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**Developing Leaders in Organizations: A Cognition, Identity, Motivation, and Proactive
Behaviour-Based Approach Investigated Through Longitudinal Structural Equation
Modelling**

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This thesis is presented for the degree of Doctor of Philosophy of Durham University

DURHAM UNIVERSITY BUSINESS SCHOOL



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Abstract

Imagine a future in which organizations and communities have the requisite leadership to confront the most complex global challenges. Central to the actualization of this ambition is the development of leaders. My thesis puts forth a novel longitudinal model of leader development that demonstrates how the deeper psychological structures in development are connected over time; providing a clearer, more robust model of the leader development process. This includes how individuals develop an identity as a leader and effectively self-regulate important human functioning processes related to cognition, affect, and behaviour. My thesis also answers the call for further longitudinal and experimental designs in the field. The first empirical study of my thesis is experimental and investigates the impact of different cognitive sense-making approaches about the self as a leader; demonstrating how intrinsic motivation to lead is sparked through the construction of a future leader self via leader identity. The second and third studies of my thesis conduct cross-lagged and time-lagged analysis and examine how leadership self-regulation emerges over time in a serial mediation process from a salient future leader self (cognition) through to leader identity (self-definition) to affective motivation to lead (motivation) to proactive leadership behaviour (behaviour). The fourth empirical study of my thesis uses ANCOVA and latent growth curve modelling analysis to examine the impact of a leader identity development training program (each participant received three training sessions that were each four hours long, with two weeks in between each session) on the long-term leader identity trajectory changes of participants. Overall, my thesis addresses several key gaps within the literature on leader development; namely how individuals' develop an identity as a leader and become intrinsically motivated to lead and enact proactive leadership behaviours over time, along with recommendations of how organizations can best facilitate the leader development process.

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In my second study, data was collected from Ardagh Doncaster, UK in 2018 and 2019.

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Authorship Declaration

I, Richard Harry Morgan, certify that:

This thesis has been completed during enrolment in the degree of

Doctor of Philosophy at Durham University Business School.

This work will not be used in my name for any other degree or diploma.

This thesis contains work in preparation for publication.

This thesis does not contain any material that was written by anyone else. Every effort has been made to ensure other work has been correctly cited and referenced.

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Signature:

A handwritten signature in black ink that reads "Richard Morgan". The signature is written in a cursive style with a horizontal line underneath the name.

Date: 2/2/21

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Chapter 1: The Importance of Leader Identity Development in Solving the Leadership

Shortage Problem in Organizations: An Introduction

“Leadership is what wins for you.”

- Head Coach Tony Dungy

Purpose of the Research

Leadership is a process of *influence* centred around the individual making an enduring impact on other people and their wider social environment (Yukl, 2013; Day & Dragoni, 2015; Bass, 1990). As work in organizations becomes even more dynamic and collective-based than in previous decades (Scott et al., 2018; Ostroff, 1999; Brungardt, 1996), there is increasing pressure on organizations to develop leaders who can motivate other team members in day-to-day tasks at work and positively shape the long-term direction of the organization (Stam et al., 2014; Salas et al., 2012). Yet, whilst this pressure has meant that the demand for more effective leadership within organizations remains strong (Athanasopoulou & Dopson, 2018; Day & Dragoni, 2015; see Wakefield et al., 2016 which reports that 56% of surveyed executives say their company has not been able to meet its need for leadership), our understanding of how to best configure a sustainable reserve of such leaders within our organizations and communities remains incomplete (Gentry et al., 2014; Deloitte, 2012).

Such a dilemma cannot be ignored by any organization because the beneficial outcomes generated from developing leaders are too high to overlook. Although the extent of the financial impact of effective leadership is tricky to ever quantify accurately (Avolio et al., 2010; Donaldson & Grant-Vallone, 2002; Galli & Stewens, 2012), scholars and organizations broadly agree that ensuring long-term profitability is now closely intertwined with the development of effective leaders who have the ability to maximise group productivity within

the organization (Petriglieri et al., 2017; Kegan et al., 2014; Day & Dragoni, 2015; Brungardt 1996). Perhaps the most enticing reason for investing our attention and resources into further understanding the process of leader development is because these effects can become enduring over time (Day & Harrison, 2007). Indeed, individuals who develop more advanced leadership skills can cause ‘cascading leadership’ effects across their organization in which other individuals in the same environment subsequently become inspired and motivated to lead (Howell & Shamir, 2005; Bass et al., 1987; Lord & Hall, 2005). This represents an exciting prospect for any organization because the development of leaders would then be creating a positive culture of readiness to lead others within the organization itself (Avolio & Hannah, 2008). Such benefits typically provide long-term competitive advantages for organizations because of the consequential effects that leaders have on other organizational members and the overall corporate culture of their organization (Day & Dragoni, 2015; Salas et al., 2012; Silzer & Dowell, 2010; van Knippenberg & Hogg, 2003; Morgeson et al., 2010; Randall et al., 2011). Meanwhile, for other employees, leaders matter to their day-to-day experience at work because they shape the overall work climate of their group and can act as role-models who teach others in the group how to behave in the social environment (Newstead et al., in press; Treviño et al., 2000) and potentially, how to further their own skills and capabilities at work (Brown & Treviño, 2014; Gibson, 2004). For all these reasons, leaders are typically prioritized as fundamental, ‘must-have’ human capital that executive decision-makers in organizations believe to be worthy of further investigation and financial investment (Athanasopoulou & Dopson, 2018; Wakefield et al., 2016).

