	Af_C2C	C-C2C
TrF	0.045	0.367	0.044	1.792	1.543
CNr	0.04	0.044	0.039	1.723	
MbEx	0.388	0.153	-0.32	1.053	1.052
ToR	-0.42	0.196	0.559		1.528

Review table 4 for a full definition of the table symbols

multicollinearity problem vector inflation factor (VIF) analysis is conducted as shown in table-17, the results do not indicate any multicollinearity problem between the models' latent variables (i.e., all VIF values are below the critical value of (5).

Table 18 MGA test of heterogeneity

Statistics	MGA-PLS-Age based		MGA-PLS-Gender based		MGA-PLS-Years of Ex based	
	Path Coefficients-diff (| Age G1 - Age G2 |)	p-Value (Age G1 vs Age G2)	Path Coefficients-diff (| Male G1 - Female G2 |)	p-Value(Male G1 vs Female G2)	Path Coefficients-diff (|Y-exp<10 vs Y-exp>10|)	p-Value(Y>10 G1 vs Y<10 G2)
Variables						
	1	**2**	**3**	**4**	**5**	**6**
CNr -> Af_C2C	0.166	0.342	0.448	0.051	0.047	0.583
CNr -> Turn	0.198	0.774	0.295	0.151	0.012	0.549
TrF -> Af_C2C	0.066	0.524	0.192	0.19	0.107	0.737
TrF -> C-C2C	0.357	0.149	0.225	0.203	0.567	0.972
TrF -> Weng	0.269	0.746	0.13	0.25	0.163	0.704
MbyEx -> Af_C2C	0.474	0.044	0.162	0.37	0.346	0.924
MbyEx -> C-C2C	0.034	0.456	0.114	0.596	0.153	0.74
MbyEx -> Turn	0.138	0.712	0.083	0.656	0.105	0.353
ToR -> C-C2C	0.673	0.1	0.312	0.89	0.406	0.794
ToR -> Weng	0.306	0.249	0.443	0.957	0.391	0.796

MGA (Based on Age; columns 1&2) G1=lower than 30; G2=higher than 30; PLS MGA (based on Gender; column 3&4) G1= Meal and G2 Female; PLS MGA (based on work experience; column 5&6) G1=1-9 years; G2= over 10 years.

	MGA-PLS-Gender based		MGA-PLs-based	Years-of-Exp	MGA-Age based		MGA-O-Change based	
Statistics	Path Coefficients-diff (| Female - Male |)	p-Value (Female vs Male)	Path Coefficients-diff (| Higher Than 10 - Lower than 10 |)	p-Value (Higher Than 10 vs Lower than 10)	Path Coefficients-diff (| age <30 - Age >30 |)	p-Value (age <30 vs Age >30)	Path Coefficients-diff (| O-Change 2 - O-change |)	p-Value (O-Change 2 vs O-change)
Variables								
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
CNr -> CWB	0.003	0.499	0.67	0.987	0.452	0.091	0.081	0.374
CNr -> OCB	0.157	0.287	0.046	0.419	0.162	0.737	0.057	0.425
CNr -> Perf_	0.056	0.389	0.108	0.329	0.144	0.255	0.157	0.226
TrF -> CWB	0.249	0.85	0.214	0.77	0.016	0.487	0.382	0.923
TrF -> OCB	0.022	0.484	0.545	0.974	0.111	0.396	0.512	0.97
TrF -> Perf_	0.245	0.126	0.016	0.525	0.121	0.724	0.01	0.518
MbyEx -> CWB	0.06	0.691	0.662	1	0.382	0.008	0.135	0.813
MbyEx -> OCB	0.354	0.971	0.235	0.803	0.136	0.266	0.08	0.649
MbyEx -> Perf_	0.07	0.33	0.147	0.258	0.011	0.527	0.087	0.278
ToR -> CWB	0.099	0.664	0.694	0.01	0.445	0.948	0.308	0.087
ToR -> OCB	0.107	0.34	0.29	0.174	0.254	0.213	0.11	0.31
ToR -> Perf_	0.015	0.535	0.347	0.899	0.159	0.215	0.299	0.955

Table 19 MGA test of heterogeneity

PLS MGA (based on Gender; column 1&2) G1= Meal and G2 Female; PLS MGA (based on work experience; column 3&4) G1=1-9 years; G2= over 10 years; MGA (Based on Age; columns 5&6) G1=lower than 30; G2=higher than 30; MGA (based on the experience of organizational change, columns 7&8) G1=experiencing organizational change; G2=no organizational change.

Heterogeneity is another important issue to consider in the analysis as it determines the possibility of the existence of external factors that might influence the estimated relationships. The existence of this problem leads to an inconsistent conclusion about the research phenomenon. Previous research in the leadership domain have indicated several factors that might affect the modelled relationships; these mostly are the demographic characteristics of the observation sample. Tables 18 and 19 provides a Multi-Group analysis MG-PLS in order to test the possibility that the research model relationships significantly differ between the sample subgroups (i.e., the sample data subdivided based on its demographic characteristics). Whereas table-17 showcases the MG-PLS of the correlation between the perception of different leadership behaviours and work-related attitudes, table-18 demonstrate the MG-PLS for the relationships between leadership behaviours and work-related behaviours. Although some relations

P-values refer to a significant variation; they remain minor relations in the tables. Over all, the results in tables 15-18 do not show any existence of both multi-collinearity and heterogeneity problems in the sample data.

The following diagram presents the assessment model of the latent variables. The figure showcases the assessment model indicators presented in table 14 in more simplified way.
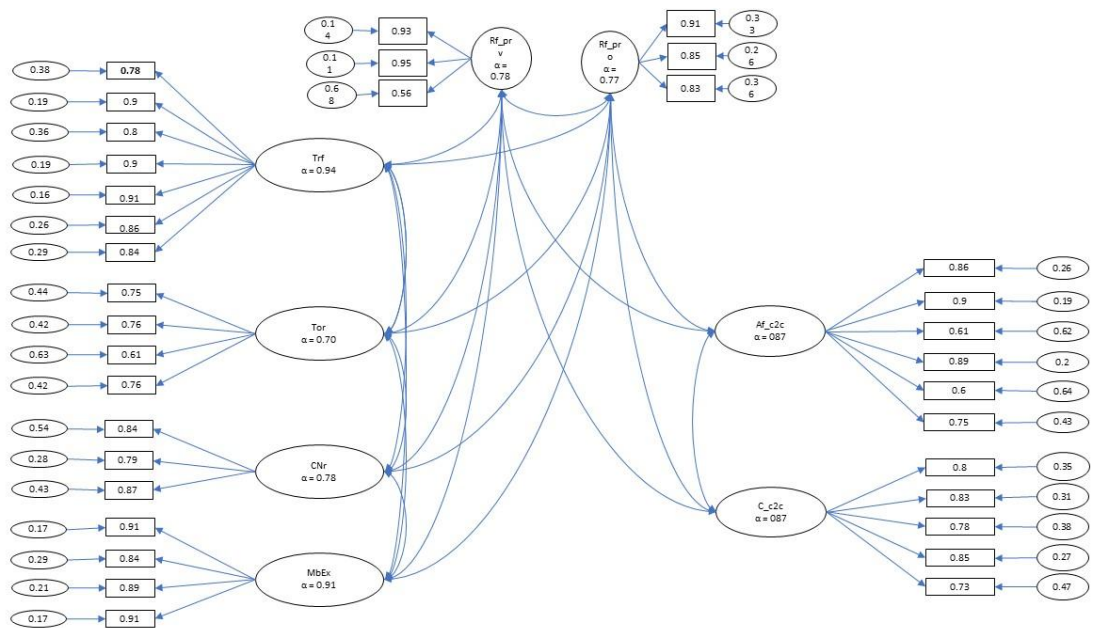
Figure 10 the assessment model of the latent variables: followers' perceptions of leadership behaviours, motivational orientations and attitude
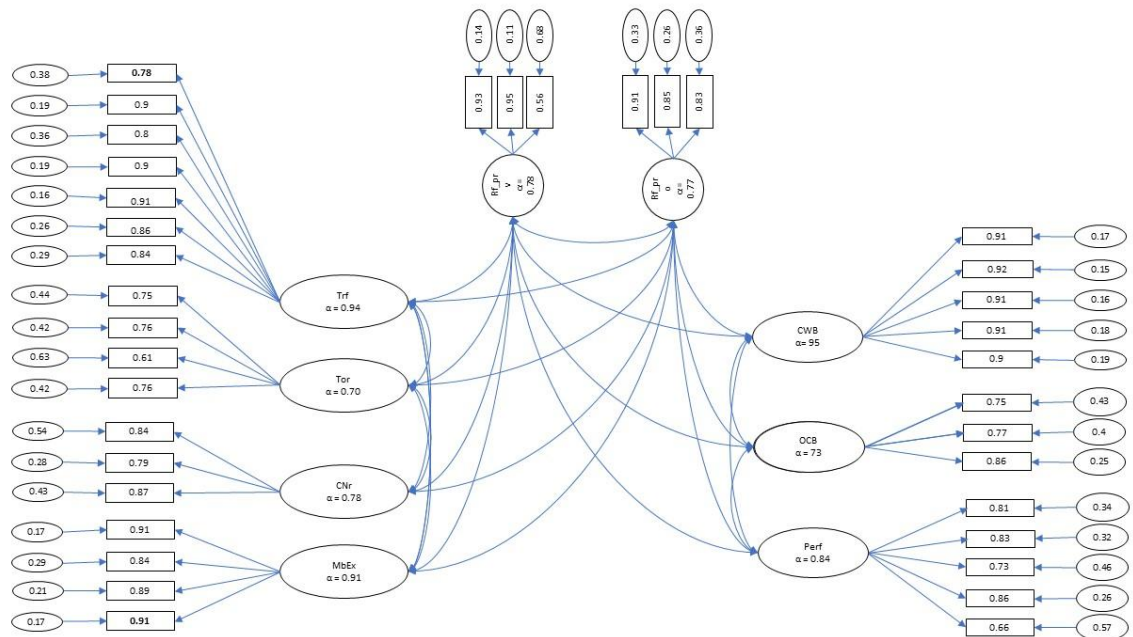
Figure 11the assessment model of the latent variables: followers' perceptions of leadership behaviours, motivational orientations and work-related behaviours

2.2 Estimation Model

This section provides a detailed analysis of the causality effect of the perception of different leadership behaviours including -transformational, task oriented, contingent reward and management_by_exception on the work-related behaviours, performance and attitudes. Importantly, this study focuses on examining how individuals' differences in their motivational orientation systems influence the relationship between their perceptions of leadership behaviours and their work-related outcomes. In order to provide a simplified view of these relationships, this part is organized at two sections each of them presents the estimation results of a specific set of the modelled relationships.

2.2.1 The perception of leadership behaviours, individuals' motivational systems and work-related behaviours.

Table-20 presents the results of estimating the influence of the variation in individuals' motivational orientations on their receptivity and reactions to different forms of leadership behaviours. Model-1 in this table presents the direct relations between the perceptions of leadership and work-related behaviours and performance, while model-2 estimates the moderation effect of individuals' motivational systems on the relationships between the perception of leadership and the work-related behaviours.

TABLE 20 THE RELATIONSHIPS BETWEEN THE PERCEPTION OF LEADERSHIP BEHAVIOURS, INDIVIDUALS' MOTIVATIONS AND WORK-RELATED BEHAVIOURS AND PERFORMANCE.

STATISTICS VARIABLES	M1				M2			
	Coeff	T Statistics (|O/STDEV|)	P Values	F2	Coeff	T Statistics (|O/STDEV|)	P Values	F2
TRF -> CWB	0.046	0.469	0.639	0.003	0.04	0.35	0.72	0
TRF -> OCB	0.367	3.023	0.003	0.104	0.32	2.49	0.01	0.09
TRF -> PERF_	0.039	0.507	0.612	0.003	-0.02	0.26	0.79	0
TRF->RF_PRO->OCB					0.01	0.05	0.96	0
TOR -> CWB	-0.187	1.888	0.059	0.046	-0.21	1.91	0.06	0.05
TOR -> OCB	0.159	1.193	0.233	0.019	-0.1	0.77	0.44	0.01
TOR -> PERF_	0.381	4.672	0	0.229	0.4	4.36	0	0.24
TOR->RF-PRV->CWB					0.08	0.55	0.58	0.01
CNR -> CWB	0.035	0.349	0.727	0.001	0.07	0.59	0.55	0
CNR -> OCB	0.046	0.345	0.73	0.001	-0.01	0.09	0.93	0
CNR -> PERF_	0.035	0.389	0.697	0.002	0	0	1	0
CNR->RF_PRV->PERF					0.02	0.25	0.8	0
CNR->RF-PRV->CWB					0.05	0.55	0.58	0
MBYEX -> CWB	-0.042	0.525	0.6	0.003	-0.02	0.15	0.88	0
MBYEX -> OCB	0.216	1.9	0.057	0.038	0.28	2.53	0.01	0.07
MBYEX -> PERF_	-0.012	0.142	0.887	0	-0.12	1.09	0.28	0.02
MBEX->RF_PRV->CWB					-0.01	0.1	0.92	0
MBYEX->RF_PRV->PERF					0.1	1.05	0.29	0.02
SOCIA -> CWB	0.733	8.771	0	0.697	0.8	7.53	0	0.67
SOCIA -> OCB	-0.106	0.921	0.357	0.008	-0.09	0.96	0.34	0.01
SOCIA -> PERF_	-0.549	6.325	0	0.473	-0.65	5.8	0	0.56

TRF=TRANSFORMATIONAL LEADERSHIP; TOR= TASK-ORIENTED LEADERSHIP; CNR= CONTINGENT REWARD; MBYEX=MANAGEMENT BY EXCEPTION; CWB= COUNTER WORK BEHAVIOURS; OCB= ORGANIZATIONAL CITIZENSHIP BEHAVIOURS; PERF= IN-ROLE PERFORMANCE; SOCIAL=SOCIAL DESIRABILITY; TRF->RF_PRO->OCB= THE MODERATION OF RF_PRO ON THE RELATIONSHIP BETWEEN TRF AND OCB. (THE SAME APPLY FOR ALIKE RELATIONAL SYMBOLS).

Model-1 presents the estimation results of the relationships between different leadership behaviours, work-related outcomes and performance. From the table statistics, we can notice that the perception of transformational leadership behaviours positively and significantly affects individuals' engagement in organizational citizenship behaviours (OCB) (Coeff: 0.367, p-value: 0.00). Although, the positive relationship between transformational leadership and both counter work behaviours and in-role performance (Coeff: 0.04, 0.04 respectively), these relations do not show any significant effects (p-values: 0.639; 0.612 respectively).

Conversely, task-oriented leadership behaviours negatively and significantly affect employee's involvement in counter work behaviours (Coeff: -0.187: p-value 0.046), but positively and significantly affects in-role performance (Coeff: 0.381, p-value: 0.00). As theoretically expected the relationship between task-oriented leadership behaviours and organizational citizenship behaviours does not show any significance (Coeff: 0.159; p-value: 0.233). Analogous with the theoretical predictions, management-by-exception behaviours negatively correlate with both CWB and in role performance (Coeff: -0.042, -0.012), albeit not significant. Surprisingly, the figures show a positive and significant relation between management-by-exception leadership behaviours and organizational citizenship behaviours (Coeff: 0.216; p-value: 0.05). Even though, the f^2 figures provide a better understanding of the estimated relations, particularly the relations that do not match with the theoretical predictions. From the values of $f^{2,}$ we can notice that both transformational and task-oriented leadership behaviours play the most influential role in predicting both OCB and in-role performance ($F^2= 0.104$, 0.229 respectively). The rest of the estimated relations disclose a small effect of the modelled exogenous variables in predicting work-related behaviours and performance (i.e., F^2 ranges between $0.001\sim 0.046$). Social desirability

relations disclose an important fact regarding the significance of controlling Individual's social desirability in self-completed surveys.

Model-2 presents these relationships after considering the moderation effects of individuals' motivational systems. Apparently, the relationships between the model's variables are almost the same. However, some slight changes could be noticed in the modelled relationships. This includes the relationship between transformational leadership and performance which turned to a negative sign.

Table 21 the perception of leadership behaviours, team-members attitudes and work-related outcomes.

Statistics / Variables	M-3				M-4			
	Coefficient	T Statistics (|O/STDEV|)	P Values	F^2	Coefficient	T Statistics (|O/STDEV I)	P Values	F^{22}
TrF -> Af_C2C	0.553	3.679	0	0.539	0.623	3.746	0	0.834
TrF -> C-C2C	-0.569	3.739	0	0.30	-0.603	4.085	0	0.452
TrF->Rf_prv->Af C2C	-0.059	0.732	0.464	0.058				
TrF->Rf_pro->Af C2C	0.031	0.499	0.618	0.015				
MbyEx -> Af_C2C	0.098	0.739	0.46	0.017	0.058	0.464	0.643	0.027
MbyEx -> C-C2C	-0.065	0.362	0.718	0.004	-0.027	0.163	0.871	0.019
MbyEx->Rf_prv->C-C2C	0.026	0.325	0.746	0.006				
RF_Pro_ -> Af_C2C	0.36	2.738	0.006	0.239	0.271	1.654	0.098	0.062
RF_Pro_ -> C-C2C	0.243	1.303	0.193	0.057	0.278	1.536	0.125	0.164
RF_prv -> Af_C2C	-0.336	2.02	0.043	0.223	-0.383	2.937	0.003	0.14
RF_prv -> C-C2C	0.566	3.716	0	0.31	0.584	4.266	0	0.16
RF_Pro_ -> TrF					0.616	5.811	0	0.612
RF_prv -> MbyEx					0.615	7.065	0	0.611
Social -> Af_C2C	-0.248	1.934	0.053	0.108	-0.268	2.135	0.033	0.126
Social -> C-C2C	0.397	2.191	0.029	0.152	0.382	2.189	0.029	0.139
RF_Pro_ -> TrF -> Af_C2C	specific indirect effect (the mediation of TrF and MbyEx on the relationships between regulatory focus and commitment to change)				0.394	3.587	0	0.394
RF_prv -> MbyEx -> Af_C2C					0.072	0.847	0.397	0.072
RF_Pro_ -> TrF -> C-C2C					-0.394	3.704	0	-0.394
RF_prv -> MbyEx -> C-C2C					-0.081	0.73	0.465	-0.081
MbyEx M Rf_prv-> C-C2C	Moderation effect of leadership behaviours: **Model-5**				-0.1	2.108	0.035	0.146
Tr M Rf_pro->Af_C2C					0.017	0.282	0.778	0.004

TrF=transformational leadership; ToR= task-oriented leadership; CNr= contingent reward; MbyEx=management by exception; RF_Pro= promotion regulatory focus; RF_prv=prevention regulatory focus; Af_C2C=affective commitment to change; C-C2C= continuance commitment to change.

2.2.2 <u>The perception of leadership behaviours, commitment to change and the individual's motivational system.</u>

This part presents the estimation results of the relationship between leadership behaviours and commitment to change; the sample data was divided based on participant's response to the question about the extent they are experiencing an organizational change in their work environment.

Among leadership behaviours, the initial test confirmed the significance of transformational and task-oriented leadership behaviours. Table-21 shows three models of estimation, model-3 address the moderation effect of an individual's motivational system orientation on the relationship between leadership behaviours and both affective (Af_C2C) and continuance commitment to change (C-C2C). The figures show a positive and significant influence of transformational leadership on affective commitment to change (Coeff: 0.553; P-value 0.00), and negative influence on continuance commitment to change (Coeff: -0.569; p-value 0.00). Analogous with the theoretical predations, both prevention (promotion) orientations negatively (positively) moderated the relationship between transformational leadership and affective commitment to change (Coeff: -0.059; 0.031), albeit not significant (p-value 0.464; 0.618).

Rather, the estimation results show no significant role for management_by_exception in predicting commitment-to-change. Importantly, the results unveil the importance of individuals' motivational system orientation in predicting the form of commitment-to-change that they develop. Prevention-ally oriented individuals are more inclined to develop continuance rather than affective commitment to change (Coeff: 0.566, -0.336; p-value 0.00, 0.043). Conversely, those who are promotionally oriented are more

inclined to develop affective rather than continuance commitment to change (Coeff: 0.36, 0.243; p-value, 0.006, 0.193). Moreover, f^2 statistics supports the above results concerning the significant role of both leadership behaviours and individuals motivational orientation in predicting both forms of commitment to change; particularly, for the relations between transformational leadership commitment to change (i.e., Affective f^2=0.539; Continuance f^2= 0.30), promotion orientation and affective commitment to change (f^2: 0.239), and the relations between prevention orientation and both affective and continuance commitment to change (f^2= 0.223; 0.31). Social desirability figures, confirm the importance of controlling the bias that results from an individual's social desirability in self-completed surveys. Importantly, model-3 estimation results do not provide any consistent conclusion about the role of individual's regulatory orientation in the relations between the perception of leadership behaviours and commitment to change. Apparently, the moderation effects of regulatory focuses on models-3 do not show any significant effects. This insignificance indicates either no influence or that such relations take different forms. As such, we started to portray different scenarios of these relations; these include A) modelling regulatory focus as a precursor of leadership behaviours, B) leadership behaviours as a moderator rather than a predictor of commitment-to-change. These propositions stem from the fact that regulatory focus represents trait-alike which is not spatial and has a higher influence on individuals' behaviours and motivations. Accordingly, we turn in (Models 4 & 5) to test individual's orientation as a precursor of the perception of leadership behaviours, or in other words, the mediation and moderation roles of leadership perceptions on the relationship between individuals' motivational orientations and commitment-to-change.

The results obtained from model-4 estimation, unveil a significant partial mediation role of the perception of transformational leadership on the relationship between promotion orientation and affective commitment to change. While the direct relations between regulatory orientations and commitment to change remain at its same level of significance, the perception of transformational leadership plays a significant and positive mediation role between promotion focus and affective commitment to change (Coeff: 0.394; p-value: 0.00; f^2 0.394), and negative mediation with continuance commitment to change (Coeff: -0.394; p-value: 0.00). The results also show no significant mediation role of management-by-exception on the relationship between prevention orientation and commitment-to-change. Overall, the statistics from f^2 indicate a higher ability of model-4 for predicting the estimation relationships in comparison with model-3. Apparently, f^2 for the relationship between transformational and both forms of commitment-to-change significantly increases to hit the value of (0.834 and 0.452), as well as, f^2 for the relationships between regulatory orientation and leadership behaviours with values of 0.612 and 0.611. However, neither the moderation of regulatory orientation (model-3) nor the mediation of management by exception behaviours (model-4) provided a consistent conclusion that matches the theoretical predictions about the interaction between conservative leadership behaviours (e.g., management by exception), prevention orientation and individual's attitude.

In model-5, therefore we turn to provide further analysis of the possibility of a moderation effect of the perception of leadership behaviours on the relations between regulatory orientations and leadership behaviours. Whereas the results do not support the moderation effect of the perception of transformational leadership on the relationship between promotion orientation and transformational leadership, these results revealed a negative and significant moderation effect of the perception of

management-by-exception behaviours on the relationship between prevention orientation and continuance commitment to change (Coeff: -0.1; p-value: 0.035). Accordingly, we can conclude that, Individuals regulatory orientations do not have any moderation influence on the relationships between the perception of leadership behaviours and commitment to change (model-3 conclusion), and that, ones' motivational orientations are precursors of his-er perception of leadership behaviours. Whereas the influence of individual's promotion orientation on both forms of commitment-to-change is mediated by the perception of transformational leadership, prevention orientation maintains a direct effect on individual's development of continuance commitment to change, and that this relationship is moderated by the perception of management-by-exception leadership behaviours.

3. Estimation models quality criteria.

Table-22 presents the quality criterions of study-2 estimations. From the figures, we can notice that both models 1 & 2 disclose high levels of the adjusted R^2 and Q^2 which reflects high prediction capabilities of these models. Quality criteria for model-2, where individual's regulatory orientation moderates the relationships between the perceptions of leadership behaviours and work-related outcomes, are slightly higher than those for model-1 (which estimates the direct relations without the moderation effects). Apparently, models 3 & 4 present a high level of adjusted R^2 (0.67, 0.35 – model-3) and (0.36 to 0.68 –model-4). The values of Q^2 reflect the model predictive relevance of a certain variable, from the figures in table-22 it is clearly apparent that all the models possess a higher predictive relevance for the modelled variables.

Table 22 Estimation models quality criteria

Model	Variable	CWB	OCB	Perf	
M1	R2	0.592	0.278	0.663	
	R2 adJ	0.571	0.24	0.645	
	Q	0.456	0.144	0.371	
M2	R2	0.61	0.38	0.69	
	R2 adJ	0.57	0.34	0.66	
	Q2	0.47	0.2	0.38	

Model	Variable	Af_C2C	C-C2C	TrF	MbyEx
M3	R2	0.716	0.425		
	R2 adJ	0.672	0.353		
	Q2	0.379	0.215		
M4	R2	0.718	0.482	0.379	0.379
	R2 adJ	0.683	0.417	0.365	0.365
	Q2	0.387	0.255	0.241	0.257

TrF=transformational leadership; MbyEx=management by exception; Af_C2C=affective commitment to change; C-C2C= continuance commitment to change; OCB=organizational citizenship behaviours; WB=counter work behaviours; perf= In-role performance.

Section three

**<u>The interrelationships between leaders' individual differences, followers'
perceptions, attitudes and work-related behaviours</u>**

Introduction:

This study examines how different leader's individual characteristics (i.e., Identity
levels, regulatory orientation) induce followers' effects in the leadership process model.
Specifically, the study corresponds to the recent callings in leadership literature to
examine the direct relationships between leaders' traits and followers proximal effects
(i.e., attitudes and work related behaviours) independent of the leadership behaviours
(Epitropaki et al., 2017, Tuncdogan et al., 2017). As such, this study aims to: a, understand
the relationships between leaders' identity levels and the formation of followers'
attitudes and work-related behaviours; b, examine how leaders regulatory focus (i.e.,
motivational orientations) induce different followers' attitudes and work-related
behaviours; c, understand how leaders' implicit assumptions of their followers influence
followers' attitudes and work-related behaviours. The ultimate results of this study
contribute in our understanding of the formation followers' attitudes and work-related
behaviours based on more stable leaders' traits, instead of the perception of leadership
behaviours which is prone to be influenced by different contextual forces.

To conduct this study, we followed different sampling procedures than those used in the
previous studies. The sample used for this study composes of 20 teams working at the
University of Hull. All the required data were gathered during 2017 in which the
University was undergoing through a rigorous change program. 20 teams out of 50,
successfully completed the survey with a response rate of 40%. Importantly, each team
was provided with 4 surveys, one to be filled out by the line manager and the other three
forms to be filled out by the team members. Accordingly, we conducted the estimation

at the dyadic level of analysis, using the PLS software. The following section discusses

the estimation results. Having, the small sample size of this study the interpretation of

its construct's relationships will rely on the coefficient of correlation rather than the

level of significance, therefore the analysis for this study starts directly by the

estimation model.

1. **Leaders identity influence on followers' attitudes and work behaviours**
   Leader's identity levels, followers' perceptions of leadership behaviours and work-related attitudes and behaviours.

Table-23, presents the estimation results for the relationships between different identity

levels, the perception of leadership behaviours and work-related attitudes and outcomes. These results disclosed positive relationships between the leader's collective identity and followers work related attitudes and behaviours, as

Table 23 The direct relationships between leader's identity levels and followers' attitudes and work-related behaviours

Statistics Variables	Coeff	T Statistics	P Values	f2	R2	Q2
Coll_ID -> AF_C2C	0.07	0.36	0.72	0.02	0.13	0.06
Coll_ID -> CWB	0.42	3.21	0	0.55	0.57	0.26
Coll_ID -> OCB	0.1	0.41	0.68	0.04	0	0.07
Coll_ID -> Tr_s	0.48	3	0	0.3	0.39	0.14
IN_ID -> CWB	-0.24	1.39	0.17	0.22	0.17	0.1
IN_ID -> C_C2C	-0.13	0.39	0.69	0	0	0.12
IN_ID -> OCB	-0.56	3.47	0	0.91	0.59	0.3
IN_ID -> MbyEx	0.44	2.73	0.01	0.28	0.22	0.14

Coll_ID= collective identity; IN_ID=individuals focused identity; AF_C2C=affective commitment to change; CWB=counter work behaviours; OCB=organizational citizenship behaviours; Tr_s=transformational leadership behaviours; CWB=counter work behaviours; C_C2C=continuance commitment to change; MbyEx=management by exception.

well as, follower's perception of transformational leadership behaviours. However, the

significance and predictability figures indicate significant relations with CWB and the

perception of transformational leadership behaviours (Trf) and insignificant relations

with OCB and affective commitment to change. The figures for the individual level of

identity, on the other hand, significantly and negatively correlated with follower's

organizational citizenship behaviours, and positively with management by exception.

The figures also show negative relationships, albeit not significant, between the leader's

individual level of identity, followers' CWB, and continuance commitment to change. Importantly, the statistics obtained from the quality criterion Q^2 disclose a match with the levels of significance, such that the significant relationships indicate a high level of Q^2 compared with the insignificant relationships.

Table-24 presents the estimation results for the indirect interactions between leaders' levels of identity and followers work related attitudes and behaviours. Importantly, the figures indicate a significant indirect effect of leader's collective identity and followers' development of affective commitment to change, CWB, and OCB through the perception

Table 24 The indirect relationships between leaders identity levels and followers attitudes and work related behaviours

Variables \ Statistics	Coeff	T Statistics	P Values	F2	R2	Q2
Coll_ID -> tr_s -> AF_C2C	0.41	3.46	0	0.27	0.81	0.5
Coll_ID -> tr_s -> CWB	-0.19	2.24	0.02	0.31	0.03	0
Coll_ID -> tr_s -> OCB	0.28	2.23	0.03	0.29	0.2	0.1
IN_ID -> MbEx -> C_C2C	0.08	0.52	0.6	0.01	0.01	0
IN_ID -> MbEx -> CWB	-0.02	0.26	0.79	0.01	0.01	0
IN_ID -> MbEx -> OCB	-0.3	1.24	0.22	0.74	0.42	26

Coll_ID= collective identity; IN_ID=individuals focused identity; AF_C2C=affective commitment to change; CWB=counter work behaviours; OCB=organizational citizenship behaviours; Tr_s=transformational leadership behaviours; CWB=counter work behaviours; C_C2C=continuance commitment to change; MbyEx=management by exception.

of transformational leadership behaviours (Coeff: 0.41, -0.19, 0.28) and p-value (0.00, 0.02, and 0.03 respectively). Conversely, the statistics do not provide any support for the indirect influence of leader's individual level of identity and followers continuance commitment to change and work-related outcomes through the perception of management-by-exception leadership behaviours with a p-value (0.06, 0.79, and 0.22 respectively).

2. **Leaders regulatory focus influence on followers' attitudes and work behaviours**

Leader's regulatory orientations, followers' perceptions of leadership behaviours and work related attitudes and behaviours.

Table 25 Leaders motivational orientation, followers' attitudes and work-related behaviours.

Statistics / Variables	Original Sample (O)	T Statistics (|O/STDEV|)	P Values	F2	R2	Q2
RF_Pro -> AF_C2C	0.05	0.15	0.88	0	0.06	0.01
RF_Pro -> CWB	0.08	0.29	0.77	68	0.11	0.03
RF_Pro -> OCB	0.49	2.5	0.01	0.33	0.18	0.08
RF_Pro -> tr_s	0.09	0.34	0.73	0.08	0.08	0.03
RF_prv -> CWB	0.28	0.94	0.35	0.03	0.03	0.03
RF_prv -> C_C2C	-0.29	1.31	0.19	0.03	0.03	0.03
RF_prv -> OCB	-0.49	2.99	0	0.11	0.1	0.12
RF_prv -> mbyex_s	0.59	3.76	0	0.21	0.18	0.25

RF_Pro= promotion orientation; RF_prv= prevention orientation; AF_C2C=affective commitment to change; CWB= counter work behaviours; OCB= organizational citizenship behaviours; tr_s= transformational leadership; C_C2C= continuance commitment to change; MbyEx=management by exception leadership

Table-25 presents the estimation results for the interactions between leaders' motivational orientations, followers' attitudes and work-related behaviours. The estimation figures revealed a positive correlation between leaders' promotion orientation and follower's perception of the transformational leadership behaviours, affective commitment-to-change, OCB and CWB (Coeff: 0.09; 0.05; 0.49; and 0.08 respectively). Yet, the figures do not record any significant P-value with the dependent constructs except the relationship with OCB (p-value: 0.01).

Conversely, leaders' prevention orientation negatively correlates with followers' engagement organizational citizenship behaviours (OCB) (Coeff: -0.49; p-value: 0.00), and continuance commitment to change (Coeff: -0.49; p-value: 0.00), and continuance commitment to change (Coeff: -0.29; p-value: 0.00). The results also, disclosed a positive correlation between leaders' prevention orientation and follower's engagement in counter work behaviours (CWB) and the perception of management_by_exception leadership behaviours (Coeff: 0.28, 0.259; P-value 0.35, 0.00 respectively.

Table 26 leaders' regulatory orientations and followers work related attitudes and behaviours: the mediation of leadership behaviours.

Statistics / Variables	Original Sample (O)	T Statistics (|O/STDEV|)	P Values	F2	R2	Q2
RF_prv -> mbyex_s -> CWB	-0.05	0.32	0.75	0	0	0.08
RF_prv -> mbyex_s -> C_C2C	0.12	0.65	0.52	0.02	0.02	0
RF_prv -> mbyex_s -> OCB	-0.38	2.51	0.01	0.76	0.43	0.25
RF_Pro -> tr_s -> AF_C2C	0.19	0.92	0.36	0.58	0.36	0.23
RF_Pro -> tr_s -> CWB	-0.06	0.51	0.61	0.06	0.11	0.06
RF_Pro -> tr_s -> OCB	0.1	0.68	0.49	0.18	0.16	0.09

RF_prv -> mbyex_s -> CWB= the mediation of management by exception leadership behaviours on the relationships between leader's prevention orientation and counter work behaviours; the same role apply to other abbreviations.

The results in table-26 present the estimation results for the mediation of followers' perceptions of leadership behaviours and their work-related attitudes and behaviours. Importantly, the figures indicate a negative and significant influence of leader's prevention orientation on follower's engagement in organizational citizenship behaviours (OCB) through the perception of management-by-exception leadership behaviours (Coeff: -0.38; p-value 0.01). Further, the estimations indicated a negative (positive) mediation of the perception of management by exception leadership behaviours on the relationships between leader's prevention orientation and followers' involvement in counter work behaviours and development of continuance commitment to change (Coeff: -0.05, 0.12; p-value 0.75, 0.52). Apparently, the estimations do not support any significant mediation role of the perception of transformational leadership behaviours on the relationships between leader's promotion orientation and follower's commitment to change and work-related behaviours. However, the correlation coefficients show a positive correlation with affective commitment to change and organizational citizenship behaviours (Coeff: 0.19, 0.1 respectively).

3. **Leaders LIF's influence on followers' attitudes and work behaviours**

Leader's implicit assumptions, followers' perceptions of leadership behaviours and work related attitudes and behaviours.

Table-27 presents the estimation results for the direct relationships between leaders' implicit assumptions of their followers, followers' perceptions of leadership behaviours, work related attitudes and

Table 27 Table Leaders' LIF's and followers' attitudes and work-related behaviours

Statistics / Variables	Original Sample (O)	T Statistics (|O/STDEV|)	P Values	F2	R2	Q2
LIF_P -> AF_C2C	0.02	0.09	0.93	0	0.02	-0.12
LIF_P -> CWB	-0.13	0.96	0.34	0.03	0.12	0.03
LIF_P -> OCB	0.56	4.81	0	0.49	0.28	0.17
LIF_P -> tr_s	0.24	1.17	0.24	0.1	0.18	0.08
LIF1_N -> CWB	0	0.02	0.99	0	0	0.14
LIF1_N -> C_C2C	-0.24	1.34	0.18	0.05	0.05	0.02
LIF1_N -> OCB	-0.78	13.15	0	0.07	0.6	0.39
LIF1_N -> mbyex_s	0.56	2.6	0.01	0.52	0.31	0.23

LIF_p leaders positive (prototypical) view of followers; LIF_N leaders negative (anti-prototypical view; AF_C2C=affective commitment to change; CWB= counter work behaviours; OCB= organizational citizenship behaviours; tr_s= transformational leadership; C_C2C= continuance commitment to change; MbyEx=management by exception leadership.

behaviours, work related attitudes and outcomes. Importantly, the figures disclose positive correlations between leaders' prototypes (LIF's positive), followers' perception of transformational leadership behaviours, affective commitment to change, and OCB (Coeff: 0.24, 0.02 and 0.56 respectively). The results also indicate a negative correlation between LIF's positive and CWB (Coeff: -0.13), albeit not significant (p-value 0.34). Whereas leaders positive LIF's maintain a positive and significant correlation with OCB, leaders negative LIF's negatively and significantly influence OCB (Coeff: 0.56, -0.78; p-value: 0.00, 0.01). Leaders' negative assumptions of their followers positively and significantly correlate with follower's perception of management by exception leadership behaviours (Coeff: 0.56; p-value: 0.01). Importantly, the results indicated a no correlation between leaders negative LIF's and CWB (Coeff: 0.00; p-value 0.99) and a negative but not significant

correlation with follower's continuance commitment to change (Coeff: -0.24, p-value 0.18).

Table-28 presents the estimation results for the mediation role of the perception of different leadership behaviours on the relationships between leaders' implicit assumptions and followers' attitudes and work-related outcomes. Importantly, the estimation results show a negative mediation of the perception of management-by-exception on the relationships between leaders' negative implicit assumptions of their followers and OCB (Coeff: -0.36, p-value: 0.02).

Table 28 the mediation of the perception of leadership behaviours on the relationships between leaders' implicit assumptions of their followers and followers' attitudes and work-related behaviours.

Statistics / Variables	Original Sample (O)	T Statistics (|O/STDEV|)	P Values	F2	R2	Q2
LIF1_N -> mbyex_s -> CWB	-0.03	0.32	0.75	0.01	0.01	0.11
LIF1_N -> mbyex_s -> C_C2C	0.09	0.61	0.54	0.01	0.04	0
LIF1_N -> mbyex_s -> OCB	-0.36	2.38	0.02	0.72	0.39	0.26
LIF_P -> tr_s -> AF_C2C	0.29	2.53	0.01	0.17	0.6	0.49
LIF_P -> tr_s -> CWB	-0.09	0.87	0.39	0.29	0.06	0
LIF_P -> tr_s -> OCB	0.15	1.46	0.15	0.31	0.16	0.1

LIF1_N -> mbyex_s -> CWB= the mediation of leaders' management by exception leadership behaviours on the relationship between their anti-prototypical view of followers and their counter work behaviours; the same role applies to other abbreviations

Insignificant and weak correlations are indicated for the mediation role of management-by-exception on the relationships between leaders LIF's, CWB, and continuance commitment to change. On the other hand, the perception of transformational leadership behaviours significantly and positively mediated the relationships between leader's positive LIF's and follower's development of affective commitment to change (Coeff: 0.29, p-value: 0.01). The estimations also indicated a positive mediation of the perception of transformational leadership behaviours on the relationships between leaders' positive assumptions of their followers and OCB (Coeff: 0.15, p-value 0.15). Similar to the results obtained for the mediation role of management by exception on the relationships between leaders' negative assumptions of their followers and CWB, the results also indicated a weak and insignificant mediation role of the perception of

transformational leadership behaviours on the relationships between leaders' positive assumptions of their followers and CWB (-0.09, p-value 0.39).

Section Four: Hypothesis Testing

Based on the estimations in the previous sections which provided a detailed analysis for different senarious of the resrach model relationships. In this section, we provide an exact estimation of the results suitable for testing the study hypothesis. Some of the shown figures in the follwing tables are drived from the prvioues estmation sections, and others are exclusively conduceted for the purpose of hypothesis testing. This is followed by further analysis to re-examine the insignficant hypothesised relationships.

1. Hypothesis Testing

1.1 Leaders' characteristics and leadership behaviours

1.1.1 Leaders Identity and leadership behaviours.

The follwing hypothesises driven based on theoritical arguments about the influcne of different levels of leaders self-concept/idenity on their leadership behaoiurs. Specifically, we hypotheisised that:

> **H.1** Leader's collective identity influence transformational-leadership behaviour.

> **H.2** Leader's individual identity positively influence directive leadership behaviours (H.2.1 task-oriented; H.2.2; contingent reward; H.2.3 management-by-exception).

The first hypothes test the extent to which the saliance of collective identity (i.e., leader's identification of him-er self based on the belongneess to a particular set or group) influence leader's tranformational leadership behaviours. Table-29 results indicate that the presens of collective-self in leaders identity has a signficant influence on their

Table 29 Identity levels and leadership behaviours					
STATISTICS	STATISTICS FOR HYPOTHESIS TESTING				
VARIABLE	Coefficient	T Stat	P Values	F2	
ID_COLL->TRF	0.52	5.57	0.00	0.4	H1
ID_IND -> TOR_	0.23	2.78	0.01	0.08	
ID_IND -> CNR	0.07	0.65	0.52	0.01	H-2
ID_IND -> MBEX	0.32	3.05	0.000	0.11	

tranformational leadership behaviours (coeff: 0.52; p-value: 0.00; f^2 0.4), which supports the first hypothesis H1. In the second hypotheis, the study hypothisise that the saliance of individual-self in leaders identity psitively assoicate with their inclination to engage in directive forms of leadership behaoivurs (i.e., task, contingent, and management-by-exception). The estimation figures presents a signficant and positive influence of individual's identity on both task oriented (coeff: 0.23; p-value 0.01) and management-by-exception beahviours (coeff: 0.23; p-value: 0.00). However, there is no indication for any signficant influence of individual identity on contingent reward behaviors (coeff: 0.07; p-value 0.52). These results support the hypothesised relations in H 2.

1.1.2 Regualtory focus and leadership behaviours

This study examines regulatory focus theory as a precoursor of leadership behaviours, that is we examine how the variation in individuals' motivational orientations (i.e.,promotion vs prevention) influence their engagement in acollective and/or directive leadership behaviours. Specifically, we hypothesise that;

H.3. Leader's promotion orientation positively influence transformational-leadership behaviours.

H.4. Leader's prevention orientation positively influences directive leadership behaviours (H.4.1 task-oriented, H.4.2 contingent reward, H.4.3 and management by exception).

The figures in table-30 indicate a signficant influce of individuals motivational orientaion on their engagement in different forms of leadership behaivours. Importantly, promotion oreintation assosicate psotiviely and signficantly with

Table 30 Regulatory focus and leadership behaviours

Statistics Variables	STATISTICS FOR HYPOTHESIS TESTING				
	Coefficient	T Stat	P Values	F2	
RF_PRO -> TrF	0.28	2.47	0.01	0.12	H-3
RF_PRv->Tor	-0.19	1.92	0.05	0.04	
RF_PRv->CNr	-0.22	2.42	0.02	0.07	H-4
RF_PRV -> MbEx	0.1	0.83	0.4	0.02	

RF_Pro= promotion orientation; Trf= transformational leadership behaviours; Rf_prv=prevention focus; CNr=contingent reward; Tor= task-oriented leadership.

tranformational leadership behaviour (coeff: 0.28; p-value: 0.01). Conversely, the estimation results indicated a negative and signficant influence of prevention oreintation on both contingent reward (coeff: -0.22; p-value: 0.02) and task-oriented behaviours (coeff: -0.19; p-value: 0.05), and positive albite not significant on management-by-exception leadership behavoiurs (coeff: 0.1; p-value: 0.4). While these results statistically support H.3, it does not provide any statistical support for H.4.

1.2 The moderation roles of leaders implicit followership theory (L-IFT)

a. Identity levels and leadership behaviours: L-IFT moderation.

Individuals' differences and contextual forces are believed to substantially influence the relationship between individuals identity (distal predictors) and leadership behaviours. In this part, we examine the influence of leaders' assumptions about their team-

members (i.e., positive & negative prototypes). Particularly, we hypothesis that the positive assumptions (or prototype) .

views of a leader about his-er followers should result in a higher relation between his-er collective self and collective forms of leadership behaviours such as transformational

Table 31 Identity levels and leadership behaviours: L-IFT moderation

Statistics / Variables		STATISTICS FOR HYPOTHESIS TESTING				
		Coefficient	T Stat	P Values	F2	
Direct	LIF_P -> TrF	0.2	3.06	0	0.08	
The moderation of LIF_n/p	LIF_N M-->ID_Coll->TrF	-0.08	1.1	0.27	0.15	H5/1
	LIF_P M-->ID_Coll ->TrF	0.07	1.5	0.13	0.06	
	LIF_N->ID_Ind->MbyEx	0.28	1.87	0.06	0.04	H5/2
	LIf_p M->ID_ind->MbyEx	0.13	2.01	0.04	0.04	
	LIF_N->ID_Ind->CNr	-0.09	1.5	0.13	-0.09	
	LIF_P->ID_Ind->CNr	-0.06	0.79	0.43	-0.06	
	LIF_N->ID_Ind->Tor	-0.22	1.72	0.09	-0.22	
	LiF_P->ID_ind->Tor	-0.3	1.56	0.12	-0.3	

LIF_N M-->ID_Coll->TrF= the moderation of leader's anti-prototypical view of followers (LIF_N) on the relationship between their collective identity (ID_Coll) and transformational leadership behaviours (TrF).

leadership. And, that holding anti-prototype or negative assumptions about their team members is associated with higher relations between individual-self and directive forms of leadership behaviours (i.e., task-oriented, contingent reward and Managemen by exception). Specifically, we hypothesise that:

H5: LIFT moderate the relationship between leaders' levels of identity and leadership behaviours.

H5.1:The relationship between leader's collective identity and transformational leadership behaviours will be stronger when leaders hold positive prototypes about their followers than negative prototypes.

H5.2 The relationship between leaders' individual identity and directive leadership behaviours (i.e., H.5.2.1 contingent reward, H.5.2.2 task-oriented behaviours,

and H.5.2.3 management by exception) will be stronger when leaders hold negative rather than positive prototypical views of their followers.

The estimation results in table-31 revealed a significant direct influence of leaders prototypes on transformational leadership, and insignficant moderation effect of LIF's on the relationship between collective identity and transformational leadership behaviours (p-values: 0.15; 0.06). Concerning the relationship between individual-identity and directive leadership behaviours, the estimation results in table-31 indicated a significant moderation role of leaders assumptions (positive & negative) on the relationship between individual identity and management-by-exception (p-values: 0.06; 0.04 respectively). Even though, the relationships with other directive leadership behaviours (i.e., task-oriented and contingent reward) do not show any significant moderation effects. Overall, table-31 show no significant moderation of the leader's assumptions on the relationships between identity levels and different leadership behaviours. Importantly, the signficane moderation betwween individual identity and management-by-exception does not match with the theoritical predictions, which is very apparent from the low values of f^2's for these relations.

b. Regulatory focus and leadership behaviours: L-IFT moderation.

Table 32 Regulatory focus and leadership behaviours: L-IFT moderation

Statistics Variables	STATISTICS FOR HYPOTHESIS TESTING				
	Coefficient	T Stat	P Values	F2	
LIF_N M-> RF_pro->TrF	0.27	1.65	0.1	0.27	H6/1
LIF_P M->RF_Pro->TrF	0.02	0.22	0.82	0.02	
LIF_N M-->RF_Prv-->MbyEx	0.05	1.69	0.09	0.04	H6/2
LIF_p M-->RF_prv-->MbyEX	-0.14	1.4	0.16	0.18	
LIF_N M-->RF_Prv-->CNr	0.1	1.33	0.18	0.17	
LIF_P M-->RF_Prv-->CNr	-0.06	1.6	0.11	0.04	
LIF_N M-->RF_Prv-->Tor	0.08	1.23	0.22	0.09	
LIF_P M-->Rf_Prv-->Tor	-0.11	3.08	0	0.1	

LIF_N M-> RF_pro->TrF= the moderation role of leader's anti-prototypes on the relationship between leader's promotion focus and transformational leadership behaviours; the same role apply to other relationships abbreviations.

It's believed that leaders implicit assumptions a bout his-er followers affect the relationships between his-er motivational orientation and leadership behaviours. That is, promotionally oriented people would be more willing to embrace transformational leadership when they hold positive rather than negative assumptions about their followers. Conversely, those who are preventionnaly orientated engage more in prevention-focused behaviours (i.e., task-oriented, contingent reward, and management-by-exception), when they hold negative rather than positive assumptions about their team members. Accordingly, this study hypothesises that;

H 6: LIFT moderate the relationship between leaders' regulatory focuses and their leadership behaviours.

H 6.1: The relationship between leader's promotion-focus and charismatic behaviours will be stronger when leaders hold positive rather than prototypical negative view about their followers.

H6.2   The relationship between leaders' prevention focus and directive behaviours (H.6.2.1 task-oriented, H.6.2.2 contingent reward, and H.6.2.3 management by exception) will be stronger when leaders hold positive rather than negative prototypical view of their followers.

The estimation results in table-32 do not support any moderation role of leaders implicit followership theory on the relationships between regulatory focuses and leadership behaviours. Therefore, the hypothesised relations in H.6 were not supported.

1.3 Followers perceptions of leadership, regulatory focus and work related attitudes and behaviours

1.3.1 Leadership behaviours, followers' regulatory focuses and commitment to change.

This part of the study is concerned with understanding the follower's side of the leadership process model. Importantly, it is believed that employees regulatory focus (i.e., motivation orientation) influence their receptivity of different leadership behaviours and the formation of their attitudes. Specifically, we hypothesise that,

H.7 Individual's regulatory focus moderates the relationships between the perception of leadership behaviours and commitment-to-change,

H7.1:The positive relationship between transformational leadership and affective commitment to change is moderated by individuals' regulatory focus; such that, the positive relation will be stronger for promotionally oriented individuals than prevention oriented.

H7.2: The positive relationship between directive leadership behaviours and continuance commitment to change will be stronger for individuals with prevention focus than those with promotion focus.

The estimation results in table-33 do not provide any support for the hypothesised moderation role of followers regulatory focus on the relationships between the perceptions of leadership behaviours and commitment-to-change with p-value ranges between (0.08 to 0.78).

Table 33 followers' perceptions of leadership behaviours, regulatory focus, and attitudes

Statistics Variables	STATISTICS FOR HYPOTHESIS TESTING				H?
	Coefficient	T Stat	P Values	F2	
RF_Prv M TrF-> Af C2C	-0.059	0.732	0.464	0.058	H7
Rf_pro M TrF->Af C2C	0.031	0.499	0.618	0.015	
RF_prv M MbyEx-> C-C2C	-0.108	1.754	0.08	0.127	
RF_pro M MbyEx->C-C2C	0.071	0.935	0.35	0.032	
RF-prv M CNr->C-C2C	0.026	0.279	0.78	0.004	H8
Rf_pro M CNr->C-C2C	-0.136	0.792	0.428	0.024	
RF_pro M Tor->C-C2C	0.072	0.433	0.665	0.011	
RF_prv M Tor ->C-C2C	0.178	0.76	0.447	0.033	

RF_Prv M TrF→ Af C2C= the moderation of individuals prevention orientation on the relationship between transformational leadership behaviours and affective commitment to change; Rf_pro M TrF= the moderation of individuals promotion orientation on the relationships between transformational leadership and affective commitment to change. The same role applies for other abbreviations with AFC2C=affective commitment to change; C-C2C= continuance commitment to change; MbyEx=management by exception
leadership; CNr=contingent reward; ToR=task oriented leadership.

1.3.2 Followers' perceptions, regulatory orientation and work-related behaviours.

This section analyses the moderation role of followers regulatory focus on the relationships between different leadership behaviours and work-related outcomes. Particularly, this study examines the following hypothesised relationships.

H.8 Individuals regulatory focus moderates the relationships between the perception of leadership behaviours and work-related outcomes.

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H.8.1 Followers' regulatory-foci moderate the relationship between transformational leadership and followers' OCB; such that this relation is stronger for promotionally oriented individuals than prevention oriented.

H.8.2 The positive relationship between directive leadership (task-oriented H.8$_{2.1,}$ contingent reward H.8.$_{2.2,}$ and management by exception H.8$_{2.3}$) behaviours and in-role performance will

Table 34 followers' perceptions of leadership behaviours, OCB, CWB and performance

Statistics Variables	STATISTICS FOR HYPOTHESIS TESTING				
	Coefficient	T Stat	P Values	F2	
RF_pro M TrF ->OCB	-0.01	0.12	0.91	0.00	H9
RF_prv M TrF-> OCB	-0.12	1.10	0.27	0.33	
Rf_pro M ToR-> In_role perf	0.02	0.31	0.76	0.01	H10
Rf_prv M ToR-> In-role perf	-0.08	1.38	0.17	0.11	
Rf_prv M CNr-->In-role perf	-0.05	1.01	0.32	0.07	
Rf_pro M CN -->In_role perf	-0.02	0.22	0.83	0.01	
Rf_prv M MbyEx-->In-role perf	0.00	0.04	0.97	0.00	
Rf_pro M MbyEx-> In_role perf	-0.05	0.97	0.34	0.06	
Rf_pro M Tor ->CWB	-0.08	0.87	0.38	0.04	H11
Rf_prv M Tor->CWB	-0.01	0.12	0.91	0.00	
Rf_pro M CNr->CWB	-0.06	0.90	0.37	-0.06	
Rf_prv M CNr->CWB	0.08	1.36	0.17	0.08	
Rf_pro M MbyEx ->CWB	-0.03	0.36	0.72	-0.03	
Rf_prv M MbyEx->CWB	0.01	0.27	0.79	0.02	

RF_pro M TrF-> OCB = the moderation of individuals promotion orientation (RF_Pro) on the relationship between transformational leadership and OCB; the same role apply to the other abbreviations with ToR refer to task oriented leadership, In role perf= in role performance; CNr=contingent reward behaviours; MbyEX=management by exception; Tor= Task oriented leadership behaviours; CWB=counter work behaviours.

be stronger for prevention-oriented individuals than promotion oriented.

H.8.3 The negative relationship between directive leadership behaviours (task-oriented H.8$_{3.1,}$ contingent reward H.8.$_{3.2,}$ and management by exception H.8$_{3.3}$) and counter work behaviour will be stronger for prevention than promotion-oriented individuals.

The estimation results in table-34 do not provide any support for the hypothesised moderation of employees' regulatory focus on the relationships between the perception

of leadership behaviours, OCB, CWB, and In-role performance. Together with the results obtained from the estimation analysis in section-2, we can distill that these relationships take a different form than the hypothesised one.

1.4 leaders traits, followers perceptions and work related attitudes and behaviours

1.4.1 leaders identity, followers attitudes and work related outcoms.