A concerning trend that has been identified in the literature is that many organizations often do not fully get these positive externalities of effective leader development despite paying high financial costs in attempted investments into leadership (Grossman & Salas, 2011; Wakefield et al., 2016; Schwartz et al., 2014). Their employees are often not fully

motivated to develop the requisite leadership skills and capabilities for leading others in the specific context that they are operating in, and so are unable to step up and lead effectively (Lord & Hall, 2005; Mumford et al., 2017; Day & Dragoni, 2015). Indeed, unless this issue is somehow resolved; we risk organizations eventually losing fundamental trust in the research-led process for understanding how to develop leaders (Lacerenza et al., 2017; Avolio et al., 2009; Aguinis & Kraiger, 2009). The origins of this problem often begin from underestimating how difficult the process of leader development is to sustain over time (Day et al., 2009; Day & Harrison, 2007; Lord & Hall, 2005). To make matters worse, unrealistically high expectations of how quickly the benefits of investing in leader development emerge can lead to frustration and disappointment which can subsequently reduce individual and organizational commitment to the process over time (Wakefield et al., 2016; Schwartz et al., 2014; Hunt & Weintrub, 2007; Lacerenza et al., 2017; Avolio et al., 2009). By reflecting on the problem in this way, it becomes obvious that any potential solutions that are put forth must address the more fundamental reasons why someone identifies and feels motivated to lead to the extent that they would persist in developing their leadership skills and capabilities to lead over time (Day et al., 2014; Avolio, 2005). To do this, further investigation into the longitudinal nature of leader development and the deeper processes that underpin it is clearly needed (Day & Dragoni, 2015; Day & Sin, 2011; Baltes et al., 1980).

Leader Development

With all this in mind, it is important to first provide definitional clarity on what the objective focus of my thesis is specifically (Day, 2000). In the extant literature, ‘leader development’ and ‘leadership development’ are viewed as conceptually distinct phenomena as a way of clarifying the level of analysis (the *individual* or the *collective*) from which a particular research project is being conducted at (Day, 2000). Leader development is

examined at the individual level and characterises “the expansion of the capacity of individuals to be effective in leadership roles and processes” whilst leadership development at the broader organizational level is defined as “the growth of a collective’s capacity to produce direction, alignment, and commitment” (Day & Dragoni, 2015, p. 134).

As a multi-level construct, leadership development in an organization requires a much broader and more complex form of structural change involving significant adjustments to the current organizational work culture (Chen & Kanfer, 2006). A priori focus on leadership development would likely become much more convoluted because it requires broader systematic change on an organizational level before the individuals have been changed. On this basis, it can be argued that it often makes much more strategic sense for organizations to *first* focus on the leader development of individuals who over time can then become more effective leaders who have a significant impact on the climate and leadership development of the organization later on over time (Avolio & Hannah, 2008; Day & Harrison, 2007).

Key Construct Definitions

Importantly, in focusing on leader development, there becomes a range of antecedents and indicators of development that must be defined for further clarity. Most significantly, leader identity is a construct that influences affective and behavioural reactions to leadership roles and opportunities. Day and Harrison (2007) define leader identity as “the sub-component of one’s identity that relates to being a leader or how one thinks of oneself as a leader” (p. 365) that represents a central construct of leader development processes (Miscenko et al., 2017; Lord & Hall, 2005; DeRue & Ashford, 2010) that my thesis explores in terms of both change over time in its strength (Hiller, 2005) and prioritization relative to other sub-components of one’s identity such as one’s follower identity, managerial identity, and professional identity (Stryker & Burke, 2000). Meanwhile, self-regulation of behaviour is seen to relate to a deliberate process guiding the individual towards a particular goal or

objective (Carver & Scheier, 1998) and is known to be directed by self-identity (Lord & Hall, 2005; Lord & Brown, 2004). Much of my thesis is also focused on how cognition about the self affects leader identity (one's current self-definition as a leader, Day & Harrison, 2007). I have conceptualized a new form of self-cognition drawing upon possible selves theory (Markus & Nurius, 1986; Strauss et al., 2012) that is termed a future leader self. For reference, future leader self can be defined as an individual's conscious long-term goal for their future as a leader (Strauss et al., 2012). The salience of this future leader self relates to how clearly this possible self is to envision for the individual (Strauss et al., 2012).