This part of the study examines the interaction between leaders' traits and followers effects on the leadership process. Particularly, the study examines how leaders' individual charactersitics (identity levels, regulatory orienton) influence followers attitudes and work-related behaviours through the perception of different leadership behaviours. Threfore, the study tests the following hypothesis;

H.9 The perception of tranformational leadership behaviours positively mediates the relationships between leader's collective identity with followers affective commitment to change (H.9.$_1$),

Table 35 Leaders traits, follower's attitudes, and work-related behaviours

statistics / Variables	Coeff	T Statistics	P Values	
Coll_ID -> tr_s -> AF_C2C	0.41	3.46	0.05	
Coll_ID -> tr_s -> CWB	-0.19	2.24	0.02	H10
Coll_ID -> tr_s -> OCB	0.28	2.23	0.03	
IN_ID -> mbyex_s -> C_C2C	0.08	0.52	0.6	
IN_ID -> mbyex_s -> CWB	-0.02	0.26	0.79	H11
IN_ID -> mbyex_s -> OCB	-0.3	1.24	0.22	

Coll_ID -> tr_s -> AF_C2C= the mediation of transformational leadership behaviours (tr_s) on the relationship between leaders' collective identity (Coll_ID) and followers' affective commitment to change (AF_C2C); the same role applies to other abbreviations.

OCB (H9.$_2$), and negatively mediates the relationship with CWB (9.$_3$).

H.10 The perception of management_by_exception positively mediated the relatinoship between leaders individual identity and followers continauance commitment to change (H10.$_1$), and negatively mediate the relationships with CWB (H10.$_2$) and OCB (H10.$_3$).

The estimation results in table-35 indicated a signficant postive influence of leaders collective identity on followers affective commitment to cahnge and OCB with (p-value=0.05 and 0.03). Conversely, the figures show a significant negative influence of leaders collective identity on followers CWB (Coff – 0.19, p-value 0.02). These results supports the mediation of transfromational leadership behaviours on the realtionships between leaders collective idenity and followers work related attitudes and behaivours. Moreover, the results do not support any signficant effect of leaders individual identity on their followers' attitudes and work-related behaviuors. However, the coeffecient relationships match the theoritical prediction, such that leaders individual identity presents a psotive correlation with continuance commitment to change, and negative correlation with followers CWB and OCB (Coff: 0.08, -0.02 and -0.3).

1.4.2 Leaders regulatory focus, followers attitudes, and work-related outcomes

To examine the relationships between leaders motivational oriention, followers attitudes, and work-related outcomes, the study examines the following hypothesised relationships:

H 11 The perception of transformational leadership positively mediate the relationships between leaders promotion focus, affective commitment to

Table 36 Leaders regulatory focus, followers' attitudes and work related behaviours: the mediation of the perception of leadership behaviours.

Statistics / Variables	Original Sample (O)	T Statistics (|O/STDEV|)	P Values	
RF_Pro -> tr_s -> AF_C2C	0.19	0.92	0.36	
RF_Pro -> tr_s -> CWB	-0.06	0.51	0.61	H12
RF_Pro -> tr_s -> OCB	0.1	0.68	0.49	
RF_prv -> mbyex_s -> CWB	-0.05	0.32	0.75	
RF_prv -> mbyex_s -> C_C2C	0.12	0.65	0.52	H13
RF_prv -> mbyex_s -> OCB	-0.38	2.51	0.01	

RF_Pro-> tr_s--> Af_C2C= the mediation of transformational leadership behaviours on the relationship between individual's promotion orientation (RF_pro) and affective commitment to change (AF_C2C); the same role applies to the other abbreviations.

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change (H 11.1), OCB (H11.2), and negatively with CWB (H11.3).

H 12 The perception of management by exception positively mediated the relatinoships between leaders prevention orientation and individual continuance commitment to change (H12.$_1$), CWB (H12.$_2$), and negatively with OCB (H12.$_3$).

The estimation results presented in table-36 supports the hypotheised realtionships in H11 & 12. Specifically, the results indicated a positive mediation of the perception of transformational leadership behaviours on the relationships between individuals promotion orieantion and affictive commitment to change, OCB, and negtive mediation on the relationship with CWB (Coeff: 0.19, -0.06, and 0.1 respectively). Similarly, the perception of management by exception positively mediated the realtionships between leaders prevention orientation and continuance commiemt to change, and negatively with CWB and OCB (coff: 0.12, -0.05, and -0.38 respectively).

1.4.3 Leaders implicit followership assumptions, followers attitudes and work related outcomes.

The study examines the relationships between leaders' assumptions about their followers and the formation of followers attitudes and work-realted behaviours. Particularly, the study examines the following hypothesis,

H.13 The perception of transformational leadership behaviours positively mediaated the realtionships between leaders prototypes and followers affective commitment to change (H13.$_1$), OCB (H13.$_2$), and negatively mediates the realtionship with followers CWB (H 13.$_3$).

H14 the perception of management by exception leadership behaviours positively mediates the relationships between leaders' anti-prototype and followers'

continuance commitment to change (H 14.1) and negatively mediates the relationship with followers' OCB (H14.$_2$) CWB (H14.$_3$).

Table 37 leaders' prototypes, followers' attitudes and behaviours: the perception of leadership

Statistics / Variables	Original Sample (O)	T Statistics (|O/STDEV|)	P Values	
LIF_P -> tr_s -> AF_C2C	0.29	2.53	0.01	
LIF_P -> tr_s -> CWB	-0.09	0.87	0.39	H14
LIF_P -> tr_s -> OCB	0.15	1.46	0.15	
LIF1_N -> mbyex_s -> CWB	-0.03	0.32	0.75	
LIF1_N -> mbyex_s -> C_C2C	0.09	0.61	0.54	H15
LIF1_N -> mbyex_s -> OCB	-0.36	2.38	0.02	

LIF_P -> tr_s -> AF_C2C= the mediation of transformational leadership (tr_s) on the relationships between leaders prototypes and followers affective commitment to change; the same role apply to the other abbreviations.

The estimation results in table-37 support the hypothesised relationships between leaders prototypes and followers attitudes and behaviours. Particularly the figures indicated that the perception of transformational leadership behaviurs significantly mediates the relationships between leaders' prototypes and affictive commitment to change (coef 0.29, p-value 0.01), and positive but not signficant mediation on the realtionships with OCB (coeff: 0.15, p-value 0.15). Moreover, the estimations disclose a negative effect of leaders prototypes on the folowers CWB through the perception of transformational leadership behavours (coeff: -0.09, p-value 0.39). Notably, leaders anti-prototypes negatively associate with followers engagement in both CWB and OCB throgh the perception of management by exception leadership behaviours (coeff: -0.03, -0.36), and negatively associate with followers continuance commitment to change (coeff: 0.09).

2. Further analysis of the hypothesised insignificant relationships.

The insignificant results obtained in the previous section estimations urges the necissity to implement the iterative process of model construction. An integral part of the iterative process relates to modifying the modelled relationships based on the analysis results. The modifications are conducted bas on the simplification of the model relations are proposed (such as linearity) or by further refining the model. Model refinement refers to introducing additional variables into the modelled relationships and portray more sophisticated relations between the model variables, or expand the scope of the problem(Giordano et al., 2013). Importantly, the analysis in this section differs in its aim from the general estimation presented earlier in sections 1 to 3. Wherease, the main goal from the general analysis was to provide different senarious cabable to explaine the interrelationships between the proposed theories and how they influnce the reseach phenomenon, the analysis in this section is conducted solely to complete the hypothesis testing section, or in other words, to find a consistent conclusion about the hypothesised relations. Even though, both the genral analysis and the analysis in this section are considered interdependent, if we count that the results of the estimations in the gneral sectoin analysis help us to identify the possible alternatives of the insignficant hopothesised relationships.

In the hypothesis section, all the hypothesised direct relations between identity levels, motivational orientations, and leadership behaviours (i.e., hypothesis 1-4) are accepted. However, the remaining hypothesised reltionships pertaining the moderation effects of L-IFT between identity levels, regulatory focuses and leadership behaviours, as well as, the moderation of followers regulatory focus on the relationships between their perceptions of leadership behavoirs and work-related behaviours and attitudes, have not received any statistical support (i.e., hypothesis 5-11). Therefore, in this section, we

turn to refine these relationships, by testing the mediation rather than the moderation effect of both L-IFT and regulatory focus[8].

2.1 Identity levels and leadership behaviours: the mediation role of L-IFT

Non of the conducted anlysis in the provious sections succeded to support the hypothesised moderation of L-IFT on the relationship between identity levels and leadership behaviours. The four tables (38-40) prsent the estimation results of the mediation role

Table 38 Identity levels and leadership behaviours: L-IFT mediation

		Statistics / Variables	Original Sample (O)	T Statistics (|O/STDE V|)	P Values	
Collective Identity & Transformational Leadership	Direct	ID_Coll -> TrF	0.57	6.91	0	H5/1
	2-stage effect	ID_Coll -> LIF_N	-0.43	5.47	0	
		ID_Coll -> LIF_P	0.39	5.1	0	
		LIF_N -> TrF	0.08	0.95	0.34	
		LIF_P -> TrF	0.23	2.51	0.01	
	Total-Indirect Effect	ID_Coll -> LIF_N -> TrF	-0.10	0.89	0.15	
		ID_Coll -> LIF_P -> TrF	0.12	2.17	0.03	
		Social desirability -> TrF	-0.21	2.4	0.02	

of L-IFT on the relationshps between individual identity and directive leadership behaviours (i.e., task oriented, contingent reward, and management by exception) The estimation results in tabele-38 depects the anlsysis results of the propsed mediation of L-IFT on the relationship between collective identity and tranformational leadership. The statistical figures refer to a signficant direct influence of collective identity on tranformational leadership (Coeff: 0.57; p-value: 0.00). Moreover, the figures from the indirect (medition) relations indicate a signficant indirect influence of leaders collective identity on transofmational leadership via the implicit positive assumptions that they form about their subordinates. Accordingly, we can conclude that leaders prototypes (i.e., positive assumptions) partialy mediates the relationship between collective identity and tranformational leadership.

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[8] In the general analysis section different forms of model simplification have been implemented.

Table 39 Individual Identity and Leadership behaviours: L-IFT Mediation

		Statistics / Variables	Original Sample (O)	T Statistics (|O/STDEV|)	P Values	
Individual Identity & Task Oriented	Direct	ID_Ind -> Tor_	0.33	3.78	0	H5/2
	2-stage effect	ID_Ind -> LIF_N	0.07	0.35	0.73	
		ID_Ind -> LIF_P	0.11	0.69	0.49	
		LIF_N -> Tor_	0.01	0.05	0.96	
		LIF_P -> Tor_	0.23	1.51	0.13	
	Total-Indirect Effect	ID_Ind -> LIF_N -> Tor	0	0.01	0.99	
		ID_Ind -> LIF_P -> Tor	0.02	0.54	0.59	
		Social desirability -> Tor_	-0.28	2.87	0	

The estimation figures in table-39 do not supoort any mediation role of L-IFT in the relationships between individual identity and task oriented leadership behaviours. Unlike collective identity, individual identity relates directly to leadership behaiours (Coeff: 0.33; p-value:0.00).

Table 40 Individual identity and contingent reward: L-IFT Mediation

		Statistics / Variables	Original Sample (O)	T Statistics (|O/STDEV|)	P Values	
Individual Identity & Contingent Reward	Direct	ID_Ind -> CNr	0.18	1.59	0.11	H5/2
	2-stage effect	ID_Ind -> LIF_N	0.03	0.17	0.87	
		ID_Ind -> LIF_P	0.12	0.61	0.54	
		LIF_N -> CNr	-0.24	1.96	0.05	
		LIF_P -> CNr	0.18	1.24	0.22	
	Total-Indirect Effect	ID_Ind -> LIF_N -> CNr	-0.01	0.15	0.88	
		ID_Ind -> LIF_P -> CNr	0.02	0.44	0.66	
		Social desirability -> CNr	-0.16	1.78	0.07	

Table-40 preesents the estimation results of the relationships between individual identity and contingent reward. Importantly, the statistics in table-39 do not provide any support neither for direct nor for indirect effects of the individual identity on contingent reward behaviours. Table-41 presents the estimation results of the relationships between individual identity and management-by-exception leadership behaviours. Apparently,

the figures refer to a significant direct influnce of individuals identity on management-by-exception leadership behaviours (Coeff: 0.3; p-value: 0.00).

Overall, based on the above results, it is apparent that individual's identity directly correlates with the conservative forms of leadership behavoiurs (task oreinted and management by exception) regardless of the assumptions that the leaders might hold about their subordinates. Collective identity correlates both through direct and indirect relationships with tranformational leadership behaviours via the postive assumptions "prototypes" that the leaders hold about their followers.

Table 41 Individual Identity and Management by Exception

		Statistics / Variables	Original Sample (O)	T Statistics (|O/STDEV|)	P Values	
Individual Identity & MbyEx	Direct	ID_Ind -> MbEx	0.3	2.87	0	H5/3
	2-Stage	ID_Ind -> LIF_N	0.1	0.71	0.48	
		ID_Ind -> LIF_P	0.07	0.39	0.69	
		LIF_N -> MbEx	0.23	2.17	0.03	
		LIF_P -> MbEx	-0.04	0.39	0.7	
	Indirect	ID_Ind -> LIF_N -> MbEx	0.02	0.62	0.54	
		ID_Ind -> LIF_P -> MbEx	0	0.15	0.88	
		Social desirability -> MbEx	0.04	0.36	0.72	

2.2 Leaders regulatory focus and leadership behaviours: the mediation of L-IFT.

Table 42 Leaders' regulatory focuses and leadership behaviours: L-IFT mediation

	Statistics / Variables	Coefficient	T Statistics	P Values
Direct	RF_PRO -> TrF	0.24	2.20	0.03
	RF_PRV -> MbEx	0.05	0.41	0.68
2-stage effects	RF_PRO -> LIF_P	0.34	3.65	0.00
	RF_PRV -> LIF_N	0.47	6.83	0.00
	LIF_N -> MbEx	0.29	3.03	0.00
	LIF_P -> TrF	0.28	2.98	0.00
Total indirect	RF_PRV -> LIF_N -> MbEx	0.18	2.46	0.01
	RF_PRO -> LIF_P -> MbEx	0.03	0.40	0.69
	RF_PRV -> LIF_N -> TrF	0.05	0.18	0.85
	RF_PRO -> LIF_P -> TrF	0.12	2.07	0.04
	Socia_ -> MbEx	0.03	0.29	0.78
	Socia_ -> TrF	-0.35	3.12	0.00

RF_Pro= individuals promotion orientation; RF_Prv=individuals prevention orientation; LIF_N=leaders anti-prototypical view of their followers; LIF_P= leaders prototypical views of followers; MbyEx= management by exception leadership behaviours; TrF=transformational leadership behaviours; socia= social desirability
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The hypothesised relationships in hypothesis-6 about the moderation effect of L-IFT on the relationships between leaders regulatory focus and their leadership behaviours did not receive any support. Accoringly, we turned to refine these relations into ameditioan relationships. The estimation of the mediation role of L-IFT on the relationship between leaders' regulatory orientaions and behaiours is presented in table-42.

The results reveiled a complete mediation effect of leaders anti-prototypes "negative assumptions" on the relationships between prevention orientaiton and manamgement-by-exception leadership. Whereas the results indicated a non significant relationship between prevention orientation and management by exception (coeff:0.05; p-value: 0.68), the indirect relation statistics indicated a high level of signficance (coeff: 0.18; p-value: 0.01). Leaders' positive assumptions "prototypes" partially mediated the

relationship between promotional orientation and tranformational leadership behaviours. While, the direct relationship between promotion focus and tranformational leadership is signficant (coeff: 0.24; p-value: 0.03) the indirect relationships is also signficant (coeff:0.12; p-value:0.04). Based on these results we can not accept the hypothesised moderation effect of L-IFT on the relations between regulatory focus and leadership behaviours (i.e., H6), and conclude that the L-IFT mediates the relations between regulatory focus and leadership behaviours.

Table 43 Individuals regulatory focuses and commitment to change: Mediation and Moderation role of leadership perception.

Variables	Statistics	The Mediation Effect			
		Coefficient	t-statistics	P Values	F^2
The mediation of leadership perceptions	RF_Pro_ -> TrF -> Af_C2C	0.39	3.59	0.00	0.39
	RF_prv -> MbyEx -> Af_C2C	0.07	0.85	0.40	0.07
	RF_Pro_ -> TrF -> C-C2C	-0.39	3.70	0.00	-0.39
	RF_prv -> MbyEx -> C-C2C	-0.08	0.73	0.47	-0.08
		The Moderation effect			
The moderation of leadership perceptions	MbyEx M RF_prv & C-C2C	-0.10	2.11	0.04	0.15
	Trf M Rf_pro->Af_C2C	0.02	0.28	0.78	0.00

Rf_pro=promotion focus; Rf_prv=prevention focus; Trf=Transformational leadership; MbyEx=management by exception leadership; Af_C2C=affective commitment to change; C-C2C= continuance commitment to change.

3.3 The interrelationships betwween the individual's regulatory orientation, the perception of leadership behaviours, and attitudes; hypotheis (7)

Table-43 present the refined relations in hypothesis-7. The hypothesised moderation effects of followers regulatory orientations on the relationship between their pereception of leadership behaviours and commitment-to-change did not receive any statistical support. Accordingly, we started to refine the modeled relationships based on the

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assumption that regulatory focus represents individual trait wich is more distal and influence ones' perceptions and attitudes.

As such, the modeled relations in hypothesis-7 could be reversed to reflect a mediation/or moderation of the pereception of leadership behaviours between regulatory oreintation and attitude. Table-43 presents the estimation results of both the mediation and moderation propositions. Apparently, we can notice a significant mediation effect of the perception of tranformational leadership on the relationships between promotion focus and affective commitment to change (Coeff: 0.394; p-value: 0.00). The mediation effect turns to a negtive mediation effect on the relationship with continuance commitment to change (Coeff:-0.394; p-value: 0.00). Wherease, the results disclose a non-significant mediation of management-by-exception on the relationships between prevension focused and commitment to change, the second estimation of the moderation influences revealed a signficant negative moderation of manamgement-by-exception on the relationship between prevention orientaion and continuance commitment to change (coeff: -0.1; p-value: 0.035). Overall the estimation results have reveiled that, individuals regulatory focuses are a precoursors rather than a modertors of the relationships between the pereception of leadership behaviours and individual's attitude; wherease, the perception of tranformatioal leadership plays a mediation role in the relationship between promotionally oriented individuals and their commitment to change, the perception of directive leadership behaviours has a negative moderation influence on the relationship between prevention oriented individuals and their commitment-to-change [9].

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[9] A further discussion and interpretation of these results could be found in the following chapter.

3.4 The interrelationships betwween the individual's regulatory orientation, the perception of leadership behaviours, and employees work-related behaviours; hypotheis (8).

Based on rejecting the hypothesised relationships in hypothesis 8. We turned to follow the itterative process of model building to refine the modeled relationships by introducing regulatory focus as determinant/anticedent of the perception of leadership behavoiurs and individuals work-related outcomes. Importantly, the estimation results in table-44 indicates that, promotion orientation postiviely and signficantly influenced organizational citizenship behaivours and in role performcne (coeff: 0.46, 0.45; p-value: 0.00, 0.00 0), and negative relationship with counterproductive behaviours (CWB), albite not significant (coeff: -0.1; p-value: 0.21).

Table 44 interrelationships between regulatory orientation, TrF perception and work-related behaviours.

	Statistics Variables	Original Sample (O)	T Statistics (|O/STDEV|)	P Values
The direct relations	RF_Pro_ -> CWB	-0.10	1.26	0.21
	RF_Pro_ -> OCB	0.46	4.04	0.00
	RF_Pro_ -> Perf_	0.45	6.57	0.00
	RF_Pro_ -> TrF	0.40	4.57	0.00
	TrF -> CWB	0.03	0.34	0.73
	TrF -> OCB	0.26	2.14	0.03
	TrF -> Perf_	0.01	0.15	0.88
	Socia -> CWB	0.70	9.75	0.00
	Socia -> OCB	0.08	0.98	0.33
	Socia -> Perf_	-0.55	10.3	0.00
The mediation effect	RF_Pro_ -> TrF -> CWB	0.01	0.32	0.75
	RF_Pro_ -> TrF -> OCB	0.11	1.80	0.07
	RF_Pro_ -> TrF -> Perf_	0.00	0.14	0.89

Rf_pro= promotion focus; Rf_prv= prevention focus; CWB=counter work behaviours; OCB= organizational citizenship behaviours; Trf=transformational leadership behaviours; Perf=performance.

The relations between promotion orientation and work-related behaviours via the mediation of tranformational leadership perception are located in the botom of table-45. Importantly, the figures indicated a signficant medation of tranformational leadership

perception between promotion orientation and OCB at 90% confidence level (coeff: 0.11; p-value: 0.07). Together with the figures of the direct relationship between promotion orientation and OCB (coeff: 0.46; p-value:0.00), we can conclude that the perception of tranformational leadership partially mediates the relationships between promotion oreintation and OCB.

Table 45 Interrelationships between regulatory orientation, MbyEx perception and work-related behaviours.

	Statistics Variables	Original Sample (O)	T Statistics (|O/STDEV|)	P Values
Direct effect	RF_prv -> CWB	-0.2	1.96	0.05
	RF_prv -> Perf_	0.27	2.32	0.02
	MbyEx -> CWB	0.00	0.01	0.99
	MbyEx -> Perf_	-0.12	1.02	0.31
	RF_prv -> MbyEx	0.67	12.5	0.00
	Socia -> CWB	0.87	9.53	0.00
	Socia -> Perf_	-0.85	9.90	0.00
Indirect effect	RF_prv -> MbyEx -> CWB	0.00	0.01	0.99
	RF_prv -> MbyEx -> Perf	-0.08	0.99	0.32

RF_prv= prevention orientation; CWB= Counter work behaviours; Perf=in role performance; MbyEx=management by exception leadership

Table-45 depects the interrelationships between prevention orientation, the perception of leadership, and work-related behavoiurs. Wherease, prevention oreintation maintains a negative correlation with CWB, it psotively correlate with in-role performance (coeff: -0.2, 0.27; p-value: 0.05, 0.02). The indirect "mediation" relationships indicated at the bottom of table-44 indicate a non-signficant mediation role of management by an exception on the relationships between prevention orientation and work-related behaviours.

Summary of the hypothesis testing results

Table 46 Hypothesis summary

Hypothesis Number	Hypothesis	Status	Section	Refinement procedures	Hypothesis after refinement	Status	Section
H.1	Leader's collective identity positively associate with transformational-leadership behaviours	Supported H.1***		Non			
H.2	Leader's individual identity positively associate with the directive leadership behaviours (i.e., H2.1 task oriented; H2.2 contingent reward; H2.3 management by exception).	Supported H2.1*** H2.3*** H2.2	Section-3 Nu 1.1	Non			
H.3	Promotion oriented leaders positively associate with transformational leadership behaviours	Supported H.3***		Non			
H.4	Prevention oriented leaders positively associate with directive leadership behaviours (i.e., task oriented H4.1; contingent reward H4.2; and management by exception H4.3)	Not supported supported H4.1 H4.2 Supported H4.3	Section-3 Nu 1.2	The rejection of hypothesis H.4.1 and H.4.2 returns to the reversed estimation results from the hypothesised one, rather than for the insignificant effect which is theoretically inconsistent. Therefore, a further examination of the moderation influences could be found in H.6 estimations.			
H.5 L-IFT moderates the relationships between leaders' levels of identity and leadership behaviours.		Not supported	Section-3 Nu 1.3-a	An examination of the mediation of L-IFT on the relationships between leaders' levels of identity and leadership behaviours.			Section-3 Nu 2.1
H5.1	The relationship between leader's collective identity and transformational leadership behaviours will be stronger when leaders hold positive prototypes about their followers than negative prototypes.	Un supported	Section-3 Nu 1.3-a	A test of the mediation of leaders' prototypes (positive assumptions) between collective identity and transformational leadership behaviours was conducted. The estimation result in a significant direct (Coeff: 0.57; p-value 0.00) and indirect relationships between collective identity and transformational leadership via leaders' prototype view of their followers (coeff: 0.12; p-value: 0.03).	Leader's prototypes (i.e., positive assumption of their followers) partially mediates the relationship between collective identity and transformational leadership behaviours.	Supported	Section-3 Nu 2.1

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H5.2	The relationship between leader's individual-identity and directive leadership behaviours (i.e., H.5.2.1 contingent reward, H.5.2.2 task oriented behaviours, and H.5.2.3 management by exception) will be stronger when leaders hold negative rather positive prototypical views of their followers.	Un supported H.2.1 H.2.2 H.2.3*	Section-3 Nu 1.3-a	None of the mediation estimations has received any statistical support, and therefore direct relations are hypothesised instead. The ultimate results supported the direct effect of individual identity on the directive forms of leadership behaviours.	Leader's individual identity maintains a direct correlation with directive leadership behaviours (behaviours (H.5.2.1 contingent reward, H.5.2.2 task oriented behaviours, and H.5.2.3 management by exception)	Supports H.5.2.1 * H.5.2.2 *** H.5.2.3 ***	Section-3 Nu 2.1
H.6 LIFT moderates the relationship between leader regulatory focus and leadership behaviours.		Not supported	Section-3 Nu 1.3-b	None of the examined moderation effects showed any level of significance. Together with the theoretically inconsistent direct relationships especially that indicated in table-10, we opted to test the mediation role of L-IFT. Importantly, the estimation results concerning the mediation of LIF_N between leaders' prevention focus and other directive leadership behaviours (task oriented and contingent reward) did not reveal any significant results.	*H.6(R) L-IFT Mediate the relationship between leaders' regulatory focus and leadership behaviours.*		Section-3 Nu 2.2
H.6.1	The relationship between leader's promotion-focus and charismatic behaviours will be stronger when leaders hold positive than negative prototypical views about their followers.	Not supported	Section-3 Nu 1.3-b		H6.1(R): leader positive assumptions (prototype) mediate the relationship between promotion focus and transformational leadership behaviours.	Supported H.6.1(R) ***	Section-3 Nu 2.2
H.6.2	The relationship between leader's prevention-focus and directive behaviours (H.6.2.1 task-oriented, H.6.2.2 contingent-reward, and H.6.2.3 management by exception) will be stronger when leaders hold prototype than anti-prototypical view of their followers.	Not supported	Section-3 Nu 1.3-b		H.6.2 (R) Leaders negative assumptions (anti-prototypes) mediate the relationship between prevention focus and management by exception	Supported H.6.2 (R) **	Section-3 Nu 2.2
H.7 Individual's regulatory focus moderates the relationships between the perception of leadership behaviours and commitment-to-change		Not supported	Section-3 Nu 1.4	An examination of the mediation influence is needed.			

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H.7.1	The positive relationship between transformational leadership and affective commitment to change is moderated by individuals regulatory focus; such that, the positive relation will be stronger for promotionally oriented individuals than prevention oriented.		Section-3 Nu 1.4	Based on rejecting the hypothesised moderation influence in H.7, and the significant direct influence of regulatory focus on commitment to change, we turned to refine hypothesis 7 relations, by introducing regulatory focus as a precursor of leadership perceptions. Therefore, we turn to test leadership perceptions as a mediator and or moderators of the relationships between individual's regulatory orientation and commitment to change.	H.7.1 (R) The perception of transformational leadership behaviours mediates the relationship between individual promotion orientation and affective commitment to change.	Supported H.7.1.(R) ***	Section-3 Nu 2.3
H.7.2	The positive relationship between directive leadership behaviours and continuance commitment to change will be stronger for individuals with prevention focus than those with promotion focus.		Section-3 Nu 1.4		H.7.2 (R) The perception of management by exception moderates the relationship between prevention orientation and continuance commitment to change.	Supported H.7.2 (R) **	Section-3 Nu 2.3
H.8 Individuals regulatory focus moderates the relationships between leadership behaviours perceptions and work-related behaviours.		Not supported	Section-3 Nu 1.5	An examination of the mediation and moderation possibilities of the perception of leadership behaviours on the relationships between regulatory orientation and work related behaviours.			
H8.1	Followers' regulatory-foci moderate the relationship between transformational leadership and followers' OCB; such that this relation is stronger for promotionally oriented individuals than prevention oriented.		Section-3 Nu 1.5	Based on the analysis results of the direct relations between the perception of leadership behaviours (TrL, Tor, CNr, and MbyEx) and individuals work-related behaviours (OCB, CWB and In-role performance) which failed to provide significant statistical support for their direct relations (table-16), as well as, the hypothesised moderated relationships in H.8. Therefore, initiating from the idea that we	H8.1 (R) The perception of transformational leadership behaviour mediates the relationship between promotion oriented individuals and organizational citizenship behaviours.	Supported H.8.1 (R) *	Section-3 Nu 2.4

H.8.2	H.8.2 The positive relationship between directive leadership (task-oriented H.8$_{2.1}$, contingent reward H.8.$_{2.2}$, and management by exception H.8$_{2.3}$) behaviours and in-role performance will be stronger for prevention-oriented individuals than promotion oriented.		Section-3 Nu 1.5	measure chronic regulatory (i.e., which is considered as trait-alike) rather than work-related regulatory focus, it's believed that individuals regulatory orientations have a dominant influence on individuals perceptions and attitudes. Accordingly, we opted to refine the hypothesised relations in H.8 to the ones indicated in H.8.1(R), H.8.2 (R)	H.8.2 (R). The perception of management-by-exception moderate the relationship between prevention oriented individuals and counter work behaviours.	Not supported	Section-3 Nu 2.4
H.8.3	The negative relationship between directive leadership behaviours and counter work behaviour will be stronger for promotion oriented individuals.		Section-3 Nu 1.5				
H9	The perception of transformational leadership behaviours significantly and positively mediates the relationships of leaders collective identity with followers affective commitment to change (H.9.1), OCB (H9.2), and negatively mediates the relationship with CWB (9.3).	Supported	Section-3 Nu 2				
H10	The perception of management_by_exception significantly and positively mediate the relationship between leader's individual identity and followers continuance commitment to change (H10.1), and negatively mediate the relationships with CWB (H10.2) and OCB (H10.3).	Supported	Section-3 Nu 2				
H11	The perception of management-by-exception significantly and positively mediate the relationships between leaders individual identity, continuance commitment to change (H 11.1), OCB (H11.2), and negatively with CWB (H11.3).	Supported	Section-3 Nu 2				

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H12	The perception of management by exception positively and significantly mediates the relationships between leaders prevention orientation and individual continuance commitment to change (H12.1), CWB (H12.2), and negatively with OCB (H12.3)	Supported	Section-3 Nu 2				
H13	The perception of transformational leadership behaviours positively mediate the relationships between leaders prototypes and followers affective commitment to change (H13.1), OCB (H13.2), and negatively mediates the relationship with followers CWB (H 13.3).	Supported	Section-3 Nu 2				
H14	the perception of management by exception leadership behaviours positively mediates the relationships between leaders anti-prototype and followers continuance commitment to change (H 14.1), and negatively with followers OCB and CWB (H14.2&3)	Supported	Section-3 Nu 2				

Chapter Five
Discussion of the Estimation Results

This chapter provides a further interpretation of the estimation analysis. The discussion extends beyond the statistical figures and includes more analysis based on both the estimation results and the underlying theoretical foundation of the hypothesised relationships. This includes unveiling the controversial aspects of the agreement between the current study findings and the previous empirical and theoretical research. This chapter is organised in three main sections: section one presents the discussion for the first study findings, which explains the interrelationships between the leaders' individual differences (i.e., identity levels, regulatory orientation) and their leadership behaviours. Similarly, section two presents the discussion of the second study findings, which explains the influence of an individual's regulatory orientation on the receptively of different leadership behaviours and work-related attitudes and behaviours. Section three discusses how the leaders' characteristics could induce the followers' effects and leadership outcomes. Each of these sections is closed by a study conclusion of the main findings. This chapter is enclosed with a general statement of the two studies.

The primary focus of this section is to discuss the research findings in relation to the first two research questions. These questions focus on examining the role of the leaders' individual characteristics in the formation of their leadership behaviours (H1-H4), and how the leaders' traits interact with the perceptions of their followers to induce different leadership behaviours (H5-H6).

1. Leaders' intuition to act

One of the controversial issues in leadership literature that still attracts leadership scholars relates to the constituents of effective leaders, and what determines the leaders' inclination to act in a certain way or another. This section presents the main findings obtained from testing the hypothesis H5-H6 pertaining to the leaders' individual characteristics and how it affects their manifestation of various leadership behaviours, as well as how their adoption of various leadership behaviours is influenced by the interactions between the leaders' characteristics and the implicit assumptions of their followers (L-IFT). In doing so, a particular focus was given on understanding the hierarchy in the leaders' behaviours from the non-transformational leadership to the most-transformational or charismatic leadership behaviours. As such, a multivariate estimation of the different levels of one's identity and regulatory focus on the two extreme forms of leadership behaviours (transformational & management-by-exception) were conducted first, followed by estimating the influence on a wider range of leadership behaviours that represents the gradual movement from management-by-exception and contingent rewards to task-oriented and transformational leadership behaviours. This was followed by estimating the interactions of the leaders' implicit assumptions of their followers.

1.1 Identity levels and leadership behaviours.

Individual psychology research has indicated that individuals tend to represent themselves at multi levels (individual, relational and collective), and each of these levels has its distinct influence on one's motivation (Cooper and Thatcher, 2010, Johnson and Lord, 2010), situation perception, and behaviour (Ashforth and Schinoff, 2016). That is, individuals tend to behave in a manner that verifies their views of themselves to maintain consistency in their identity standards (Swann, 1990). Importantly, scholars have indicated two aspects that reflect the individuals' pursuit for self-verification: these include, one's conscious involvement in activities that create a supportive social environment for their self-views and unconscious activities that instil a bias in one's perception of the social reality or, their social environment (Swann Jr et al., 2003).

Theoretically, it is believed that the salience of a particular level of self-awareness effectively works in inducing an individual to act in a way that verifies his/her view of self (Owens et al., 2010, Leary and Tangney, 2011). Accordingly, the salience of the leaders' collective identity is expected to associate positively with one's adoption of collective forms of leadership behaviours (i.e., transformational leadership) and negatively with non-collective forms of leadership behaviours (i.e., management-by-exception), and vice versa for the salience of individual level of identity (Jackson and Johnson, 2012). The estimation results have revealed significant direct relationships that match with these theoretical predictions, such that, collective identity is positively associated with the adoption of transformational leadership behaviours, and negatively correlated with management-by-exception. Conversely, the salience of one's individual identity positively and significantly influences the adoption of management-by-exception and insignificantly correlates with the transformational leadership behaviours.

These results support the self-verification processes in which individuals tend to act in a way that proves their view of self (Swann Jr et al., 2003, McCall and Simmons, 1966).

Interestingly, the estimation of the broader influence of identity levels on different leadership behaviours showcases the hierarchy of influence between the levels of identity and the leadership behaviours. Apparently, the statistical evaluations have revealed a hierarchical influence between the collective identity and leadership behaviours, ranging from the most significant and positive correlation with transformational leadership, task orientation, and contingent rewards, to a negative and significant relationship with management-by-exception. On the other hand, the salience of individual identity induces leaders to focus their attention on directives rather than the motivational part of leadership behaviours. This is apparent from the significant positive relationship between the individuals' identity levels, management-by-exception, and task-oriented leadership behaviours, and the insignificant association between the contingent rewards and transformational leadership behaviours.

Overall, these results support the prediction from the self-verification theory (Swann, 1990), which indicates that individuals tend to verify the views they hold about themselves to increase their sense of predictability and control over their current situation. On their way to do so, people tend to engage in activities that influence the other person's feedback in a way that supports their inner views of self. Apparently, from the results, it is notable that the salience of individual levels of identity positively and significantly correlates with task-oriented and management-by-exception leadership behaviours. This reflects the leaders' endeavour to confirm their views of self by adopting leadership behaviours that contribute to building their own success rather than focusing on achieving their subordinate's well-being. Conversely, the salience of collective identity induces leaders to act in ways that consolidate their belonging to their

followers by manifesting more collectivistic and compensational leadership behaviours (i.e., transformational and contingent rewards). Consequently, the hypothesised direct relationships between the leaders' identity levels and the leadership behaviours were supported.

1.2 Motivational orientation and leadership behaviours.

Building on the idea that individuals seek to allocate themselves to the goals and standards that they hold, Higgins (1997) and Higgins (1998) introduced the chronic regulatory theory in which they differentiated between individuals based on how they approach pleasure, and/or avoid pain. This variation in an individual's motivational orientation is believed to influence their attitudes and behaviours (Cooper and Thatcher, 2010, Johnson and Lord, 2010, Kark and Van Dijk, 2007). That is, individuals tend to behave in a way that fits/matches with their regulatory orientations to increase their sense of feeling right. As such, prior research indicated that those who are promotionally orientated tend to be more involved in exploration, risk-taking, and un-bureaucratic activities, and those who are prevention orientated are more involved in doing routine activities and maintaining the status quo (Tuncdogan et al., 2015, Scholer et al., 2010).

The estimation results of the relationships between the individuals' regulatory focuses and leadership behaviours have revealed a high tendency of promotionally oriented leaders who engage in more inspirational and motivational leadership behaviours (i.e., transformational leadership), rather than the directive forms of leadership behaviours (i.e., management-by-exception). Although the results for promotionally oriented leaders match the theoretical predictions, the figures obtained for preventional oriented relationships with directive leadership behaviours do not show any statistical significance that matches with its theoretical predictions. Apparently, whereas, the

estimations provided significant statistical support for promotionally oriented individuals' direct relationships with transformational leadership behaviour, the results for prevention oriented leaders have not provided any statistical support for the relationship with directive leadership behaviours. These results, although, have led to accepting the hypothesised direct relationships between promotionally oriented leaders and transformational leadership; it led to rejecting the hypothesised relationships between prevention orientation and directive leadership behaviours. These results match with the predictions that promotionally oriented individuals possess a higher tendency to satisfy their need for growth and accomplishment and behave in a more transformational manner, than prevention oriented individuals who seek to meet their needs for security and stability, and therefore, engage in more conservative behaviours (Brockner and Higgins, 2001, Kark and Van Dijk, 2007).

Considering that both motivational systems of the regulatory focuses are not mutually exclusive, one can hold high level of any or both of them at the same time depending on the situational circumstances (Brockner and Higgins, 2001). Importantly, the descriptive figures for these two motivational systems have revealed the dominance of promotion orientation over prevention orientation among the study sample with a mean of 5.29 and 3.86, respectively. This justifies the insignificant relationship between prevention oriented and directive forms of leadership behaviours. Moreover, research in trait induced leadership behaviours has revealed an important fact concerning the individuals' tendency to manifest all trait levels during the course of everyday practices with which it becomes substantially crucial for the researchers to consider the circumstances that trigger or inhibit the leaders' prototypes, and hence, the trait induced behaviours. This requires the inclusion of more dynamic notions of traits and the context within which the leadership phenomena occur (Antonakis et al., 2012,

Tuncdogan et al., 2017, Uhl-Bien et al., 2014). In this regard, the statistical figures presented that the majority of the study participants have prototypical "positive views" of their followers (mean of 7.62) rather than anti-prototypical "negative views" (2.75). This provides an initial justification of the insignificant relationships between prevention orientation and leadership behaviours and urges the necessity to consider the interaction with the prototypical views of the leaders about their followers.

1.3 Individual differences and leadership behaviours: the interaction of leaders' prototypical views.

It's believed that the leaders' conceptions of their followers define the way in which they treat or act towards them (Sy, 2010). Scholars demonstrate that human behaviours are driven by implicit forces or cognitive structures that specify various schema-related behavioural tendencies (Bargh, 1997, Macrae and Bodenhausen, 2000) and that the activation of proper cognitive representation unconsciously primes the relative action tendencies which shape one's behaviour accordingly (Macrae and Bodenhausen, 2000). Thus, when a particular perception (or conceptual representation) is activated, it increases the likelihood of individuals behaving in a consistent way with these cognitions (Bargh et al., 1996). Therefore, examining the interactions between the leaders' implicit assumptions of their followers and their psychological characteristics become substantially important for understanding the drivers of different leadership behaviours.

The estimations presented in chapter four did not provide any statistical support for the moderation role of L-IFT on the relationships between the leaders' levels of self, motivational orientation and leadership behaviours. Whereas, scholars in psychology have indicated that individual behaviours are induced by both internal (i.e., traits) and external (i.e., the perception of others) motives (Bargh, 1997, Bargh et al., 1996), but

they did not show how exactly these two sources interact to induce one's behaviours. Importantly, the individuals' chronicle characteristics represent the stable individual traits, which are believed to form one's conceptions of his/her surroundings (Swann Jr et al., 2003). According to the self-verification theory (McCall and Simmons, 1966), individuals tend to be biased in perceiving their contextual information / social reality, that is, they tend to interpret their context in a way that matches their conceptions about themselves. As such, individuals become selective in recalling information and experiences that confirm their self and ignore information that does not provide such confirmation. Moreover, individuals tend to show attention to remarks that provide self-confirmatory feedback (Swann and Read, 1981). Together with the insignificant moderation effect of LIF, this study examines LIF as a mediator between the leaders' individual characteristics and their leadership behaviours. As such, the study argues that the salience of the leaders' collective identity and promotion orientation induces them to positively perceive their subordinates (prototypical/ positive LIF) and embrace more motivational/collectivistic behaviours. Conversely, leaders who hold prevention orientation and individual identity are more likely to form anti-prototypical views of their followers and engage in prevention behaviours.

Importantly, the estimation results for the mediation effect have revealed a significant mediation role of L-IFT on the relationships between the leaders' levels of identity and leadership behaviours. Specifically, the results showed that the salience of collective identity induces leaders to form positive views and assumptions about their followers, which in turn positively and significantly drives their transformational leadership behaviours. The salience of the leaders' individual self directly correlates with the directive leadership behaviours regardless of the assumptions of the followers, which indicates that leaders with individual focused identity pay less attention to the social

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factors while acting in their work context. Moreover, the results disclosed a complete mediation of the LIF-N on the relationship between prevention orientation and management-by-exception leadership behaviours. A partial mediation of L-IFT on the relationship between promotion orientation and transformational leadership behaviours was also revealed in the study results.

1.4 The overall conclusion of study one

The overall outcome for the estimation of the modelled relationships between the leaders' individual differences (i.e., identity levels and regulatory focus), L-IFT and leadership behaviours indicate that though the leaders' individual differences maintain significant direct relationships with the leadership behaviours, they also interact with the assumptions that they hold about their subordinates in inducing various forms of leadership behaviours.

The ultimate statistical results mostly support the theoretical predictions from identity and chronicle regulatory focus theories. Apparently, the estimations revealed that the leaders' collective identity significantly correlates with their engagement in transformational leadership behaviours, and there is also a significant correlation between the leaders' individual identity and the directive leadership behaviours. Analogous with the predictions from the regulatory focus theory, promotionally oriented leaders significantly engage in transformational leadership behaviours, and the leaders' negative assumptions of their followers mediate the influence of their prevention orientation on the directive leadership behaviours (i.e., particularly management-by-exception).

Furthermore, the results from the interactions with the leaders' implicit assumptions of their followers unveil an important fact concerning the influence of leaders' chronicle

characteristics on their assumptions and attitudes. That is, one's chronicle characteristics have a dominant influence on the formation of his/her implicit followership assumptions. This is visible from the insignificant moderation influence of L-IFT on the relationships between the leaders' individual differences and their leadership behaviours, and the significant re-modelled relationships of the mediation role of L-IFT on these relationships. As such, leaders' chronicle characteristics possess a higher influence on the formation of his/her assumptions of followers, whereas the salience of collective (promotion) orientations induces the leaders' positive assumptions of their subordinates, which in turn, significantly induces their transformational leadership behaviours. The salience of individuals' (prevention) orientation significantly influences the leaders' formation of negative assumptions of their followers and management-by-exception behaviours accordingly.

The primary focus of this section is to discuss the research findings in relation to the third research question. The third question of this research correlates with identifying how the followers' regulatory orientations interact with their perception of different leadership behaviours to influence their work-related attitudes and behaviours (H7-H8).

2. The perception of leadership behaviours, followers' regulatory orientations and work-related behaviours.

In this part, we extend the discussion of the influence of individuals' perception of different leadership behaviours on their attitudes and work-related outcomes. Specifically, this section focuses on understanding how individuals' regulatory focuses (i.e., motivational systems) interact with their perceptions of different leadership behaviours for inducing their commitment to change and the work-related behaviours. Out of these discussions, we aim to understand how different forms of employees' commitment to change (i.e., effective and continuance), as well as work-related outcomes (OCB, CWB and In-role performance), are developed. These relationships are estimated at two stages; the first stage examines the relationship between an individual's perception of leadership behaviours and his/her attitude (commitment to change). At this stage, two estimations are conducted, first, the direct effect of leadership perception on an individual's commitment to change, and then the indirect/or moderation effect of an individual's regulatory focus on the relationship between the perception of leadership and commitment to change. The second stage emphasises on examining the influence of the followers' perceptions of leadership behaviours on their work-related behaviours. Similarly, at this stage, two estimation models were conducted to examine the direct influence of followers' perceptions of leadership behaviours and

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its interaction with their regulatory focuses on the formation of different work-related behaviours.

2.1 Followers' perception of leadership behaviours, regulatory focus and commitment to change.

Scholars believe that the variation in the individuals' regulatory orientations influences their receptivity of different role models and persuasion messages (Lockwood et al., 2002, Cesario et al., 2004). Building on the idea of regulatory fit, several studies have revealed the importance of a match between individuals' motivational (regulatory) orientation and their contextual forces generally, and the leadership behaviours as a main contextual force specifically. This match/fit between one's contextual forces and his/her regulatory orientation has been considered as a strong determinant of one's attitude and persuasion (Hamstra et al., 2014, Higgins, 2005, Joseph and Higgins, 2008). Importantly, the current study estimations have revealed several significant results concerning the direct influence of the perceptions of different leadership behaviours and individuals' regulatory orientations on the development of various forms of commitment to change (i.e., effective and continuance).

Firstly, though the results of this study significantly match the previous research concerning the significant influence of individuals' perception of transformational leadership on their affective commitment to change (Chou, 2013, Herold et al., 2008), the perception of directive forms of leadership behaviours (task oriented, contingent rewards, management-by-exception) do not hold any significant influence on the development of continuance commitment to change. This result highly contradicts the previous research findings and theoretical predictions (Meyer and Parfyonova, 2010). An explanation of this insignificant relationship is provided by examining the estimation results for individuals' regulatory orientations. Specifically, the results

indicated that individuals' promotion (prevention) orientations significantly correlate with their development of effective (continuance) commitment to change. This reveals a higher order influence of the individual's regulatory focus on their development of commitment to change than the perception of leadership behaviours, specifically on the relationships with continuance commitment to change. Together with the negative influence of management, with an exception on the continuance commitment to change, these results support the notion of "misfit" during the times of crises as stated by Stam et al. (2016). In contrast to the idea of fit, the experimental results from Stam et al.'s (2016) study have indicated that leaders who use prevention focused communication during the times of instability induce more uncertainty and negative feelings in their followers, and therefore, lose their support. Accordingly, they propose that the regulatory misfit caused by the leaders' usage of promotional communications is more effective during the times of crises in spite of the primed prevention focus[10].

Unlike the findings from previous literature, none of the modelled moderation roles of individuals' regulatory orientation have indicated any significant influence on the relationships between the perception of leadership behaviours and commitment to change. This unveils another considerable fact concerning the importance of differentiating between chronic regulatory and work-related regulatory focuses on the one hand, and the fact that what we measure is the perception of leadership behaviours that reflects followers' attitude towards the leaders rather than the actual leadership behaviours on the other hand (Behrendt et al., 2017, Lee et al., 2015)[11]. Importantly, regulatory focus as chronicle orientation reflects stable personal traits rather than a situational induced state (Wallace et al., 2009). Having that individuals' traits influence

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[10] The uncertainty state during the times of change induce followers' prevention focus, and therefore, according to the idea of regulatory fit, it is believed that prevention communication is more effective during the times of uncertainty.

[11] It is believed that evaluating leadership behaviours through surveying followers represents an evaluation of the followers' attitudes towards their leaders rather than the actual leadership behaviours.

their cognitions and perceptions (McCall and Simmons, 1966), it's believed that individuals' chronicle orientations are more likely to present as a precursor of the perception of leadership behaviours.

The study results supported the predictions by unveiling a positive influence of the individuals' regulatory orientations on their perceptions of different leadership behaviours, and the formation of their attitudes. Particularly, the results indicated that the followers' perceptions of transformational leadership behaviours positively mediate the relationship with affective commitment to change and OCB. Further, the study analysis also indicated a positive moderation of the perception of management-by-exception leadership behaviours on the relationships between followers' prevention orientation and continuance commitment to change. These results provide further support for the first study results concerning the nature of interactions between one's traits and perceptions (or internal and external motives) in the formation of his/her attitude and work-related behaviours.

2.2 Followers' perception of leadership behaviours, regulatory-focus and work-related behaviours.

Leaders' effectiveness has for long been related to their ability to motivate their followers to achieve the defined organisational goals. Building on the idea of regulatory fit, scholars aspire leaders' effectiveness to their ability to adopt different leadership behaviours that satisfy the various needs of their followers (Stam et al., 2010, Stapel and Koomen, 2001). Importantly, research in individual psychological orientations has disclosed that individuals differ in their attention allocation to the situational stimuli depending on their regulatory orientations (McMullen et al., 2009). Therefore, these studies argue that individuals' performance is a function of the congruency between

situational and individuals' dispositional regulatory orientations ([Shah et al., 1998](#)). Based on that, this study examines how the congruency between individuals' contextual forces (i.e., different leadership behaviours) and their regulatory dispositions influence their work-related behaviours.

The results obtained from this study indicated a positive direct association between individuals' perceptions and work-related behaviours. While the employees' perception of transformational leadership significantly participates in their involvement in organisational citizenship behaviours, the perception of task-orientation negatively affects individuals' engagements in counterwork behaviours and positively influences their in-role performance. Again, the estimation results do not provide any significant moderation effect of the individuals' regulatory focus on the relationships between their perceptions and work-related behaviours. As explained in the previous sections, we turned to examine the individuals' regulatory focus as a precursor of the perception of leadership behaviours. The estimations indicated a higher order influence of the individuals' chronic regulatory focus on their perceptions and work-related behaviours. Though the estimation results indicated that promotionally oriented individuals are more receptive of transformational leadership behaviours, which in turn, induces their OCB, it shows neither a mediation nor a moderation role of the perception of directive leadership behaviours (i.e., particularly management-by-exception) on the relationship between prevention focus and work-related behaviours. Importantly, prevention orientation shows a negative direct relationship with CWB and positive relationship with in-role performance, which reflects their tendency to preserve the stability and security in their position.

2.3 The overall conclusion of study two

The overall results for the modelled relationships between the perception of different leadership behaviours, regulatory focus and commitment to change have indicated a direct influence of both transformational and regulatory focus theories on the individuals' development of different forms of commitment to change. Instead of the moderation role of individuals' regulatory focuses, the study results supported a higher order influence of the individual's regulatory focuses on their perceptions of different leadership behaviours. That is, though the results do not support any moderation role of individuals' regulatory orientations on the relationships between the perception of leadership behaviours and commitment to change, it presents a significant mediation and moderation role of the perception of leadership behaviours on the relationships between the individuals' regulatory focus and commitment to change. Importantly, the estimations present a significant mediation of the perception of transformational leadership behaviours on the relationship between promotion focus and affective commitment to change, and a significant moderation of the perception of management-by-exception on the relationship between prevention focus and continuance commitment to change.

Additionally, the study has also examined the relationships between individuals' perceptions of leadership behaviours, regulatory orientation and work related-behaviours. Though the results did not support any moderation of individuals' regulatory orientation on the relationship between their perceptions of leadership behaviours and work-related behaviours, it presents a higher order influence of one's regulatory orientation on the formation of their perceptions and work-behaviours. Particularly, t he results for the re-modelled relationships supports this prediction by

disclosing a significant mediation role of the perception of transformational leadership on the relationship between promotion-focused individuals and OCB.

Section three

The primary focus of this section is to discuss the research findings in relation to the fourth research question. The fourth question of this research is concerned with identifying" *How the leaders' individual characteristics and prototypes interact with the perception of leadership behaviours, followers' attitudes and work behaviours* (H9-H14)"

3. Leaders' individual characteristics, followers' attitudes and work-related behaviours

3.1 Leaders identity, followers' attitudes and work-related behaviours

In this section, we discuss the relationships between the leaders' individual traits, the followers' attitudes and the leadership outcomes. The main purpose of examining these relations is to correlate the followers' effects on leadership outcomes with more stable traits that assist in drawing a consistent conclusion about leadership effectiveness. The estimations of the modelled relationships in this study have provided several interesting results about the interactions between leaders' traits and followers' proximal effects (attitudes and work-related behaviours) in the leadership process. Importantly, the figures presented in chapter 4 indicate the existence of a significant interaction between the leaders' individual differences and the followers' proximal effects.

Significantly, the results revealed the existence of a direct and indirect relationship between the leaders' levels of identity and the followers' attitudes and work-related behaviours. The overall results disclose a match with the theoretical predictions of the leadership theory. Particularly, the salience of leaders' collective orientation stimulates

their collective behaviours (i.e., transformational leadership), which in turn prime follower's affective commitment to change. Analogous, with the theoretical predictions that the salience of a particular identity induces leaders to behave and adapt strategies that match with their orientations (McCall and Simmons, 1966, Crowe and Higgins, 1997), the study results indicated a significant influence of leaders' collective orientation on their followers' development of affective commitment to change and OCB through the perception of transformational leadership behaviours. Similarly, the estimations also revealed a positive association between the leaders' individual identity and their followers' attitudes and work-related behaviours, such that, the leaders' individual identity can be positively associated with their followers' continuance commitment to change and negatively correlated with CWB and OCB.

3.2 Leaders' motivational orientation, followers' attitudes and work-related behaviours.

The estimation results of the relationships between the leaders' motivational orientations and their followers' attitudes and work-related behaviours indicate several interesting results, which mostly support the theoretical predictions. Particularly, the salience of leaders' promotion orientation positively participate in the formation of followers' affective commitment to change and OCB and negatively correlate with the followers' CWB. Both direct and indicted relations between the leaders' promotion orientation, followers' attitudes and work-related behaviours indicated a good match with the theoretical predictions. Particularly, it is theoretically known that promotionally oriented leaders tend to apply more promotional strategies in their interpersonal communications (Higgins et al., 1994) with the aim of achieving their growth, development and ideal self (Higgins, 2000). This tendency could be transmitted to their followers either through the perception of leadership behaviours or through other interpersonal effect mechanisms such as the contagion effect (Van Kleef, 2009).

The significant direct relationship between the leaders' promotion focus and followers' OCB, which turn to be insignificant when mediated by the perception of transformational leadership behaviours, represents the best manifestation of the existence of the influence of the leaders' traits on their follower's attitudes and work-related behaviours independent of the leadership behaviours.

On the other hand, the salience of leaders' prevention orientation interacts positively with the followers' development of continuance commitment to change, and negatively with their engagement in CWB and OCB through the perception of management-by-exception leadership behaviours. This result matches with the theoretical predictions that preventional oriented leaders tend to apply more conservative strategies to prevent negative outcomes and or maintain the status quo (Gino and Margolis, 2011, Tuncdogan et al., 2015), which might transmit to their followers through the contagion effect (Van Kleef, 2009).

3.3 Leaders' Implicit assumptions of their followers, followers' attitudes and work-related behaviours.

The estimation results supported the theoretical predictions concerning the relationships between the leaders' implicit assumptions of their followers, followers' attitudes and work-related behaviours. Importantly, the results significantly support the predictions of the Emotions As Social Information (EASI) model which explains how the expression of emotions of a focal individual represents a valuable source of information to the observer, which in turn directs their attitudes and work behaviours (Van Kleef, 2009, Van Kleef et al., 2015). Particularly, the estimations disclosed the existence of a positive relationship between leaders' prototypes (i.e., positive assumptions) and followers' engagement in the organisational citizenship behaviours and development of affective commitment to change and correlated negatively with their CWB. Importantly,

the leaders' positive assumptions when mediated by transformational leadership behaviours significantly influence the followers' formation of affective commitment to change. Conversely, when leaders hold negative assumptions of their followers, it negatively affects their participation in OCB and affective commitment to change, and positively affects their continuance commitment to change through the perception of management-by-exception leadership behaviours.

3.4 The overall conclusion of the third study.

Overall, the study results have indicated a significant role of leaders' individual traits in the formation of their followers' effects in the leadership process and outcomes. Particularly, the ultimate results have indicated that the variation in the leaders' individual traits and motivational orientation differently affect their followers' attitudes and work-related behaviours, such that, the salience of leaders' collective and promotional orientation positively participates in enhancing their followers' affective commitment to change and OCB and reduces their CWB through the perception of transformational leadership behaviours. Conversely, the salience of leaders' prevention orientation and individual level of identity positively induces followers' development of continuance commitment to change and negatively correlates with their OCB and CWB through the perception of management-by-exception leadership behaviours.

Furthermore, the results also indicate that the leaders' positive assumptions of their followers positively correlates with their follower's affective commitment to change and OCB, and negatively correlates with their CWB through its positive association with transformational leadership behaviours. In contrast, when leaders hold negative assumptions of their followers, it reduces their followers OCB and CWB and induces their continuance commitment to change through their positive association with management-by-exception leadership behaviours. Importantly, these results support the

major premise of the situational leadership theory which addresses that leaders have to adapt their leadership style to match with their followers' capabilities on a given task (Morrison, 2007).

3.5 Overall chapter conclusion

This chapter extended the analysis results presented in chapter four by providing a further interpretation of the obtained results and its correlation with the theoretical predictions. Accordingly, the discussion unveils an agreement and disagreement with some aspects in the previous research and literature, even though the overall results significantly supported the substantial role that both identity and regulatory-focus theories play in driving both leaders' implicit views of their followers and their leadership behaviours. The results also unveil an important result regarding the higher order influence of the individuals' chronicle orientations in driving their perceptions, attitudes and work-related behaviours in comparison to the perception of leadership behaviours. Moreover, the study provided some significant indicators for the existence of a relationship between the leaders' traits and the followers' effects in the leadership process model that supports the leadership research efforts to provide more consistent and integrated results for the leadership phenomenon. The overall findings are believed to add to our understanding of the current theoretical and professional debates in the leadership domain. A further discussion of the overall findings and its theoretical and empirical implications are presented in the following chapter.

Chapter Six: Study Conclusion

This chapter concludes the current study by providing a summarised view through the entire study conduction and its main results. This includes a discussion of the findings and how it contributes in answering the research questions and achieving its objectives. Consequently, the chapter starts by presenting an overview of the main findings of the current research. Following that, a discussion of the implications of the research findings on both the theoretical and professional domains is presented. At the end of this chapter, the research limitation, conclusion and future recommendations are discussed.

1. A brief overview of the overall research findings

Individuals in their engagement in everyday behaviours express their feelings, values and self-concepts. People do things because this is what they are, and by acting in one way or another they affirm their established identities (Shamir et al., 1993). This crucial role that the individuals' identity levels play in deciding the way in which they behave, has inspired scholars over several decades of research (Tuncdogan et al., 2017). Leaders' traits have received a considerable amount of research in leadership literature, and yet scholars still report a lack of integration between research in traits and leadership behaviours (Tuncdogan et al., 2017). This lack is obvious both within and across the traits and behavioural typologies, as a result of the uniaxial focus of the leadership scholars on either the trait or behavioural perspectives (Derue et al., 2011)[12]. The current study examined the effects of both the identity levels and regulatory theory on different leadership behaviours. The first research question aimed to investigate how the leaders' levels of identity influences their adoption of various leadership behaviours. The hypotheses of this research were built in line with the social cognition school of thought in which individuals rely on their self-system for processing their environment information and the regulation of their leadership behaviours (Bandura, 1986). Based on the self-consistency and verification theories, the individuals' views of self-influence on their recognition of their environment and behaviours (McCall and Simmons, 1966, Swann, 1990). The overall findings of this research significantly supported the predictions of the self-consistency theory by indicating that leaders who are collectively oriented show hierarchy in their behaviours from transformational to passive leadership behaviours (e.g., management-

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[12] Most of the existing studies that link between leader identities and behaviours focus on group-based identity. More research is still required to examine the correlation between the different levels of identity and leadership behaviours (Johnson et al., 2012).

by-exception). Conversely, leaders who hold individual based identity tend to show hierarchy in their manifestation of leadership behaviours from the passive forms to transformational leadership behaviours.

The first research question also included an investigation of the influence of leaders' regulatory orientation on their manifestation of different leadership behaviours. The hypotheses for this part of the question were built based on Higgins (1997) and Higgins (1998) proposition of the two different processes through which people are motivated to approach pleasure and avoid pain. That is, people's motivation to act is derived from one or two distinct motivation or self-regulatory systems: namely, promotion focus (approach pleasure) and prevention focus (avoid pain). These two different foci are thought to have a substantial influence on the people's behaviour and performance, as they affect the individuals' strategies to attain goals, and or, avoid barriers that hinder their efforts in achieving these goals (Lanaj et al., 2012). The mechanism that underpins the influence of individuals' chronic regulatory on their behaviours and attitudes is centralised on the idea of regulatory fit (Higgins, 2000). The concept of fit refers to the relationship between an individual's regulatory focus or orientation towards an activity and the means used to pursue such an action (Higgins, 2002). Regulatory fit makes people feel right about what they are doing, and become more engaged in activities that maintain that feeling (Higgins, 2000). Scholars supported this notion of fit by disclosing that individuals with a promotion focus tend to go beyond the routine activities and risk-taking, than those with prevention focus who are more inclined to preserve the status quo through their involvement in regular activities and risk avoidance (Scholer et al., 2010, Tuncdogan et al., 2017). From the findings of the current study, it's evident that the leaders' regulatory focus substantially influences their manifestation of different leadership behaviours, such that, promotionally oriented leaders are more inclined to

adopt transformational leadership behaviours that reflect their orientation to go beyond routine activities and achieve their potentials. Conversely, those with prevention focus are more inclined to adopt directive leadership behaviours that aim to preserve the status quo.

The second question for this research was to examine the interactions between the leaders' individual differences and perceptions of followers and how it influences their manifestation of the different leadership behaviours. The hypotheses pertaining this question were built based on the perception behaviour model, which indicates that the underlying cognitions of a particular behaviour stem not only from internal sources of motivation but also from external sources (Bargh, 1997). The overall findings of this research have indicated positive interactions between the leaders' individual characteristics and perceptions of followers. It is evident from the results that one's perceptions of others are not independent of his/her individual characteristics. That is, the leaders' individual traits significantly participate in the formation of their perceptions of followers and how they trait them accordingly. Particularly, the results have indicated that leaders who hold collective and promotion orientation tend to positively perceive their followers which in turn has positive consequential effects on their adoption of transformational leadership behaviours. On the other hand, the salience of leaders' prevention orientation positively associates with their anti-prototypical view of their followers and adoption of management-by-exception leadership behaviours. Importantly the results from this study disclose a direct correlation between the salience of the leaders' individual identities and their engagement in directive forms of leadership behaviours (i.e., task orientations, contingent rewards and management-by-exception) regardless the assumptions of the followers.

The third question for this research extends the study to include the followers' side of the leadership process. Particularly, the study aimed at examining the interactions between the followers' regulatory focus, their perception of the leadership behaviours and how this influences their attitudes and work-related behaviours. The hypotheses for this research question were built based on the chronic self-regulatory theory and the idea of fit as stated by Higgins (1998) and Higgins (2000). Particularly, we examined the followers' regulatory focus as a moderator on the relationships between the leaders' behaviours and followers' attitudes and work behaviours. The ultimate results rejected the moderation of followers' chronicle regulatory focus on the relationships between the leadership behaviours and the followers' work-related attitudes and behaviours. This necessitated reconsidering these relationships in different theoretical bases. Particularly, we considered the recent criticisms that leadership scholars attribute to the study of leadership as part of the inability to differentiate between the actual leadership behaviours and the measurement of the followers' perceptions of leadership (Hansbrough et al., 2015). Scholars address that the followers' perceptions indicate their subjective evaluation of their attitudes towards leaders, rather than the actual leadership behaviours (Lee et al., 2015). Further, this study measures the followers' regulatory focuses as stable (chronic) traits rather than situational induced states, that influence the individuals' perceptions of their environment (Bandura, 1986, McCall and Simmons, 1966). Consequently, the ultimate results indicated a higher order influence of the followers' regulatory focuses on their perceptions of leadership behaviours and the formation of their work-related attitudes and behaviours. Promotionally oriented individuals' perception of transformational leadership enhances their development of inner belief in the values of the changes in their organisational context (i.e., affective commitment to change) and reduces their fear from not supporting these changes (i.e.,

continuance commitment to change). Conversely, individuals' prevention orientation negatively influences their continuance commitment to change when they perceive management-by-exception leadership behaviours, which support the idea of misfit during the times of instability (Stam et al., 2016).

The results also indicate a positive association between individuals' regulatory focuses and their work-related behaviours (i.e., OCB, CWB, and in-role performance). Individuals' promotion orientation positively affects their perception of transformational leadership behaviours, OCB and in-role performances, and reduces their CWB. Further, the results provided a positive indication of the mediation of the perception of transformational leadership behaviours on the relationship between individuals' promotion focus and their engagement in organisational citizenship behaviours. The salience of individuals' prevention orientation increases their perception of passive leadership behaviours (i.e., management-by-exception), in-role performances and CWB and reduces their OCB. Further, the individuals' prevention orientation influences their work-related behaviours (CWB and in-role performance) through their perception of management-by-exception.

The fourth question in this study aimed at examining the relationship between the leaders' traits and their followers' attitudes and work behaviours. The hypotheses for this part of the study were built based on the idea that various communal motives underlying the leaders' individual characteristics induce them to adopt different correspondent leadership behaviours that have consequential effects on the followers' attitudes and work-related behaviours (Choi, 2011, Herold et al., 2008, Johnson et al., 2012). Importantly, the study has revealed several indicators for a positive association between the leaders' individual traits and their followers' attitudes and work-behaviours. Specifically, the study results have indicated the positive effects of the

leaders' collective identity on affective commitment to change, OCB and transformational leadership behaviours. Importantly the examination of the indirect effect of collective identity on their followers' attitudes and work behaviours through transformational leadership behaviours has indicated a positive mediation on the relationship with affective commitment to change and OCB and a negative one with CWB. On the other hand, the salience of leaders' individual identity enhances followers' development of continuance commitment to change and reduce their engagement in counterwork behaviours through their perception of management-by-exception. The study has also extended the examination to include examining the direct and indirect relationships between the leaders' promotion focus and their followers' attitudes and work-behaviours. The estimations have also indicated positive direct relationships with affective C2C, CWB and OCB. It is also evident from the results that transformational leadership behaviours positively mediate the relationships between the leaders' promotion orientation and their followers' attitudes and work-behaviours. The salience of leaders' prevention orientation reduces their followers' engagement in counterwork behaviours and organisational citizenship behaviours and increases their development of continuance commitment to change.

2. Theoretical and empirical implications

The current study adopts different theories from psychology and leadership domains to provide a further understanding of the drivers of different leadership behaviours and employees' work-related attitudes and behaviours. Specifically, the study established its hypothesised relationships based on four main theories: namely, chronic regulatory theory, identity theory, leaders' implicit followership, and the leadership behaviours theories. The overall findings of the study explained above mostly support the theoretical prediction from these theories as explained in the following sections.

2.1 The implications for chronic regulatory theory

The study results highly supported the notion of regulatory fit which implies that individuals tend to use the means that matches with their regulatory orientations. As such, promotionally oriented leaders hold a higher tendency to behave in a more inspirational and motivational manner and participate in exploration activities and are more inclined to take risks (Higgins, 2005). Apparently, these predictions are supported by the study results that disclosed a significant relationship between the leaders' promotion orientation and transformational leadership behaviours. On the other hand, the idea of fit predicts that those who are preventional oriented have a higher tendency to protect the status quo and get involved in conservative leadership behaviours. Significantly, the study results disclosed a significant relationship between prevention orientation and the leaders' adoption of directive leadership behaviours (i.e., task orientation, contingent rewards and management-by-exception).

Additionally, the study results also hold a significant implication on the process through which the leaders' motivational orientation induces different leadership behaviours. Particularly, the results indicated a positive mediation role of the leaders' prototypes (positive implicit assumptions of followers) on the relationship between promotion orientation and transformational leadership behaviours. Further, the findings revealed a positive and complete mediation of the leaders' anti-prototypes (negative implicit assumptions of followers) on the relationship between prevention orientation and management-by-exception leadership behaviours. Importantly, the results of estimating the relationships between individuals' regulatory orientations and their perceptions of leadership behaviours have indicated a higher order influence of individuals' chronic regulatory focuses on the formation of their perceptions of different leadership behaviours. These results contribute to our understanding of the relationships between

the individuals' chronicle traits, perceptions, attitudes and behaviours on one side, and the process through which individuals chronicle characteristics induce their behaviours on the other.

2.2 The implications on identity theory

The identity theory address how individuals define themselves relative to others. Importantly, the theory indicates that individuals tend to represent themselves at different levels of analysis and each of these levels has its distinct influence on one's motivation (Cooper and Thatcher, 2010) and perceptions of situations and behaviours (Ashforth and Schinoff, 2016, Johnson et al., 2012). Importantly, research in psychology has indicated that individuals tend to behave in a way that verifies their views of themselves in order to maintain consistency in their identity standards (Swann, 1990). Accordingly, it's theoretically established that the salience of collective identity induces leaders to adopt transformational leadership behaviours in order to maintain consistency between their collective self and leadership behaviours. On the other hand, the salience of individuals' identities induces leaders to adopt more directive form of leadership behaviours in order to maintain congruency between the individuals' (idiosyncratic) view of self and their leadership behaviours. Importantly, the estimation results significantly supported this prediction by indicating that the salience of collective identity induces leaders to act in a more transformational way and that individual identity salience induces the leaders' adoption of directive leadership behaviours.

Moreover, the results have revealed a direct relationship between leaders' levels of identities and their engagement in different leadership behaviours regardless of the assumptions that they hold about their followers. This is apparent from the partial mediation of the leaders' prototypes (i.e., positive assumptions) of their followers on the

relationship between the salience of collective identity and transformational leadership behaviours. Moreover, the salience of leaders' individual identity maintained a direct effect on the directive leadership behaviours regardless of the assumptions that they hold about their followers, such that LIF do not show any significant moderation or mediation effects on the relationship between individual identity and directive leadership behaviours.

2.3 The implication on the LIF theory

The leaders' implicit followership theory refers to the leaders' conceptions and judgements of the traits and characteristics of their follower. The study of LIF can enhance our understanding of the leader-followers interpersonal dynamics by explaining how the leaders' conceptions shape their judgement of and behaviours towards their followers (Uhl-Bien et al., 2014). Importantly, scholars have identified indirect, unconscious influences of one's perceptions of others (i.e., cognitive representation of others) on behaviours (Gawronski et al., 2006, Macrae and Bodenhausen, 2000), even though leadership scholars have not provided an explanation of how LIF fits within the leadership process. Accordingly, the current study unveiled several aspects that reflect a significant role of LIF in the leadership process. Significantly, none of the hypothesised moderation roles of LIF in the leadership process model have received any statistical support. Literature in psychology has revealed that one's self-knowledge defines their interpretation of their social environment, interactions and behaviours (Shamir and Eilam, 2005, Johnson et al., 2012). This indicates that one's chronicle characteristics are precursors of the conceptions of their social environment and that LIF mediates the relationships between the leaders' individual differences and the leadership behaviours. Importantly, the study results highly supported this prediction by unveiling;

- A significant mediation of the leaders' positive LIF on the relationship between collective identity and transformational leadership behaviours.

- A significant mediation of leaders' positive LIF on the relationship between the leaders' promotion focus and transformational leadership behaviours.

- A significant mediation of leaders' negative LIF on the relationship between the leaders' prevention focus and management-by-exception.

These results explain the substantial role of LIF on the leadership process, by contributing to explaining the process in which the leaders' individuals' differences induces different leadership behaviours. This is apparent in the full mediation of LIF in some relationships between the leader's chronicle traits and leadership behaviours (i.e., the relation between prevention orientation and management-by-exception).

2.4 The implication of leadership behaviour.

Recent literature urges the importance of more research that integrates both traits and leaders' behaviours (Johnson et al., 2012, Tuncdogan et al., 2017). This stems from the need to identify the reasons behind the leaders' engagement in different leadership behaviours (Johnson et al., 2012). Drawing on the identity, chronic regulatory and leaders' implicit followership theories, this study examined the different effects of leaders levels of identity in his/her adoption of the various leadership behaviours. Importantly, the results indicated a significant influence of one's different levels of identity and regulatory orientations on their adoption of different leadership behaviours. Particularly, the study results contribute to our understanding of the motivational bases behind the leaders' adoption of collectivistic leadership behaviours (i.e., transformational leadership behaviours) through unveiling its positive association with leaders' collective orientation (i.e., collective self, promotion orientation and positive

prototypes). On the other hand, the results indicated that leaders' individual orientations (i.e., individual self, prevention orientation and anti-prototypes of followers) contribute in their adoption of directive forms of leadership behaviours (i.e., task orientation, contingent rewards and management-by-exception). Furthermore, the study also explained how individuals' internal and external motives interact and induce different leadership behaviours. This is apparent in the study results that support the mediation role of LIF on the relationships between leaders' individual characteristics and their manifestation of different leadership behaviours.

Furthermore, the study results through unveiling the higher order influence of the followers' chronic regulatory orientations on their perceptions of different leadership behaviours, support the recent debate in leadership literature concerning the necessity of separating the actual perception of leadership behaviours (Hansbrough et al., 2015, Behrendt et al., 2017). Specifically, leadership scholars have tended to study the leadership phenomenon by measuring the perception of different leadership behaviours and how it induces different followers' work-related attitudes and behaviours directly and via the interaction with the followers' individual characteristics (Carter et al., 2013, Carter et al., 2014, Choi, 2011, Hamstra et al., 2011). This study, however, discloses that the perceptions of leadership behaviours are subject to be influenced by the followers' characteristics, and therefore, differ from the actual leadership behaviours. Thus, the study supports the recent literature presented by Lee et al. (2015) and Behrendt et al. (2017) that urge for the necessity to reconsider the study of the relationships between the perceptions of leadership behaviours and work-related attitudes, and behaviours both in terms of their theoretical foundations and causality effects.

3. Empirical implications

This study alongside research in cognitive psychology and leadership focuses on understanding the way leaders and followers think and process information; this includes the study of the self-concept and implicit leadership theories (Avolio et al., 2009). Importantly, literature in psychology revealed that self-knowledge forms the way in which individuals perceive their context and behave accordingly. Understanding the relationships between one's levels of self and how it induces different leadership behaviours, therefore, significantly contributes to our understanding of leadership effectiveness and development. The findings from this research alongside the existing research (Johnson et al., 2012) indicated that certain levels of self that correlate positively with the leaders' manifestation of different leadership behaviours might positively or negatively correlate with leadership effectiveness. Consequently, these results are believed to substantially contribute to leadership development (Avolio et al., 2009), in terms of, the development of a particular level of one's self to increase his/her adoption of certain leadership behaviours that are necessary for being effective in a particular situation or context.

The findings from this study significantly supported the positive role that the salience of leaders' collective identity and promotion orientation play in inducing positive forms of leadership behaviours such as transformational and task-oriented leadership behaviours. This reveals that developing these aspects in the leaders' recognition of self positively plays an important role in their leadership effectiveness. Rather, the results showcase important indications of the influence of the leaders' individual differences on the perception of their followers, which subsequently influences their leadership behaviours. Therefore, the results unveiled a positive correlation between the leaders' promotion (prevention) orientations and their positive (negative) perceptions of their

followers. These results hold a subsequent implication for understanding and developing the leader-followers relationship quality that significantly influences the leadership process and outcomes (Cogliser et al., 2009, Joiner and Leveson, 2015, Kang et al., 2011).

Moreover, the findings from this research extend to include unveiling the relationships between the followers' chronicle regulations and the perception of leadership behaviours and their work-related attitudes and behaviours. Significantly, the estimations indicated that followers' perceptions of the leadership behaviours are a function of their motivational orientations. This particular result holds substantial empirical implication for leadership development and effectiveness in the workplace, having that leadership effectiveness correlates not only with how leaders behave but also with how their followers perceive and react to these behaviours (Tuncdogan et al., 2015, Choi, 2011). Accordingly, developing followers' motivational orientation in the workplace contributes to their receptivity and reactions to different forms of leadership behaviours which influences their work-related attitudes and behaviours accordingly. Analogous with Lord and Hall (2005) who assert that leadership development significantly depends on the individuals' differences or knowledge structures that define their desires, tendencies and receptivity of information, these study findings shed light on some aspects of the leaders' individuals' differences that are considered necessary for the adoption of different leadership behaviours.

4. Limitations and future research recommendations

This research examined leadership as a process type model that provided significant theoretical and empirical implications. However, it is worth referring to some aspects that might have affected the ultimate results obtained from the current study, and that

must be considered in future research. Firstly, the study has relied on a self-rating survey which is significantly prone to social bias. Although the study anticipated for such expected bias in data collection and analysis by controlling the individuals' social desirability, future researchers would benefit more from collecting their data by using different sources that significantly contribute in avoiding data bias. The second limitation of this study is the reliance on two separate samples of data collection in order to assess a process type model. Importantly, future research would benefit more from assessing such models by relying on team-level/dyad data with which the relationships between the distal, proximal and outcomes aspects of the leadership process model could be directly and accurately assessed. Although the study considered this issue in the third study, the small sample size for the team level data raises some concerns about the significance of the results and this is a matter that the future research should consider. Third, the analysis unveiled a limitation in the study anticipation for the contextual factors and causal process, particularly in the relationships between individual differences and leadership behaviours. This limitation significantly affected the study estimations that have resulted in a high percent of hypothesis rejection. The supplementary analysis revealed the importance of considering more mediators on the relationships between individuals' differences and leadership behaviours. Consequently, it is highly recommended for future research to consider more contextual and causal process factors when testing the relationships between individual differences and leadership behaviours.

5. Overall Conclusion

This study is designed to examine the leadership phenomenon in a process type model. The conduction of this research has gone through three different research stages. At the first stage, the study questioned the consequential effects of the variations in leaders'

levels of identity and motivational orientation on their manifestation of different leadership behaviours. The estimation results revealed a significant role of the leaders' levels of identity and motivational orientation on their adoption of different leadership behaviours. Specifically, the results indicated that leaders who hold collective and promotional orientations are much more involved in collective forms of leadership behaviours (i.e., transformational leadership). Conversely, the salience of individual and prevention orientation in the leaders' identity substantially influenced their adoption of directive forms of leadership behaviours (i.e., task orientation, contingent rewards and management-by-exception). Another important aspect that the study investigated at this stage is related to the interactions between leader-followers and how this induces different leadership behaviours. Importantly, the results indicated that the leaders' characteristics significantly determines the way in which they perceive and behave towards their followers, such that the salience of collective and promotion orientation in the leader's identity significantly contributes in the leader's formation of positive assumptions of their followers and the adoption of transformational leadership behaviours. On the other hand, when leaders hold prevention and individual-focused identity, they tend to negatively perceive their followers and adopt an authoritative form of leadership behaviours.

At the second stage, this study investigated the consequential effects of the interactions between the followers' motivational orientations and their perceptions of different leadership behaviours on the formation of their attitudes and work-related behaviours. Importantly, the estimation results indicated a higher order influence of the individuals' regulatory orientations on the formation of their perceptions of different leadership behaviours, and their attitudes and work-related behaviours accordingly. Specifically, the ultimate results indicated that individuals' promotion orientation positively

participates in the formation of their affective commitment to change and OCB through the perceptions of transformational leadership behaviours. On the other hand, individuals who are preventional oriented develop continuance commitment to change and reduce their involvement in counterwork behaviours through the experience of management-by-exception leadership behaviours (MbEx as the mediator).

At the third stage, the study questioned about the interactions between the leaders' psychological characteristics and assumptions and their followers' attitudes and behaviours. Importantly, the estimations at this stage of research have revealed the existence of positive interactions between the leaders' characteristics and the formation of their followers' attitudes and behaviours via the perceptions of different leadership behaviours. Specifically, the results have indicated that the salience of leaders' collectivistic characteristics (i.e., collective self, promotion orientations, positive assumptions of followers) enhances the followers' development of affective commitment to change and engagement in OCB, and reduces their involvement in CWB through the perception of transformational leadership behaviours. On the other hand, the salience of leaders' individualistic characteristics (i.e., individual self, prevention orientation and negative assumptions of followers) enhances the followers' development of continuance commitment to change and reduces their involvement in CWB and OCB through the perception of management-by-exception leadership behaviours. These results substantially contributed to our understanding of the interactions between the leaders' identity and followers' proximal effects and leadership outcomes[13]. This research aimed to depict the relationship between the leaders' individual differences and leadership behaviours and their followers' attitudes and work-related outcomes. Drawing on identity, chronic regulatory, leaders' implicit

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[13] Summarised summary of the research findings is located in Appendix 2 table 51

followership, leadership and attitude theories, the study tested several hypotheses that aim to advance our understanding of the precursors of leadership behaviours as well as the formation of their followers' attitudes and work-related outcomes.

To sum up, the overall findings from this research significantly supported the theoretical predictions, particularly those concerning the influence of leaders' individual differences in their leadership behaviours and contextual perceptions. Specifically, the results supported a significant role of the leaders' collective identity and promotion orientation on their adoption of transformation leadership behaviours. Further, the leaders' engagement in directive forms of leadership behaviours (i.e., task orientation, contingent rewards and management-by-exception) was found to be highly correlated with the salience of individual-level of identity and prevention focus orientation. This study findings also supported the significant role of the individuals' identity and chronicle orientation on the formation of their implicit assumptions of followers (LIF). Particularly, the study supported a positive association between the salience of leaders' collective self and promotion orientation on his/her formation of positive assumptions of followers, as well as, developing a positive relationship between the salience of prevention orientation and the formation of negative assumptions of followers. Thus, the study results supported a mediation rather than moderation role of LIF on the relationships between leaders' traits and behaviours.

Moreover, the findings obtained from estimating the relationships between the perceptions of leadership behaviours and the followers' regulatory focus and their work-related attitudes and behaviours have revealed a superior influence of the followers' chronicle orientations on the formation of their perception of leadership behaviours and work-related attitudes and outcomes. The study findings have several theoretical and empirical implications, among them, a reconsideration of the study of followers' traits

and perceptions of leadership behaviours should be considered. This would benefit more from the recent leadership literature recommendations for distinguishing between the perception and the actual leadership behaviours in the study of leadership phenomenon (Behrendt et al., 2017, Lee et al., 2015). Empirically, this research indicated how the individuals' variation in their self-conception and motivational orientations correlates with the different leadership behaviours.

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Appendixes

Index 1

Analysis Results

Table 47: Iteration Criterion Table (study 1)

ITERATION NUM	Iteration 0	Iteration 1	Iteration 2	Iteration 3	Iteration 4	Iteration 5	Iteration 6	Iteration 7	Iteration 8	Iteration 9
CRL1	0.21	0.202	0.203	0.202	0.202	0.202	0.202	0.202	0.202	0.202
CRL2	0.21	0.207	0.207	0.207	0.207	0.207	0.207	0.207	0.207	0.207
CRL4	0.21	0.224	0.225	0.225	0.225	0.225	0.225	0.225	0.225	0.225
CRL5	0.21	0.138	0.14	0.14	0.14	0.14	0.14	).14	0.14	0.14
CRL6	0.21	0.244	0.242	0.242	0.242	0.242	0.242	0.242	0.242	0.242
CRL7	0.21	0.242	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
IDCOLL1	0.32	0.314	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
IDCOLL2	0.32	0.242	0.252	0.251	0.252	0.252	0.252	0.252	0.252	0.252
IDCOLL3	0.32	0.416	0.414	0.414	0.414	0.414	0.414	0.414	0.414	0.414
IDCOLL4	0.32	0.286	0.285	0.285	0.285	0.285	0.285	0.285	0.285	0.285
IDIND1	0.327	0.273	0.279	0.28	0.28	0.28	0.28	0.28	0.28	0.28
IDIND2	0.327	0.416	0.414	0.413	0.413	0.413	0.413	0.413	0.413	0.413
ID_IND3	0.327	0.356	0.354	0.355	0.355	0.355	0.355	0.355	0.355	0.355
ID_IND4	0.327	0.254	0.253	0.252	0.251	0.251	0.251	0.251	0.251	0.251
LIF_N1	0.204	0.252	0.25	0.251	0.251	0.251	0.251	0.251	0.251	0.251
LIF_N2	0.204	0.207	0.208	0.208	0.208	0.208	0.208	0.208	0.208	0.208
LIF_N3	0.204	0.313	0.308	0.308	0.308	0.308	0.308	0.308	0.308	0.308
LIF_N4	0.204	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088	0.088
LIF_N5	0.204	0.185	0.186	0.186	0.186	0.186	0.186	0.186	0.186	0.186
LIF_N6	0.204	0.175	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
LIF_P2	0.235	0.171	0.177	0.178	0.178	0.178	0.178	0.178	0.178	0.178
LIF_P4	0.235	0.46	0.443	0.441	0.441	0.441	0.44	0.44	0.44	0.44
LIF_P6	0.235	0.297	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
LIFT_P3	0.235	0.119	0.121	0.122	0.122	0.122	0.122	0.122	0.122	0.122
MBEX1	0.284	0.257	0.256	0.256	0.256	0.256	0.256	0.256	0.256	0.256
MBEX2	0.284	0.335	0.336	0.336	0.336	0.336	0.336	0.336	0.336	0.336
MBEX3	0.284	0.259	0.248	0.247	0.247	0.247	0.247	0.247	0.247	0.247
MBEX4	0.284	0.281	0.292	0.291	0.291	0.291	0.291	0.291	0.291	0.291
RFPRO2	0.303	0.258	0.262	0.262	0.262	0.262	0.262	0.262	0.262	0.262
RFPRO3	0.303	0.375	0.368	0.369	0.369	0.369	0.369	0.369	0.369	0.369
RFPRO4	0.303	0.331	0.336	0.336	0.336	0.336	0.336	0.336	0.336	0.336
RFPRO5	0.303	0.247	0.245	0.245	0.245	0.245	0.245	0.245	0.245	0.245
RFPRV2	0.556	0.462	0.453	0.452	0.452	0.452	0.452	0.452	0.452	0.452
RFPRV3	0.556	0.645	0.654	0.655	0.655	0.655	0.655	0.655	0.655	0.655
LIF_P1	0.235	0.117	0.127	0.127	0.127	0.127	0.127	0.127	0.127	0.127

Table 48: Cross loading for leaders' sample (study 1)

	TrL	ID_Coll	ID_Ind	LIF_Negative	LIF_positive	MbEx	RF_PRO	RF_PRV
CrL2	0.803	0.542	0.149	-0.228	0.476	-0.02	0.416	-0.214
CrL4	0.839	0.611	0.198	-0.323	0.379	-0.025	0.351	-0.188
CrL5	0.7	0.419	0.173	-0.126	0.316	-0.028	0.253	-0.005
CrL6	0.845	0.629	0.208	-0.394	0.41	-0.135	0.356	-0.269
CrL7	0.823	0.629	0.278	-0.441	0.393	-0.086	0.29	-0.229
IdColl1	0.528	0.808	0.12	-0.368	0.283	-0.219	0.277	-0.141
IdColl2	0.445	0.641	0.213	-0.398	0.25	-0.112	0.391	-0.229
IdColl3	0.723	0.872	0.14	-0.337	0.446	-0.142	0.341	-0.191
IdColl4	0.491	0.797	0.196	-0.24	0.186	-0.061	0.308	-0.123
IdInd1	0.233	0.221	0.692	-0.044	0.171	0.159	0.237	0.014
IdInd2	0.167	0.175	0.844	0.077	0.055	0.342	0.108	0.218
Id_ind3	0.286	0.161	0.752	0.03	0.125	0.173	0.09	-0.006
Id_ind4	0.064	0.043	0.757	0.065	-0.113	0.233	0.032	0.273
Lif_N1	-0.365	-0.364	-0.122	0.773	-0.303	0.213	-0.295	0.246
Lif_N2	-0.291	-0.315	0.114	0.819	-0.507	0.231	-0.224	0.353
Lif_N3	-0.439	-0.384	0.051	0.848	-0.398	0.237	-0.163	0.482
Lif_N4	-0.116	-0.252	0.201	0.715	-0.29	0.253	-0.099	0.402
Lif_N5	-0.267	-0.3	0.084	0.831	-0.47	0.24	-0.278	0.392
Lif_N6	-0.275	-0.392	0.028	0.876	-0.412	0.289	-0.261	0.38
Lif_P2	0.333	0.294	0.045	-0.48	0.799	-0.079	0.358	-0.227
Lif_p4	0.446	0.331	0.1	-0.34	0.914	-0.195	0.291	-0.197
Lif_p1	0.322	0.279	0.045	-0.464	0.779	-0.056	0.238	-0.178
Lif_p6	0.503	0.397	0.096	-0.461	0.85	-0.133	0.279	-0.354
Lift_p3	0.373	0.302	0.03	-0.477	0.832	-0.054	0.289	-0.21
MbEx1	-0.042	-0.179	0.195	0.29	-0.12	0.857	-0.088	0.17
MbEx2	-0.047	-0.163	0.295	0.258	-0.199	0.921	-0.099	0.197
MbEx3	-0.029	-0.103	0.332	0.226	-0.006	0.858	0.033	0.127
MbEx4	-0.153	-0.163	0.254	0.262	-0.187	0.889	-0.069	0.151
Rfpro2	0.302	0.305	0.256	-0.183	0.238	-0.009	0.811	-0.088
Rfpro3	0.37	0.424	-0.018	-0.222	0.321	-0.132	0.816	-0.112
Rfpro4	0.398	0.374	0.157	-0.279	0.313	-0.044	0.858	-0.203
Rfpro5	0.274	0.219	0.15	-0.226	0.23	-0.017	0.812	-0.179
Rfprv2	-0.212	-0.137	0.037	0.313	-0.242	0.102	-0.045	0.867
Rfprv3	-0.224	-0.238	0.221	0.489	-0.263	0.216	-0.247	0.928

Subordinates sample analysis results

Table 49: Stop Criterion for subordinates' sample (study 2)

	Iteration 0	Iteration 1	Iteration 2	Iteration 3	Iteration 4	Iteration 5	Iteration 6	Iteration 7	Iteration 8	Iteration 9	Iteration 10
Af-C2C-1	0.21	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
Af-C2C-2	0.21	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Af-C2C-3	0.21	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Af-C2C-4	0.21	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
Af-C2C-5	0.21	0.14	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Af-C2C-6	0.21	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
C-C2C-1	0.25	0.36	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
C-C2C-2	0.25	0.27	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
C-C2C-3	0.25	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
C-C2C-5	0.25	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
C-C2C6	0.25	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
CWB-1	0.22	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
CWB-2	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
CWB-3	0.22	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
CWB-4	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
CWB-5	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Con-R-1	0.4	0.42	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43
Con-R-2	0.4	0.4	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
Con-R-3	0.4	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
L-Cr-1	0.17	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
L-Cr-2	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
L-Cr-3	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
L-Cr-4	0.17	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
L-Cr-5	0.17	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
L-Cr-6	0.17	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
L-Cr-7	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
MbyEx-1	0.28	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
MbyEx-2	0.28	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
MbyEx-3	0.28	0.31	0.31	0.31	0.32	0.32	0.32	0.32	0.32	0.32	0.32
MbyEx-4	0.28	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
OCB-1	0.41	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34
OCB-2	0.41	0.34	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
OCB-4	0.41	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Perf-1	0.25	0.26	0.26	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
Perf-2	0.25	0.3	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Perf-3	0.25	0.21	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Perf-4	0.25	0.32	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Perf-5	0.25	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
RF-Prv-1	0.4	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43
Rf-Pro-2	0.4	0.37	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
Rf-Pro-4	0.4	0.48	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47
Rf-Pro-5	0.4	0.35	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36

Rf-Prv-4	0.4	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54
Rf-Prv-5	0.4	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Socia-1	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Socia-3	0.31	0.24	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Socia-4	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Socia-5	0.31	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
T-Or-1	0.34	0.41	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
T-Or-2	0.34	0.37	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
T-Or-3	0.34	0.24	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
T-Or-4	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34
Turn-1	0.41	0.48	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47
Turn-2	0.41	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47
Turn-3	0.41	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Weng-1	0.39	0.42	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
Weng-2	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
Weng-4	0.39	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36

Table 50: Cross loading for subordinates' sample model (study 2)

	Af_C2C	C-C2C	CWB	Con_R	L_Cr	MbyEx	OCB	Perf_	RF_Pro_	RF_prv	Socia	T_Or
Af-C2C-1	0.87	-0.36	-0.17	0.4	0.51	-0.01	0.34	0.34	0.42	0.02	-0.07	0.33
Af-C2C-2	0.9	-0.33	-0.05	0.41	0.51	-0.03	0.36	0.29	0.46	0.04	-0.08	0.26
Af-C2C-3	0.62	-0.55	-0.39	0.14	0.17	-0.31	-0.06	0.28	0.2	-0.31	-0.43	0.08
Af-C2C-4	0.9	-0.39	-0.02	0.46	0.54	0.07	0.34	0.25	0.41	0.07	-0.01	0.34
Af-C2C-5	0.6	-0.47	-0.48	0.11	0.15	-0.27	0.09	0.38	0.34	-0.38	-0.46	0.18
Af-C2C-6	0.75	-0.62	-0.4	0.21	0.31	-0.19	0.13	0.33	0.3	-0.27	-0.35	0.26
C-C2C-1	-0.48	0.81	0.11	-0.17	-0.22	0.22	0.04	-0.09	-0.06	0.3	0.22	-0.03
C-C2C-2	-0.48	0.83	0.24	-0.24	-0.31	0.02	-0.14	-0.16	-0.15	0.07	0.16	-0.11
C-C2C-3	-0.35	0.78	0.32	-0.06	-0.08	0.13	0.09	-0.11	0.01	0.22	0.26	-0.05
C-C2C-5	-0.41	0.86	0.27	-0.11	-0.13	0.2	0.14	-0.08	-0.02	0.31	0.34	0
C-C2C6	-0.28	0.72	0.18	-0.06	-0.09	0.04	0.05	-0.04	0	0.16	0.15	-0.03
CWB-1	-0.22	0.18	0.91	-0.23	-0.2	0.4	-0.15	-0.58	-0.3	0.37	0.64	-0.39
CWB-2	-0.25	0.29	0.92	-0.2	-0.19	0.36	-0.15	-0.59	-0.31	0.47	0.7	-0.38
CWB-3	-0.22	0.24	0.92	-0.15	-0.17	0.36	-0.14	-0.61	-0.28	0.4	0.72	-0.36
CWB-4	-0.14	0.27	0.91	-0.08	-0.12	0.39	-0.07	-0.54	-0.24	0.51	0.72	-0.28
CWB-5	-0.26	0.22	0.91	-0.27	-0.24	0.35	-0.24	-0.65	-0.38	0.37	0.67	-0.44
Con-R-1	0.41	-0.2	-0.11	0.85	0.59	-0.02	0.29	0.39	0.43	-0.03	-0.15	0.57
Con-R-2	0.26	-0.02	-0.29	0.79	0.44	-0.07	0.36	0.41	0.49	0.06	-0.21	0.51
Con-R-3	0.35	-0.22	-0.12	0.87	0.57	-0.1	0.33	0.32	0.42	-0.03	-0.22	0.47
L-Cr-1	0.33	-0.12	0	0.47	0.79	-0.16	0.25	0.11	0.21	0.01	-0.05	0.17
L-Cr-2	0.43	-0.19	-0.1	0.49	0.9	-0.19	0.39	0.24	0.3	-0.03	-0.19	0.33
L-Cr-3	0.41	-0.24	-0.29	0.49	0.8	-0.17	0.42	0.43	0.42	-0.14	-0.3	0.5
L-Cr-4	0.41	-0.11	-0.16	0.58	0.9	-0.17	0.41	0.3	0.41	-0.01	-0.2	0.4
L-Cr-5	0.49	-0.22	-0.15	0.58	0.92	-0.12	0.42	0.37	0.41	0.02	-0.2	0.48
L-Cr-6	0.48	-0.19	-0.31	0.61	0.86	-0.29	0.48	0.54	0.58	-0.14	-0.34	0.5
L-Cr-7	0.5	-0.3	-0.14	0.6	0.85	-0.18	0.35	0.36	0.42	-0.06	-0.23	0.47
MbyEx-1	0.03	0.12	0.29	-0.04	-0.14	0.89	0.03	-0.26	-0.17	0.58	0.49	-0.02
MbyEx-2	0	0.11	0.34	-0.16	-0.02	0.81	0.05	-0.28	-0.18	0.53	0.51	-0.07
MbyEx-3	-0.17	0.23	0.44	-0.04	-0.28	0.91	0.1	-0.33	-0.16	0.64	0.61	-0.07
MbyEx-4	-0.13	0.14	0.36	-0.05	-0.24	0.94	-0.03	-0.34	-0.29	0.69	0.55	-0.15
OCB-1	0.16	0.07	-0.14	0.23	0.29	0.11	0.75	0.33	0.35	0.13	-0.11	0.2
OCB-2	0.23	-0.06	-0.1	0.26	0.3	0.13	0.79	0.29	0.4	0.18	-0.03	0.33
OCB-4	0.32	0.07	-0.15	0.4	0.47	-0.08	0.86	0.44	0.51	0.07	-0.19	0.39
Perf-1	0.25	-0.05	-0.54	0.26	0.28	-0.2	0.36	0.83	0.48	-0.31	-0.54	0.53
Perf-2	0.33	-0.17	-0.5	0.43	0.41	-0.17	0.49	0.83	0.55	-0.2	-0.44	0.6
Perf-3	0.29	-0.05	-0.3	0.38	0.26	-0.38	0.26	0.72	0.47	-0.26	-0.49	0.38
Perf-4	0.37	-0.05	-0.53	0.46	0.37	-0.24	0.43	0.86	0.66	-0.2	-0.47	0.6
Perf-5	0.18	-0.2	-0.77	0.15	0.19	-0.53	0.12	0.67	0.39	-0.51	-0.81	0.33
Rf-Pro-2	0.36	-0.04	-0.24	0.41	0.4	-0.11	0.49	0.52	0.82	-0.07	-0.21	0.57
Rf-Pro-4	0.45	-0.06	-0.4	0.47	0.41	-0.28	0.45	0.7	0.86	-0.32	-0.45	0.68
Rf-Pro-5	0.34	-0.07	-0.14	0.45	0.34	-0.16	0.39	0.39	0.8	-0.19	-0.21	0.43
RF-Prv-1	-0.04	0.26	0.4	-0.03	-0.06	0.63	0.11	-0.3	-0.25	0.93	0.63	-0.22
Rf-Prv-4	-0.11	0.24	0.5	0.01	-0.04	0.69	0.12	-0.4	-0.27	0.95	0.71	-0.21

Rf-Prv-5	-0.09	0.24	0.15	0.04	-0.08	0.34	0.18	-0.01	0.07	0.57	0.26	-0.05
Socia-1	-0.25	0.21	0.6	-0.29	-0.24	0.54	-0.14	-0.63	-0.4	0.67	0.83	-0.39
Socia-3	-0.06	0.24	0.48	-0.05	-0.1	0.58	0.01	-0.35	-0.13	0.65	0.74	-0.06
Socia-4	-0.1	0.2	0.61	-0.07	-0.18	0.45	-0.05	-0.56	-0.23	0.52	0.81	-0.29
Socia-5	-0.22	0.29	0.71	-0.27	-0.28	0.44	-0.26	-0.54	-0.37	0.46	0.85	-0.36
T-Or-1	0.51	-0.19	-0.29	0.63	0.62	-0.17	0.39	0.6	0.63	-0.18	-0.32	0.75
T-Or-2	0.11	-0.07	-0.38	0.32	0.2	-0.13	0.17	0.44	0.41	-0.32	-0.32	0.76
T-Or-3	0.1	0.19	-0.19	0.25	0.21	0.11	0.31	0.34	0.39	0.01	-0.12	0.61
T-Or-4	0.15	0.02	-0.31	0.52	0.3	-0.01	0.26	0.45	0.52	-0.08	-0.25	0.76

Table 51: Table Overall summary of the research findings

Study-1	Study-2	Study-3
1. The salience of one's collective identity significantly participates in inducing a collective form of behaviours (i.e., transformational leadership). 2. the salience of one's individuals identity significantly participate in inducing authoritative (directive) forms of leadership behaviours which include task-oriented, contingent reward, and management by exception. 3- Leaders who are promotionally oriented are more involved in transformational leadership behaviours. 4- Leaders who are prevention-ally oriented are more involved in directive forms of leadership behaviours (i.e., task oriented, contingent reward, and management by exception). 5. Leaders' positive assumptions (i.e., prototype) of their followers partially mediate the relationship between collective identity and transformational leadership behaviours. 6. The salience of the leader's individual-self maintain a direct effect on directive leadership behaviours, and that LIF'S has neither moderation nor mediation effect on these relationships. 7- Leaders positive assumptions of	1.The perception of transformational leadership behaviours mediates the relationship between follower's promotion orientation and affective commitment to change, 2. The perception of management by exception moderates the relationship between prevention orientation and continuance commitment to change. 3. Promotionally oriented individuals are highly involved in organizational citizenship behaviours. 4. Promotionally oriented individuals are more receptive to transformational leadership behaviours and involved in OCB, or in other words, the perception of transformational leadership partially mediates the relationships between promotion orientation and OCB. 5. The negative relationship between prevention oriented individuals and counter work behaviours become stronger when individuals perceive management by exception leadership behaviours. In other words, the perception of	1- The salience of leader's collective identity enhance followers' affective commitment to change and OCB, and reduce their engagement in CWB through the perception of transformational leadership behaviours. 2- The salience of leader's individual identity positively contribute in the formation of followers' continuance commitment to change, and reduce their engagement in OCB and CWB through the perception of management by exception leadership behaviours. 3- the saliance of leaders promotion orienation positively correlate with them being perceived as a transformational leaders, which positively contripute in the formation of affective commitment to change and OCB. 4- leaders promotion oreiantion negatively correlate with their followers engagement in CWB through the perception of transformational leadership behaviours. 5- leaders who are preventionlly oriented tend

their followers partially mediate the relationship between their promotion orientation and transformational leadership behaviours. 8. Leaders' negative assumptions of their followers completely mediate the relationships between their prevention orientation and management-by-exception leadership behaviours.	management by exception moderates the relationship between prevention orientation and counter work behaviours.	to adopt management by exception leadership behvaiours which positively correlate with their followers formation of continuance commitment to change. 6- the saliance of leaders prevention orienation reduce their followers engagement in CWB and OCB through the perception of mangement by exception leadership behaviours.

7- leaders prototypes positively associate with followers affective commitment to change and OCB through its positive correlation with transformational leadership behaviuors.

8- leaders prototypes negtively associate with the followers CWB through it positive correlation with transformational leadership behaviours.

9- leaders anti-prototypes positively associate with the followers continaucne commitment to change through its positve correlation with mangement by exception leadership behaviours.

10-   when leaders hold a negtive assumptions about their followers it contripute in reducing their followers engagemtn in CWB and OCB through its positive correlation with managemtn by exception leadership behaviours.

Appendix   3

Participant's consent and information sheet

CONSENT FORM

Consent to Participate in Research Project – Questionnaire

Title: The bilateral effects of leaders and followers on the leadership processes and outcomes

Name of Researcher: A, Embarak

Name of Participant: …………………………………………………………
(Optional)

I understand the purpose of the above PhD research is to:

Examine the interrelationships between managers and subordinates, and their influences on the leadership process and outcomes during times of change.

And I understand that

- Involvement in the research is entirely voluntary. I am free to withdraw my consent at any time during the study without giving any reason; in which even my participation in the research study will immediately cease and any information obtained from me will not be used.

- Upon receipt, my questionnaire will be coded and my name and contact address kept separately from it.

- I will remain fully anonymous and any information I provide will not be made public in any form that could reveal my identity to an outside party.

- Aggregated results will be used for research purposes and may be reported in scientific and academic journals and in conference proceedings.

- Individual results **will not** be released to any person except at my request and on my authorisation.

Hereby agree to participate in this study.

Participant's Signature………………………………………………Date:………………

Researcher's Signature.

The contact details of the researcher are:
A, Embarak

Hull University, Business School

Research Student,

Tel: 07492 451 996

Email: a.k.embarak@2014.hull.ac.uk

Participant Information Sheet - Questionnaire

Dear Sir/Madam

You are being invited to take part in this doctoral research project, which is being conducted under the knowledge of the University of Hull – Business School Research Ethics Committee, and the University of Hull - Human Resources department**.**

Before you decide whether to take part, it is crucial for you to understand why the research is being done and what it will involve. Please take time to read the following information. If there is anything that you don't understand, or if you would like further information, please contact me at a.k.embarak@2014.hull.ac.uk

Thank you for taking the time to read this.

What is the purpose of the Study?

The ultimate objective of this research is to extend our understanding of the effective leadership process. The study focus on understanding why both managers and their subordinates behave in a certain way or another, and the effect of their mutual interaction on their behaviours and motivation to work in general, and in times of change particularly. Specifically, this research aims to:

A) Understand how managers' behaviours are influenced by their personal (psychological)orientation, identities, and their perceptions of subordinates' personal characteristics.

B) Examinethe state of match/mismatch between mangers' behaviours and their subordinate's goal pursuit orientation, and the consequential effects of this on subordinates commitment, motivation, and engagement to the proposed changes and objectives, and their performance accordingly.

This is expected to have beneficial implications in terms of training, appraisals, development, recruitment, selection and decision making.

Why this research is essential to you.

For managers, the results of this research would enable us to provide you with a short report about several points,

A) The drivers and consequences of your behaviours during times of change on your staff members' attitudes and performance.

B) How the harmony betwenen leaders tactics and their team members oriantions, enhance the follower's' attitudes and work-related behaviours.

Overall, this research will enable us to let you know when and how different tactics you use can lead your subordinates to form highly positive work-related attitudes and performance.

For subordinates, the overall research results are in the best interest of you.

A) This research look for your orientation differences and how managers can understand this variation, and provide the appropriate incentive and goal-pursuit means that matches your orientation.

B) This research will provide the appropriate recommendations for the managers about how to achieve harmony between their behaviours and your orientation, which result in providing a more energetic work atmosphere.

C) The results of this research will help your managers to decide the appropriate appraisal policy, training and development programs, material and socialmotivational tactics, and tasks that congruent with your capabilities and orientation.

Why have I been chosen?

Because you are actively involved in the management and operation of your organisation and satisfy a staff member and or managerial position.

Do I have to take part? & will the provided information be kept confidential?

The decision to take part is entirely voluntary, and you can withdraw at any time by contacting me on 07492451996, email a.k.emabarak@2014.hull.ac.uk. The responses you make will be kept confidential and protected by the university code of ethics

Should you have any concerns about the conduct of this research project, please contact the Secretary, HUBS Research Ethics Committee, University of Hull, Cottingham Road, Hull, HU6 7RX; **Tel No** (+44) (0)1482 463536.

Contact details

If you have any queries or would like any further information, please contact me on 07492451996, or email: a.k.embarak@2014.hull.ac.uk

Yours faithfully

A, Embarak

PhD Researcher

Appendix   4

Hypothesis testing diagrams
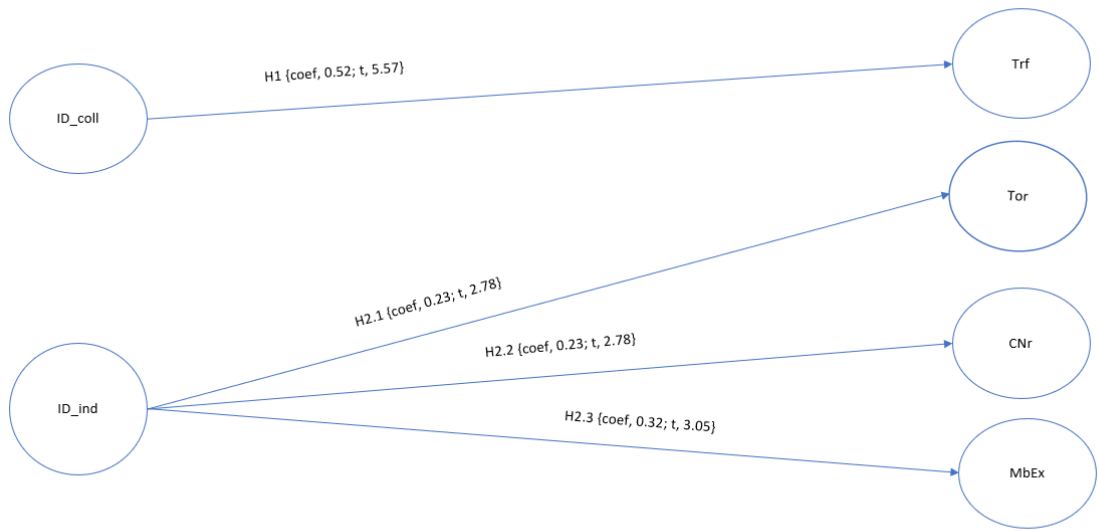
Leaders' identity and leadership behaviours
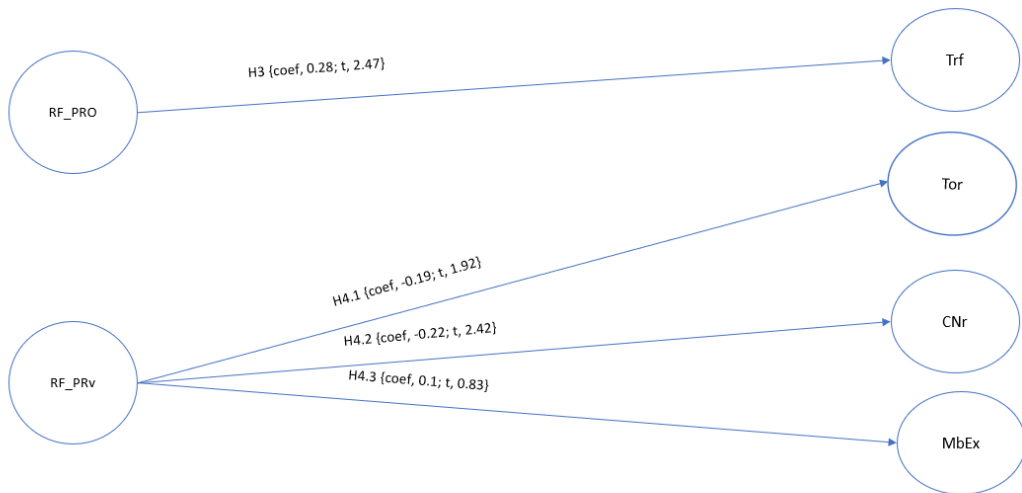
Leaders' motivational orientation and leadership behaviours
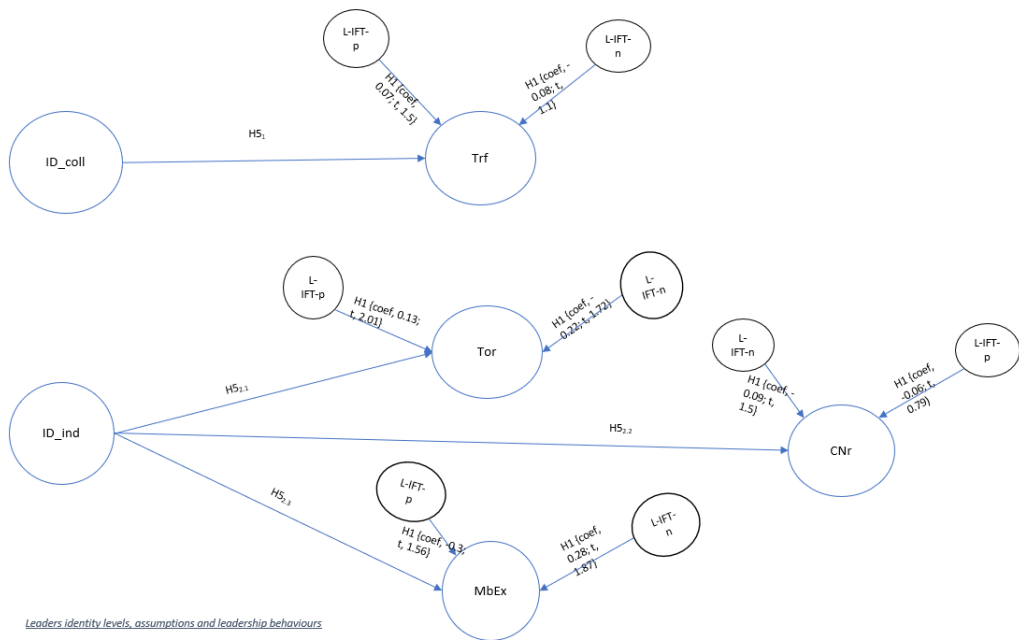
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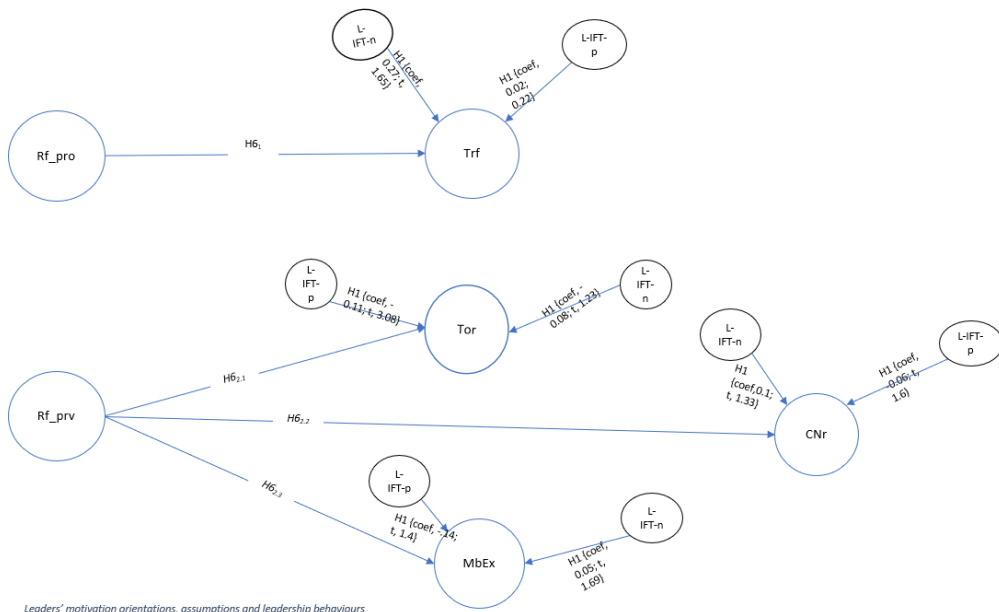
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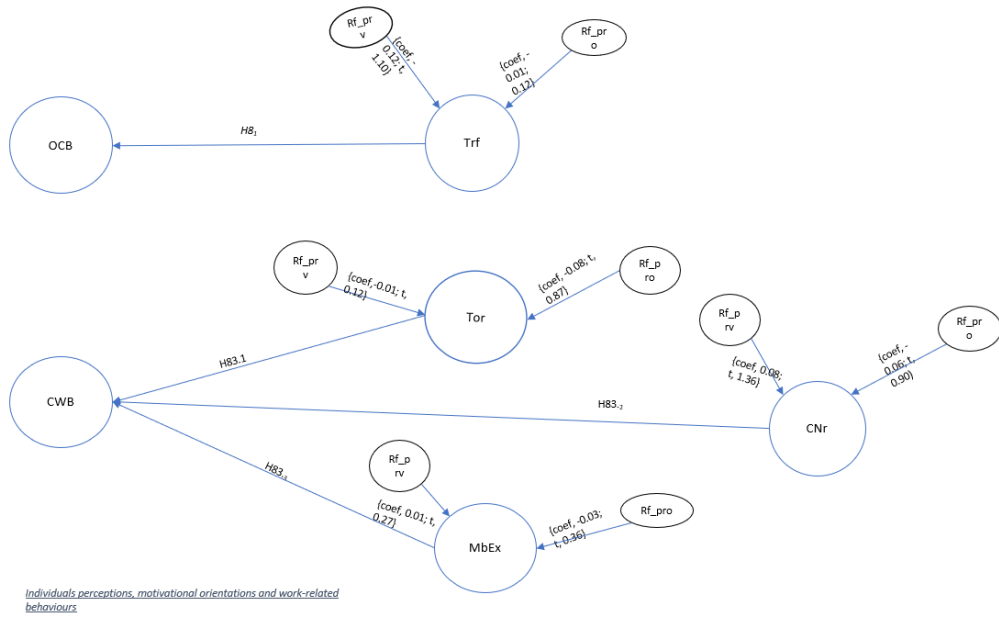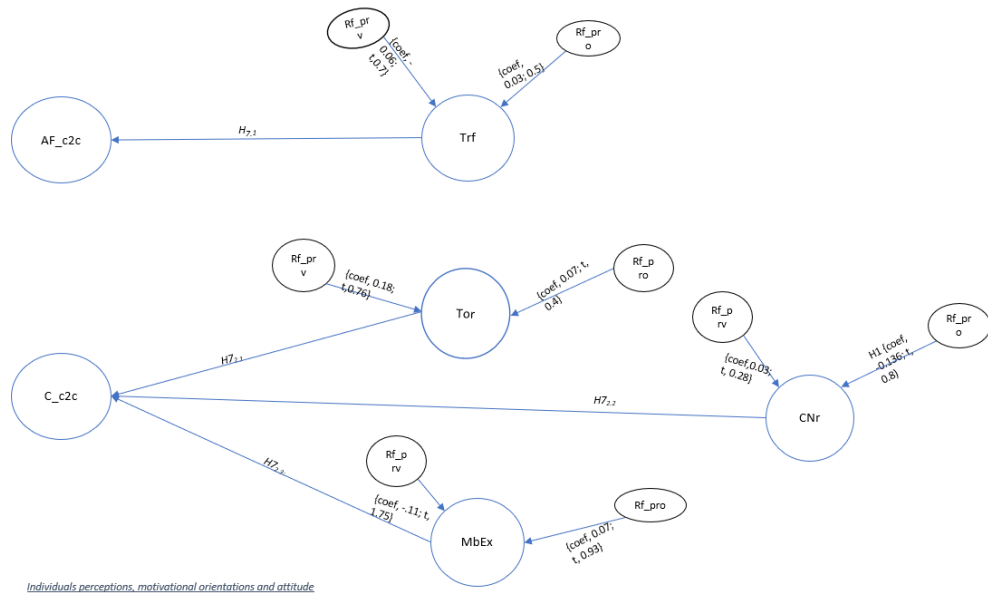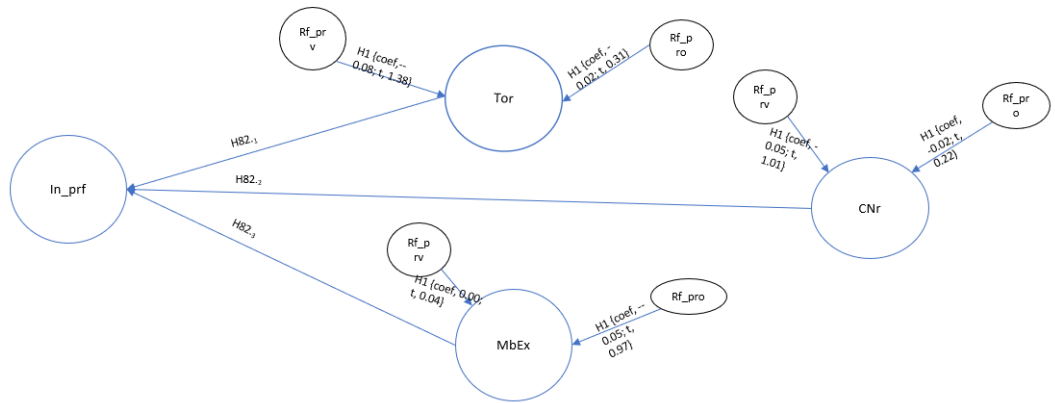
Individuals perceptions, motivational orientations and attitude

Individuals perceptions, motivational orientations and work-related behaviours

Individuals perceptions, motivational orientations and work-related behaviours
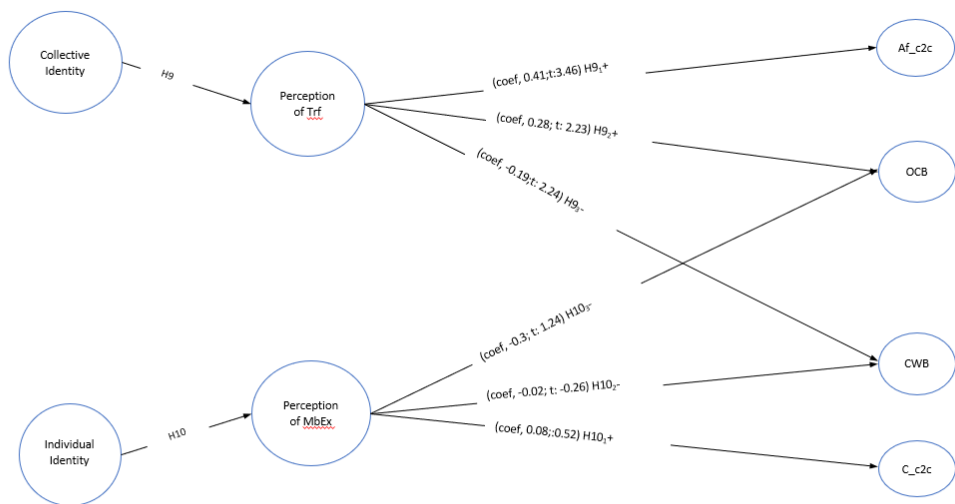
Leaders' levels of identity, followers perceptions of leadership behaviours and their attitudes and work-related behaviours.
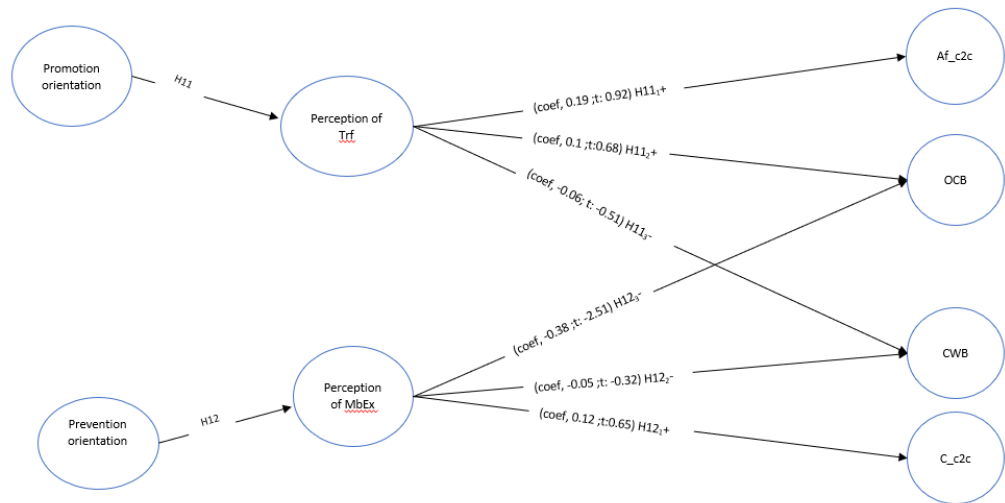
Leaders' motivational orientation, followers perceptions of leadership behaviours, their attitudes and work-related behaviours.
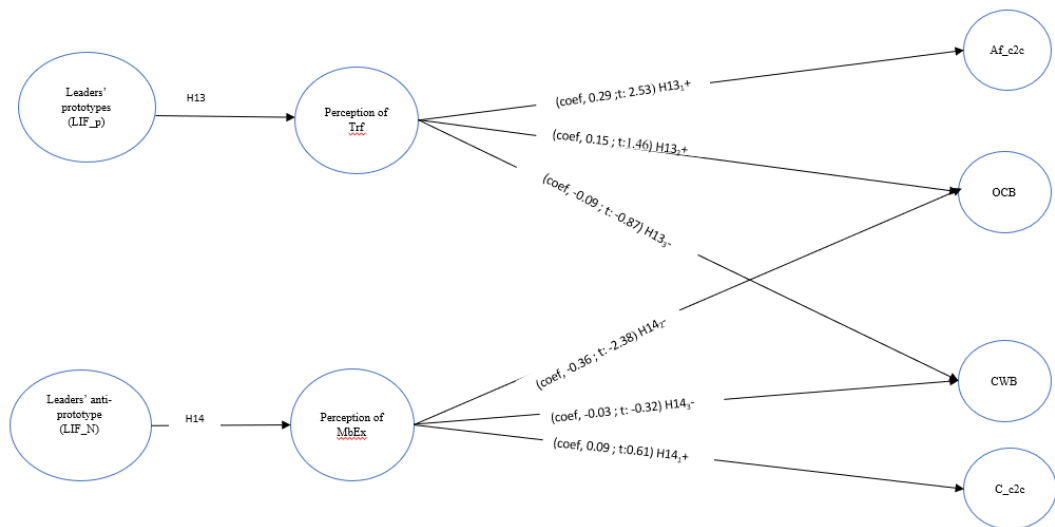
Leaders' prototypical views of followers , followers perceptions of leadership behaviours, their attitudes and work-related behaviours.

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Appendix-5
The study questionnaires

The first study survey

Leaders individual characteristics and their leadership behaviours-survey

Page 1: Intro

This research project is conducted at the University of Hull-Business School. We examine the dynamic interactions between managers and their team-members during times of change. It is a sincere pleasure to invite you to participate in this research by answering this survey.

This survey shall take about **10-minutes** of your time to complete. All your answers are protected by the university code of ethics and will be kept **CONFIDENTIAL**.

THANK YOU VERY MUCH FOR YOUR TIME

Yours faithfully,

A. Embarak

Doctoral researcher

a.k.embarak@2014.hull.ac.uk

Please note that some items might appear which are designed to check the accuracy of your survey compilation. (e.g., please chose *strongly agree* if a human is completing the survey)

I understand that

- Involvement in the research is entirely voluntary.

- I am free to withdraw my consent at any time during the study without giving any reason; in which even my participation in this research study will immediately cease, and any information obtained from me will not be used.

- I will remain entirely anonymous, and any information I provide will not be made public in any form that could reveal my identity to an outside party.

- Aggregated results will only be used for research purposes and may be reported in scientific and academic journals and conference proceedings.

- Individual results will not be released to any person except at my request and on my authorization.

-

1. Hereby agree to participate in this study * *Required*

  ○ Y

2. In a scale from 1 to 10, please indicate to what extent you believe that each of the following characteristics best describes your team members in general. **I believe that my team members are:**

☐ More info

	1= Not at all characteristic	2	3	4	5	6	7	8	9	10= Extremely characteristic
Hardworking										
Productive										
Goes above and beyond										
Excited										
Uneducated										
Outgoing										

3. **I believe that my team members are**

	1= Not at all characteristic	2	3	4	5	6	7	8	9	10= Extremely characteristic
Slow										
Happy										
Inexperienced										
Arrogant										
Rude										
Bad temper										

4. **Please indicate to what extent each of the following statements describes YOU?**

☐ More info

	1= Strongly disagree	2	3	4	5	6	7= Strongly agree
I thrive on opportunities to demonstrate that my abilities or talents are better than those of other people.							
It is sometimes hard for me to go on with my work if I am not encouraged							
Making a lasting contribution to groups that I belong to, such as my work unit/organization, is very important to me.							
I have a strong need to know how I stand in comparison to my co-workers.							
I sometimes feel resentful when I don't get my way.							

5. **To what extent each of the following statements describes YOU?**

	1= Strongly disagree	2	3	4	5	6	7= Strongly agree
When I become involved in a group project, I do my best to ensure its success.							
I often compete with my friends.							
I feel great pride when my team or group does well, even if I'm not the main reason for its success.							
On a few occasions, I have given up doing something because I thought too little of my ability.							
I feel best about myself when I perform better than others.							

5.a.

Please chose *Strongly Agree* if a human is completing the survey.

- 1= disagree
- 2
- 3
- 4= Agree
- 5
- 6
- 7= Strongly Agree

6. To what extent each of the following statements describes YOU?

	1= Strongly disagree	2	3	4	5	6	7= Strongly agree
I would be honoured if I were chosen by an organization or club that I belong to, to represent them at a conference or meeting.							
I often find myself pondering over the ways that I am better or worse off than other people around me.							
I'm always courteous, even to people who are disagreeable.							
When I'm part of a team, I am concerned about the group as a whole instead of whether individual team members like me or whether I like them.							
I'm sometimes irritated by people who ask favors of me.							

7. **Please indicate to what extent each of the following statements is true about YOU?**

☐ More info

	1= Not at all true of me	2	3	4	5	6	7= Very true of me
In general, I am focused on preventing negative events in my life.							
I often think about the person I would ideally like to be in the future.							
I am anxious that I will fall short of my responsibilities and obligations.							
I often think about the person I am afraid I might become in the future.							
I typically focus on the success I hope to achieve in the future.							

8. **Please indicate to what extent each of the following statements is true about YOU?**

	1= Not at all true of me	2	3	4	5	6	7= Very true of me
I am more oriented toward preventing losses than I am toward achieving gains.							
I see myself as someone who is primarily striving to reach my "ideal self"—to fulfil my hopes, wishes, and aspirations.							
I see myself as someone who is primarily striving to become the self I "ought" to be— to fulfil my duties, responsibilities, and obligations.							
In general, I am focused on achieving positive outcomes in my life.							
Overall, I am more oriented toward achieving success than preventing failure.							

9. **Please indicate to what extent each of the following statements applies to YOU?**

To What Extent Do You

☐ More info

	1= Not at all true of me	2	3	4	5	6	7= Very true of me
Paint an attractive picture of the future for your work-team.							
Inspire others with your plans for the future.							
Lead by doing rather than by telling.							
Seek new opportunities for your team							
Depict exciting plans for the future to your work-team.							

10. **Please indicate to what extent each of the following statements applies to YOU?**

To what extent do you

	1= Not at all true of me	2	3	4	5	6	7= Very true of me
Foster collaboration among your workgroups.							
Develop a team attitude and sprite among your work team.							
Maintain definite standards of performance.							
Assign your team members to particular tasks.							
Decide what shall be done and how it will be done.							

11. **Please indicate to what extent each of the following statements applies to YOU?**

To what extent do you

	1= Not at all true of	2	3	4	5	6	7 = Very tru
Ask your team members to follow standard rules and regulations.							
Provide assistance to your team members in exchange for their efforts							
Discus in specific terms who is responsible for achieving performance targets							
Make clear what one can expect to receive when performance goals are achieved							
Express satisfaction when I meet expectations.							

12. **Please indicate to what extent each of the following statements applies to YOU?**

To what extent do you

	1= Not at all true of	2	3	4	5	6	7= Very true of
Focus on irregularities, mistakes, exceptions, and deviations from standards							
Concentrate your full attention on dealing with mistakes, complaints, and failures.							
Keep tracking of all my mistakes							
Direct your attention towards failures to meet standards.							

13. **To what extent you think that your unit/group members are interdependent in tasks execution?**

	1= Strongly disagre	2	3	4	5	6	7= Strong ly
Members of my group or unit depend on each other for information and materials needed to perform their tasks							
Within my group or unit, jobs performed by group members are all related to one another							
Members of my group or unit cannot accomplish their tasks without information or materials from other members of the team or unit.							

Page 16: Acknowledgment

I'd like to **thank you very much** for your kind participation in this research survey YOUR

ANSWER WILL BE KEPT **CONFIDENTIAL**

Please note that an executive summary of the aggregated research results will be available to request. If you would like a copy of this report to be sent to you, please just send an empty email entitled "Executive report" to (a.k.embarak@2014.hull.ac.uk)

The second study survey

Team members motivational orientaion, perceptions of leadership behavoiurs, attitudes and work related behaiovurs-

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Survey

Intro

Dear Sir/Madam

This research project is conducted at the University of Hull-Business School. We examine the dynamic interactions between managers and their team-members during times of change. It is a sincere pleasure to invite you to participate in this research by answering this survey.

This survey shall take about **10-minutes** of your time to complete. All your answers are protected by the university code of ethics and will be kept **CONFIDENTIAL.**

THANK YOU VERY MUCH FOR YOUR TIME

Yours faithfully,

A. Embarak

Doctoral researcher

a.k.embarak@2014.hull.ac.uk

Please note that some items might appear which are designed to check the accuracy of your survey compilation. (e.g., please chose *strongly agree* if a human is completing the survey)

Consent Form

I understand that

Involvement in the research is entirely voluntary.

- I am free to withdraw my consent at anytime during the study without giving any reason; in which even my participation in the research study will immediately cease, and any information obtained from me will not be used.

- I will remain fully anonymous, and any information I provide will not be made public in any form that could reveal my identity to an outside party.

- Aggregated results will only be used for research purposes and may be reported in scientific and academic journals and conference proceedings.

- Individual results will not be released to any person except at my request and on my authorization.

Hereby agree to participate in this stud *Requiredz*

○ Y

Section A

The following statements describe various managerial behaviors. Please briefly read each statement, and give each a rating from **1** "not at all" to **7** "frequently, if not always" to indicate **how far each statement describes your line manager.**

My line manager:

	* Required						
	1= Not at all	2	3	4	5	6	7= Freque ntly, if not
Paints an interesting picture of the future for my team and me.							
Inspires others with his/her plans for the future.							
leads by doing rather than by telling.							
Is always seeking new opportunities for my team.							
Inspires others with his/her plans for the future							
Fosters collaboration among my work team.							
Develops team attitude and sprite among my work team.							

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Section A1

My line manager:

	* Required						
	1= Not at all	2	3	4	5	6	7= Frequently, if not
Maintains definite standards of performance.							
Assigns me to particular tasks.							
Decides what shall be done and how it will be done							
Asks me to follow standard rules and regulations							
Focuses on irregularities, mistakes, exceptions, and deviations from standards							
Concentrates his/er full attention on dealing with mistakes, complaints, and failures.							

Section A2

	1= Not at all	2	3	4	5	6	7= Frequentl y, if not
	* *Required*						
Keeps tracking of all my mistakes							
Directs his/er attention towards failures to meet standards							
Provides assistance in exchange for my efforts							
Discuss in specific terms who is responsible for achieving performance targets							
Makes clear what one can expect to receive when performance goals are achieved							
Expresses satisfaction when I meet expectations							

Please chose Strongly Agree if a human is completing the survey.

○   1= Strongly disagree

○   2

○   3

○   4

○   5

○   6

○   7= Strongly agree

Section B

Have you experienced any changes in your work environment (e.g., tasks, policies, procedures etc)
*Required

-
- Y

    e

    s

Section B1

Based on any changes that you might have experienced at work, *"i.e., work procedures, policies, tasks, etc.";* please Indicate *how do you think of it?*

	* Required						
	1 = Strongly disagree	2	3	4	5	6	7= Strongly agree
I believe in the value of this change							
I feel pressure to go along with this change							
This change is a good strategy for this organization							
I think that management is making a mistake by introducing this change							
This change serves an important purpose							
Things would be better without this change							

I think of these changes as:

	* Required						
	1 = Strongly disagree	2	3	4	5	6	7= Strongly agree
This change is not necessary							
I have no choice but to go along with this change							
I have too much at stake to resist this change							
It would be too costly for me to resist this change							
It would be risky to speak out against this change							
Resisting this change is not a viable option for me							

Section C

The following statements are about your personal tendencies. **Please indicate to what extent each of the following statements applies to YOU?**

☐ More info

	* Required						
	1= Not at all true of me	2	3	4	5	6	7= Very true
In general, I am focused on preventing negative events in my life.							
I often think about the person I would ideally like to be in the future.							
I am anxious that I will fall short of my responsibilities and obligations.							
I often think about the person I am afraid I might become in the future.							
I typically focus on the success I hope to achieve in the future.							

Section C1

Please indicate to what extent each of the following statements applies to YOU?

	1= Not at all true of me	2	3	4	5	6	7= Very true of me
	Required						
I am more oriented toward preventing losses than I am toward achieving gains.							
I see myself as someone who is primarily striving to reach my "ideal self"—to fulfil my hopes, wishes, and aspirations.							
I see myself as someone who is primarily striving to become the self I "ought" to be— to fulfill my duties, responsibilities, and obligations.							
In general, I am focused on achieving positive outcomes in my life.							
Overall, I am more oriented toward achieving success than preventing failure.							

Section D

Please indicate, how often have you had engaged in the behaviors and feelings described in each of the following statements, during the last five months. *How often do you:*

	* Required						
	1 = Never	2	3	4= Some times	5	6	7= Alway
Help others who have been absent.							
Adequately complete assigned duties.							
Find it hard to go on with your work if you are not encouraged							
Willingly give your time to help others who have work-related problems.							
Fulfill the responsibilities specified in your job description.							

How often do you:

	* Required						
	1 = Never	2	3	4=Some times	5	6	7= Always
Being courteous, even to people who are disagreeable.							
Perform the tasks that are expected of you.							
Feel resentful when you do not get your way.							
Give up the time to help others who have work or non-work problems.							
Assist others with their duties.							

How often do you:

	* Required						
	1 = Never	2	3	4=Some	5	6	7= Always
Meet formal performance requirements for your job.							
Give up doing something because you thought too little of your abilities							
Share personal property with others to help their work							
Neglect aspects of your job you are obligated to perform.							
Get irritated by people who ask favors of you							

Section D3

How often do you:

	1 = Never	2	3	4=Some	5	6	7= Alway
Required							
Fail to perform essential duties.							
Came to work late without permission							
Take a longer break than you were allowed to take							
Left work earlier than you were allowed to							
Purposely worked slowly when things needed to get done							
Purposely failed to follow instructions							

Section D4

Please indicate to what extent do you agree or disagree with the following statements,

	* Required						
	1 = Strongly agree	2	3	4	5	6	7= Strongly disagree
My job inspires me							
At my job, I feel strong and vigorous							
I am enthusiastic about my job							
I am immersed in my work							

Please indicate to what extent do you agree or disagree with the following statements,

	* *Required*						
	1 = Strongly agree	2	3	4	5	6	7= Strongly disagr
I get carried away when I am working							
I often think of leaving the company/ organization that I work for.							
It is very possible that I will look for a new job next year							
If I may choose again, I will choose to work for the current organization/university							

Section E: General Information

Kindly, indicate the following:

Your Age

○ Lower than 20	○ 20-29	○ 30-39
○ 40-49	○ 50-60	○ Over 60

Gender?

○ Female	○ Male	○

Years of Work Experience (Y/M)

[   ]

Highest Level of Education

○ Lower than Bachelor (level 5 or

○ lower) Bachelor degree (level 6)

○ Higher degree (level 7 or higher)

Please indicate any comments you might have about the survey (e.g., any confusing items)

Acknowledgment
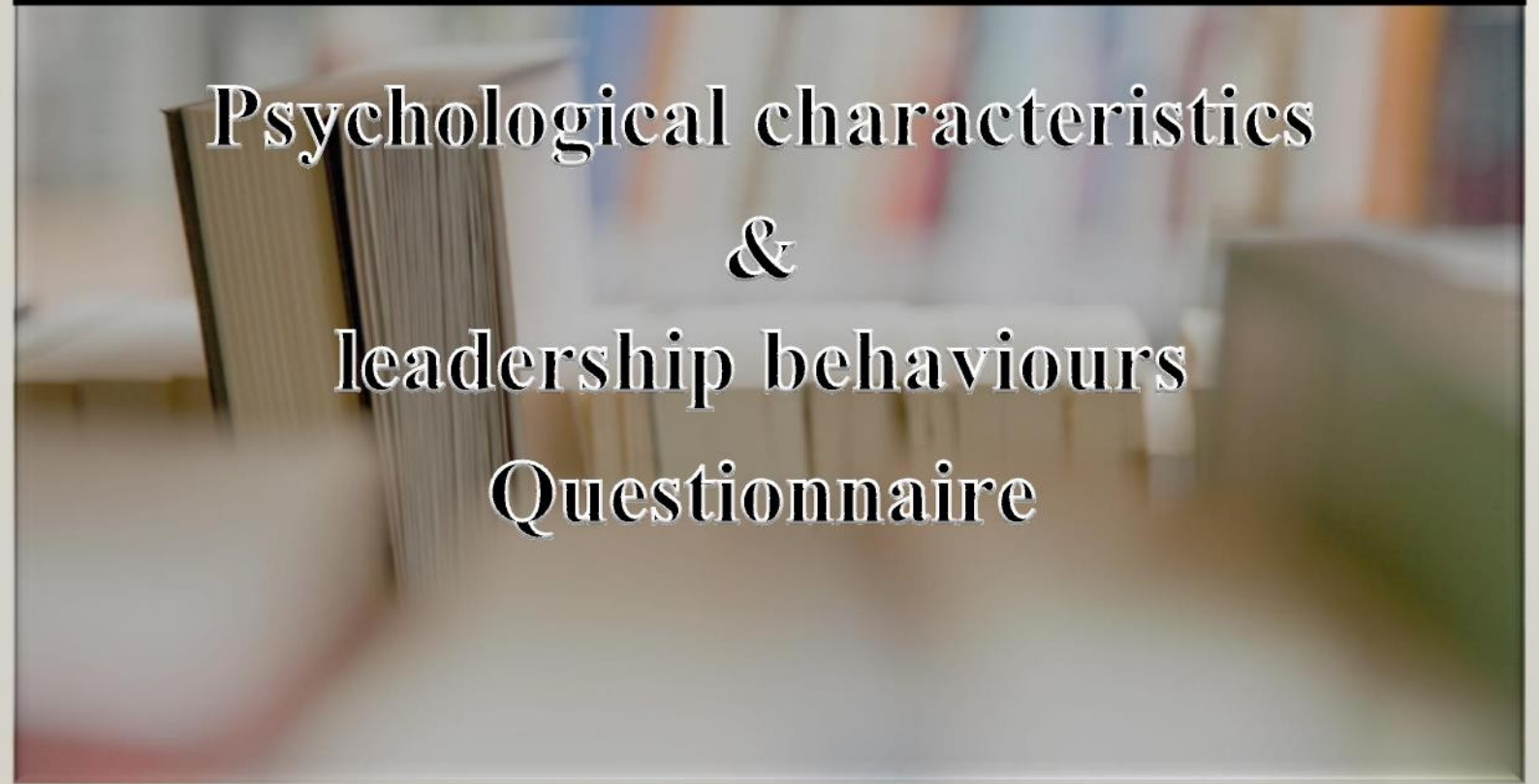
I'd like to **thank you very much** for your kind participation in this research survey YOUR

ANSWER WILL BE KEPT **CONFIDENTIAL**

Please note that, an executive summary of the aggregated research results will be available to request. If you would like a copy of this report to be sent for you, please just send an empty email entitled "Executive report" to (a.k.embarak@2014.hull.ac.uk)

The Third Study Surveys

1- Leaders Survey

Psychological characteristics
&
leadership behaviours
Questionnaire

Dear Sire/Madam

You're being invited to participate in this doctoral research project undertaken within the University of Hull-Business School. This research aims to identify the interactions between managers and employees within work environment and how this influence the leadership processes and effectiveness during times of change. We believe that because you are actively involved in the management operation of your organisation, you are best suited to speak about your employees' behaviours, performance, and characteristics alongside your personal traits.

This survey will take about **10-15 minutes** to complete. All your answers are protected by the university code of ethics and will be highly **CONFIDENTIAL**.

In exchange for your valuable time, we are happy to send you or your organization, upon your request, an executive summary of the research findings. If you would like to receive an executive summary of this research, please provide your email address below.

Email address: ....

We are aware of your job commitments but your participation is very crucial for the study and is highly appreciated. We therefore prepared this printed format so **you can easily fill it out in you leisure times**.

THANK YOU VERY MUCH FOR YOUR

TIME Yours faithfully,

The research team

For any inquiries please contact one of the following,

Doctoral researcher: A, Embarak   Supervisory team

a.k.embarak@2014.hull.ac.uk   Dr Tomas Hoyland T.Hoyland@hull.ac.uk

                                      Prof Nikos Bozionelos: N.bozionelos@hull.ac.uk

SECTION A: The following list contains different individual characteristics. Please briefly read each statement, and give each a rating from **1** "not at all characteristic" to **10** "extremely characteristic" in order to indicate how characteristic each of the items was for your **followers** in general.

These statements do not include any evaluate of a "good" or "bad" characteristics. We are just interested to know how you see your followers, so please make sure that your responses to the statements are based on what comes into your mind first.

To what extent do you think your

Subordinates are …………………… .	Not at all Characteristic									Extremely characteristic
1. Hardworking	1	2	3	4	5	6	7	8	9	10
2. Easily influenced	1	2	3	4	5	6	7	8	9	10
3. Productive	1	2	3	4	5	6	7	8	9	10
4. Follows trends	1	2	3	4	5	6	7	8	9	10
5. Goes above and beyond	1	2	3	4	5	6	7	8	9	10
6. Soft spoken	1	2	3	4	5	6	7	8	9	10
7. Excited	1	2	3	4	5	6	7	8	9	10
8. Uneducated	1	2	3	4	5	6	7	8	9	10
9. Outgoing	1	2	3	4	5	6	7	8	9	10
10. Slow	1	2	3	4	5	6	7	8	9	10
11. Happy	1	2	3	4	5	6	7	8	9	10
12. Inexperienced	1	2	3	4	5	6	7	8	9	10
13. Loyal	1	2	3	4	5	6	7	8	9	10
14. Arrogant	1	2	3	4	5	6	7	8	9	10
15. Reliable	1	2	3	4	5	6	7	8	9	10
16. Rude	1	2	3	4	5	6	7	8	9	10
17. Team player	1	2	3	4	5	6	7	8	9	10
18. Bad temper	277 1	2	3	4	5	6	7	8	9	

S

SECTION B: The following statements are designed to know more about **yourself**. Please, carefully read each statement, and give each a rating from **1** "strongly agree" to **7** "strongly disagree" in order to indicate the degree to which each statement applies to you.

These statements do not include any evaluate of a "good" or "bad" tendency. We are just interested to know more about you, so please make sure that your responses to the statements are based on what comes into your mind first rather than being driven by any other preferences.

To what extent do you agree or disagree with the following statements about you?

Statement	Strongly agree					Strongly disagree	
11. I thrive on opportunities to demonstrate that my abilities or talents are better than those of other people.	1	2	3	4	5	6	7
10. If a friend was having a personal problem, I would help him/her even if it meant sacrificing my time or money	1	2	3	4	5	6	7
12. It is sometimes hard for me to go on with my work if I am not	1	2	3	4	5	6	7
9. Making a lasting contribution to groups that I belong to, such as my work unit/organization, is very important to me.	1	2	3	4	5	6	7
13. I have a strong need to know how I stand in comparison to my co-workers.	1	2	3	4	5	6	7
3. I value friends who are caring, empathic individuals.	1	2	3	4	5	6	7
14. I sometimes feel resentful when I don't get	1	2	3	4	5	6	7
8. When I become involved in a group project, I do my best to ensure its success.	1	2	3	4	5	6	7
15. I often compete with my	1	2	3	4	5	6	7
7. It is important to me that I uphold my commitments to significant people in my life.	1	2	3	4	5	6	7
16. I feel great pride when my team or group does well, even if I'm not the main reason for its success.	1	2	3	4	5	6	7
6. On a few occasions, I have given up doing something because I thought too little of my ability.	1	2	3	4	5	6	7
17. I feel best about myself when I perform better than	1	2	3	4	5	6	7
5. Caring deeply about another person such as a close friend or relative is important to me.	1	2	3	4	5	6	7
18. I would be honoured if I were chosen by an organization or club that I belong to, to represent them at a conference or	1	2	3	4	5	6	7
4. I often find myself pondering over the ways that I am better or worse off than other people around me.	1	2	3	4	5	6	7
19. Knowing that a close other acknowledges and values the role that I play in their life makes me feel like a worthwhile person.	1	2	3	4	5	6	7
2. I'm always courteous, even to people who are disagreeable.	1	2	3	4	5	6	7
1. When I'm part of a team, I am concerned about the group as a whole instead of whether individual team members like me or whether I like them.	1	2	3	4	5	6	7
20. I'm sometimes irritated by people who ask favours of me.	1	2	3	4	5	6	7

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SECTION C: The following statements describe **your staff members' behaviours** toward the organization and each other's. Please, carefully read each statement, and give each a rating from **1** "never" to **7** "always" to indicate the degree to which each statement applies to your followers.

These statements do not include any evaluation of a "good" or "bad" behaviours. We are just interested to know how you see your subordinates behaviours, so please make sure that your responses to the statements are based on what comes into your mind first rather than being driven by any other preferences.

Most staff members in my unit/group or team............

	Never						Always
1. Help others who have been absent.	1	2	3	4	5	6	7
2. Attend functions that are not required but that help the organizational image.	1	2	3	4	5	6	7
3. Willingly give their time to help others who have work-related problems.	1	2	3	4	5	6	7
4. Adjust their work schedule to accommodate other employees' requests for time off.	1	2	3	4	5	6	7
5. Keep up with developments in the organization	1	2	3	4	5	6	7
6. Show pride when representing the organization in public	1	2	3	4	5	6	7
7. Offer ideas to improve the functioning of the organization	1	2	3	4	5	6	7
8. Express loyalty toward the organization	1	2	3	4	5	6	7
9. Give up time to help others who have work or non-work problems	1	2	3	4	5	6	7
10. Take action to protect the organization from potential problems	1	2	3	4	5	6	7
11. Assist others with their duties.	1	2	3	4	5	6	7
12. Demonstrate concern about the image of the organization	1	2	3	4	5	6	7

To what extent your unit/group members are interdependent in tasks execution?

	Strong						Strongly agree
13. Members of my group or unit depend on each other for information and materials needed to perform their tasks	1	2	3	4	5	6	7
14. Within my group or unit, jobs performed by group members are all related to one another	1	2	3	4	5	6	7
15. Members of my group or unit cannot accomplish their tasks without information or materials from other members of the	1	2	3	4	5	6	7

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To what extent each of the following statements is true about YOU?

(Not at all true — Very true of)

	1	2	3	4	5	6	7
1. In general, I am focused on preventing negative events in my life	1	2	3	4	5	6	7
2. I often think about the person I would ideally like to be in the future.	1	2	3	4	5	6	7
3. I am anxious that I will fall short of my responsibilities and obligations	1	2	3	4	5	6	7
4. I frequently imagine how I will achieve my hopes and aspirations.	1	2	3	4	5	6	7
5. I often think about the person I am afraid I might become in the future	1	2	3	4	5	6	7
6. I typically focus on the success I hope to achieve in the future.	1	2	3	4	5	6	7
7. I often imagine myself experiencing bad things that I fear might happen to me.	1	2	3	4	5	6	7

To what extent each of the following statements is true about YOU?

(Not at all true — Very of me)

	1	2	3	4	5	6	7
8. I frequently think about how I can prevent failures in my life	1	2	3	4	5	6	7
9. I am more oriented toward preventing losses than I am toward achieving gains.	1	2	3	4	5	6	7
10. I see myself as someone who is primarily striving to reach my "ideal self"—to fulfil my hopes, wishes, and aspirations	1	2	3	4	5	6	7
11. I see myself as someone who is primarily striving to become the self I "ought" to be—to fulfil my duties, responsibilities, and obligations.	1	2	3	4	5	6	7
12. In general, I am focused on achieving positive outcomes in my life	1	2	3	4	5	6	7
13. I often imagine myself experiencing good things that I hope will happen to me.	1	2	3	4	5	6	7
14. Overall, I am more oriented toward achieving success than preventing failure.	1	2	3	4	5	6	7

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	Somewhat below requirements						Consistently exceeds
1. The overall quantity-of-work of my work group/team or unit is	1	2	3	4	5	6	7
2. The overall quality-of-work of my work group/team or unit is	1	2	3	4	5	6	7
3. The overall performance of the work group/team or unit is	1	2	3	4	5	6	7

Based on the changes taking place at your organization, please give each of the following statements a rating from

1 "strongly disagree" to **7** "strongly agree" to indicate the extent to which these changes have influenced your work unit.

	Strongly disagree						Strongly agree
4- This change has made my unit less effective.	1	2	3	4	5	6	7
5- The change created problems for my work unit	1	2	3	4	5	6	7
6- This change has disrupted the way my unit normally functions	1	2	3	4	5	6	7
7- This change has harmed my work unit.	1	2	3	4	5	6	7

Section F: General Information

Please fill in the blanks or tick in the appropriate answer for you:

1- Age (years) .... Years of **experience**

2- Gender

3- Highest Level of Education

Lower than Bachelor (level 5 or lower)	
Bachelor degree (level 6)	
Higher degree (level 7 or higher)	

THANK YOU FOR YOUR KIND PARTICIPATION

PLEASE DON'T FORGET TO SIGN THE CONSENT FORM

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The sequence number will be used for data validation purposes only

The third study surveys

2- Team member's survey

Employees Effects on Leadership Process: attitudes and behaviours Qestionnaire

Dear Sire/Madam

You're being invited to take part in this doctoral research project undertaken within the University of Hull-Business School. This research aims to identify the interactions between managers and employees within work environment and how this influence the leadership processes and effectiveness in times of change. We believe that because you are actively involved in the operation of your organisation, you are best suited to speak about your perception of the managerial behaviours, as well as your attitude and behaviours during the times of change.

This survey will take about **15 minutes** to complete. All your answers are protected by the university code of ethics and will be kept **CONFIDENTIAL**.

In exchange for your valuable time, we are happy to send you or your organization, upon your request, an executive summary of the research findings. If you would like to receive an executive summary of this research, please provide your email address below.

Email address: ……………………………………………………………………………………………………

We are aware of your job commitments but your participation is very crucial for the study and is highly appreciated. We therefore prepared this printed format so **you can easily fill it out during your leisure times**.

THANK YOU VERY MUCH FOR YOUR

TIME Yours faithfully

The research team

for any inquiries please contact one of the following

Doctoral researcher: A, Embarak

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Supervision

Dr Tomas Hoyland T.Hoyland@hull.ac.uk

Prof Nikos Bozionelos: N.bozionelos@hull.ac.uk

My manager/group or team leader...

	Not at all					Frequently, if not always	
1. Has a clear understanding of where we are going.	1	2	3	4	5	6	7
2. Paints an interesting picture of the future for our group	1	2	3	4	5	6	7
3. Acts friendly with me	1	2	3	4	5	6	7
4. Is always seeking new opportunities for our group	1	2	3	4	5	6	7
5. Inspires others with his/her plans for the future	1	2	3	4	5	6	7
6. Helps me feel comfortable	1	2	3	4	5	6	7
7. Is able to get us committed to his/her dream	1	2	3	4	5	6	7
8. Leads by "doing," rather than simply by "telling."	1	2	3	4	5	6	7
9. Responds favourably to my suggestions	1	2	3	4	5	6	7
10. Provides assistance in exchange for my efforts	1	2	3	4	5	6	7
11. Discuss in specific terms who is responsible for achieving performance targets.	1	2	3	4	5	6	7
12. Treats me fairly	1	2	3	4	5	6	7
13. Provides a good model for me to follow.	1	2	3	4	5	6	7
14. Makes clear what one can expect to receive when performance goals are	1	2	3	4	5	6	7
15. Communicates actively with me	1	2	3	4	5	6	7
16. Expresses satisfaction when I meet expectations	1	2	3	4	5	6	7
17. Leads by example.	1	2	3	4	5	6	7
18. Fosters collaboration among work groups	1	2	3	4	5	6	7
19. Encourages employees to be "team players."	1	2	3	4	5	6	7

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My manager/group or team

	Not						Frequently, if not
20. Tells me what I am supposed to do	1	2	3	4	5	6	7
21. Gets the group to work together for the same	1	2	3	4	5	6	7
22. Develops a team attitude and spirit among us.	1	2	3	4	5	6	7
23. Maintain definite standards of	1	2	3	4	5	6	7
24. Provides coaching to help me improve my job performance	1	2	3	4	5	6	7
25. Demonstrates total confidence in	1	2	3	4	5	6	7
26. Makes his or her perspective clear to me	1	2	3	4	5	6	7
27. Helps me Develop my	1	2	3	4	5	6	7
28. Encourage the use of uniform policies	1	2	3	4	5	6	7

My manager/group or team .....

	Not						Frequently, if not
29. Assigns me to particular tasks	1	2	3	4	5	6	7
30. Shows concern for my well-	1	2	3	4	5	6	7
31. Decides what shall be done and how it will be done	1	2	3	4	5	6	7
32. Shows flexibility in making	1	2	3	4	5	6	7
33. Asks me to follow standard rules and regulations	1	2	3	4	5	6	7
34. Encourages me to do high-quality	1	2	3	4	5	6	7
35. focuses on irregularities, mistakes, exceptions and deviations from standards	1	2	3	4	5	6	7
36. Concentrates his full attention on dealing with mistakes,	1 7	2	3	4	5	6	
37. Keep tracking of all my	1	2	3	4	5	6	7
38. Direct his attention towards failures to meet standards	1	2	3	4	5	6	

We are grateful to you for your participation

Please continue

Because of the changes in my work unit/organization during the past 12 months

	Strongly disagree						Strongly agree
1. I am expected to do more work than I used	1	2	3	4	5	6	7
2. The nature of my work has changed.	1	2	3	4	5	6	7
3. My job responsibilities have	1	2	3	4	5	6	7
4. I find greater demands placed on me at work because of this change.	1	2	3	4	5	6	7
5. I am experiencing more pressure at work because of this	1	2	3	4	5	6	7
6. The work processes and procedures I use have changed.	1	2	3	4	5	6	7

My view of these changes is that

	Strongly disagree						Strongly agree
7. I believe in the value of this change	1	2	3	4	5	6	7
8. I feel pressure to go along with this change	1	2	3	4	5	6	7
9. This change is a good strategy for this organization	1	2	3	4	5	6	7
10. I think that management is making a mistake by introducing this change	1	2	3	4	5	6	7
11. This change serves an important purpose	1	2	3	4	5	6	7
12. Things would be better without this change	1	2	3	4	5	6	7
13. This change is not necessary	1	2	3	4	5	6	7
14. I have no choice but to go along with this change	1	2	3	4	5	6	7
15. I have too much at stake to resist this change	1	2	3	4	5	6	7
16. It would be too costly for me to resist this change	1	2	3	4	5	6	7
17. It would be risky to speak out against this change	1	2	3	4	5	6	7
18. Resisting this change is not a viable option for me	1	2	3	4	5	6	7

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Section C: The following statements are about your personal tendencies. Please, carefully read each statement, and give each a rating from **1** "not at all true of me" to **7** "very true of me" in order to indicate the degree to which each statement applies to you.
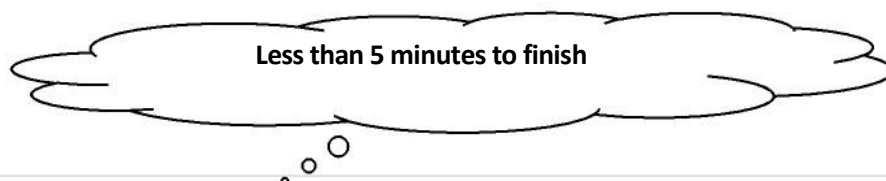
These statements do not include any evaluate of a "good" or "bad" disposition. We are just interested to know your way of doing things, so please make sure that your responses to the statements are based on what comes into your mind first.

To what extent each of the following statements apply

	Not at all true						Very true
1. In general, I am focused on preventing negative events in	1	2	3	4	5	6	7
2. I often think about the person I would ideally like to be in the future.	1	2	3	4	5	6	7
3. I am anxious that I will fall short of my responsibilities and	1	2	3	4	5	6	7
4. I frequently imagine how I will achieve my hopes and aspirations.	1	2	3	4	5	6	7
5. I often think about the person I am afraid I might become in the future.	1	2	3	4	5	6	7
6. I typically focus on the success I hope to achieve in the future.	1	2	3	4	5	6	7
7. I often imagine myself experiencing bad things that I fear might happen to me.	1	2	3	4	5	6	7

To what extent each of the following statements apply

	Not at all true						Very true
8. I frequently think about how I can prevent failures in my	1	2	3	4	5	6	7
9. I am more oriented toward preventing losses than I am toward	1 7	2	3	4	5	6	
10. I see myself as someone who is primarily striving to reach my "ideal self"—to fulfil my hopes, wishes, and	1	2	3	4	5	6	7
11. I see myself as someone who is primarily striving to become the self I "ought" to be—to fulfil my duties, responsibilities, and obligations.	1	2	3	4	5		
12. In general, I am focused on achieving positive outcomes in	1	2	3	4	5	6	7
13. I often imagine myself experiencing good things that I hope will	1 7	2	3	4	5	6	
14. Overall, I am more oriented toward achieving success than preventing failure.	1	2	3	4	5	6	7

Less than 5 minutes to finish

Section D: The following statements are about your behaviour towards the organization and your co-workers in your team or organization. Please, carefully read each statement, and give each a rating from **1** "never" to **7** "always" to indicate the extent to which you had engaged in the behaviour described by each statement.

These statements do not include any evaluation of a "good" or "bad" behaviours. We are just interested to know your way of doing things, so please make sure that your responses to the statements are based on what comes into your mind first rather than being driven by any other preferences.

To what extent do you:

			Never Always
1. Help others who have been absent.			1 2 3 4 5 6 7
2. Adequately complete assigned duties.			1 2 3 4 5 6 7
3. Find it hard to go on with your work if you are not encouraged			1 2 3 4 5 6 7
4. Willingly give your time to help others who have work-related problems.			1 2 3 4 5 6 7
5. Fulfil the responsibilities specified in your job description.			1 2 3 4 5 6 7
6. Adjust your work schedule to accommodate other employees' requests for time off.			1 2 3 4 5 6 7
7. Being always courteous, even to people who are disagreeable.			1 2 3 4 5 6 7
8. Go out of the way to make newer employees feel welcome in the work group.			1 2 3 4 5 6 7
9. Show genuine concern and courtesy toward co-workers, even under the most trying business or personal situations.			1 2 3 4 5 6 7
10. Perform the tasks that are expected from you.			1 2 3 4 5 6 7

To what extent do You?

	Never		Always
11. Sometimes, feel resentful when you do not get your			1 2 3 4 5 6 7
12. Give up time to help others who have work or non-work problems.	1		2 3 4 5 6 7
13. Assist others with their ...			1 2 3 4 5 6 7
14. Meet formal performance requirements for your job.	1		2 3 4 5 6 7
15. On a few occasions, have given up doing something because you thought too little of your abilities			1 2 3 4 5 6 7
16. Share personal property with others to help their work	1		2 3 4 5 6 7
17. Engage in activities that will directly affect your performance			1 2 3 4 5 6 7
18. Neglect aspects of your job you are obligated to perform.	1		2 3 4 5 6 7
19. Sometimes, get irritated by people who ask favours			1 2 3 4 5 6 7
20. Fail to perform essential duties.	1		2 3 4 5 6 7

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Please indicate, how often have you had engaged on the behaviours and/or feelings described in each of the following statements, during the last 5 months.

21. Came to work late without permission	1	2	3	4	5	6	7
22. Stayed home from work and said you were sick when you were not	1	2	3	4	5	6	7
23. Taken a longer break than you were allowed to take	1	2	3	4	5	6	7
24. Left work earlier than you were allowed to	1	2	3	4	5	6	7
25. Purposely did your work incorrectly	1	2	3	4	5	6	7
26. Purposely worked slowly when things needed to get done	1	2	3	4	5	6	7
27. Purposely failed to follow instructions	1	2	3	4	5	6	7
28. At my work, I feel bursting with energy	1	2	3	4	5	6	7
29. My job inspires me	1	2	3	4	5	6	7
30. At my job, I feel strong and vigorous	1	2	3	4	5	6	7
31. I am enthusiastic about my job	1	2	3	4	5	6	7
32. I am immersed in my work	1	2	3	4	5	6	7
33. I get carried away when I am working	1	2	3	4	5	6	7

To what extent do you agree or disagree with each of the following statements	Strongly disagree						Strongly agree
34. I often think of leaving the organization/company/university that I work for	1	2	3	4	5	6	7
35. It is very possible that I will look for a new job next year	1	2	3	4	5	6	7
36. If I may choose again, I will choose to work for the current organization/university	1	2	3	4	5	6	7

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Section E: General Information

Please fill in the blanks or tick in the appropriate answer for you:

1- Age (years) ....

2- Gender

1	Female	
2	Male	
3	Other	

3- Years of Work Experience

Years	Months

4- Highest Level of Education

Lower than Bachelor (level 5 or lower)	
Bachelor degree (level 6)	
Higher degree (level 7 or higher)	

5- Type of job

1	Administrative		
2	Academic	Lecturer	
		Senior Lecturer	
		Professor	

THANK YOU

FOR YOUR KIND PARTICIPAQTION IN THE

SURVEY YOUR ANSWER WILL BE KEPT

CONFIDENTIAL

PLEASE DON'T FORGET TO SIGN THE CONSENT FORM

The sequence number will be used for data validation purposes only.

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