Oyserman and colleagues (2017) argue from an identity-based motivation theory perspective that self-identity can be dynamically constructed based on changes to the immediate context in how an individual interprets their identity at the given moment in time, suggesting that "the contexts in which one thinks influences both what comes to mind and how one makes sense of what comes to mind" (p. 142; Oyserman et al., 2012; Markus & Wurf, 1987). In light of this, future leader self can be seen as conceptually distinct from one's current leader identity because a future leader self represents a unique context from which one thinks about the self as a leader in which one's identity is seen as capable of being changed through one's own actions and behaviour as opposed to remaining fixed across time (Oyserman et al., 2017). Thus, future leader self is part of the identity construction process in which "a salient possible self brings the future into the present" (Ashforth & Schinoff, 2016, p. 114) in order to form an identity development goal that the individual feels motivated to self-regulate their own behaviour towards gradually reducing the discrepancy between their current and future leader self and developing one's current identity as a leader further (Higgins, 1987; Strauss et al., 2012; Oyserman, 2009; Oyserman et al., 2017).

My thesis also focuses on affective and behavioural responses to leading others that represent important indicators of how the process of leader development emerges over time.

Motivation to lead is examined closely throughout my thesis and is another important construct that is relevant to leader development (Guillén et al., 2015). Chan and Drasgow (2001) define motivation to lead as “an individual-differences construct that affects a leader’s or leader-to-be’s decision to assume leadership training, roles, and responsibilities and that affect his or her intensity of effort at leading and persistence as a leader” (p. 482). This motivation represents a positive reaction towards opportunities to lead that is important for my investigation on the affective component of developmental processes (Badura et al., 2020). Finally, leadership behaviour is looked at as an outcome of leader identity development that represent attempts by the individual to verify the identity in social contexts (Badura et al., 2020; Swann, 1987), and denotes a process of enacting leadership in practice (Parker et al., 2010). Specifically, my thesis investigates how individuals begin to enact proactive behaviours in order to approach leadership development opportunities. Proactive leadership behaviours are essential to ensuring that sustainable progress is being made in developing as a leader because they represent self-initiated actions that are motivated from a desire to shape the direction of one’s own future as a leader (which can be in informal and formal leadership roles) and to bring oneself closer towards a self-determined goal of becoming a leader (Parker et al., 2006; Parker et al., 2010; Barrick et al., 2013). Proactive leadership behaviours can include identifying and seizing opportunities to develop new leadership skills, in planning for one’s future development as a leader, and in networking and seeking advice and feedback from more experienced leaders on how to improve further (Parker et al., 2010; Strauss et al., 2012). Proactivity is important to the process of leader development because of the length of time and effort it takes to develop leadership skills along with the complexities of this process involving approval from others which requires the individual to be persistent and learn more about what the appropriate behaviours for becoming a leader are in their social context (DeRue & Ashford, 2010; Savani & Zhou,

2019). In the final empirical study (Study 4), my thesis looks more specifically at leadership behaviours that a prospective leader can enact in social contexts to encourage others to see them as an effective leader (Judge et al., 2004). These include consideration leadership behaviours that are linked to care and support for the follower and initiating structure leadership behaviours that represent actions taken to organize the team and its members, often in pursuit of a collective goal (Fleishman & Hunt, 1973).

Consider the consequences of overlooking important deeper-level leader development processes like leader identity (Lord & Hall, 2005), motivated to lead (Chan & Drasgow, 2001) and leadership self-regulation (Carver & Scheier, 1998; Heckhausen & Dweck, 1998). If solutions that engage in these self-related processes over time are not developed, the pool of prospective leaders willing to step up to lead will be significantly smaller because most individuals will simply continue to choose to focus their efforts on alternative roles to leadership in the social context (Stryker, 2000; Burke & Stets, 2009; Lanaj et al., 2021) which will mean that only those individuals who *already* identify as leaders in the given moment in time are willing to step up and lead (Baumeister, 1986; Hyman, 1942). Thus, regardless of the intentions that organizations have to develop influential leaders who can create long-term systematic positive change for other individuals, structures, and processes (Johnson et al., 2012; Lord & Brown, 2004; Shamir et al., 1993; Chen & Kanfer, 2006), the final outcome organizations are often left with can be underwhelming or even negative (Bersin et al., 2016; Tepper, 2007; Hogg, 2001; Brickson, 2000; Lord & Brown, 2004), if the individual has not developed an identity as a leader (Miscenko et al., 2017; Day & Harrison, 2007; Lord & Hall, 2005). Moreover, the cascading benefits from leader development are less likely to be created as a consequence. In response, my thesis investigates change over time in key indicators of leader development such as leader identity (Lord & Hall, 2005; Day & Harrison, 2007) and affective motivation to lead (Chan & Drasgow, 2001) and will show

how these can be shaped by the individual themselves. Implicit in this is how organizations must make investments in leadership early on as part of an overall strategy that is focused on facilitating the deeper underlying processes that underpin leader development within the individual (Day & Sin, 2011; Day et al., 2009). This is what is most likely to enable organizations to reap more of the benefits from leader development over the long-term and to build a culture that encourages leadership development of a wider range of organizational staff (DeRue et al., 2012; Wakefield et al., 2016).

By the end of my thesis, several conclusions will be drawn as to how the process of *leader development* actually can provide solutions to how organizations implement their overall *leadership development* strategy. My thesis also offers some recommendations on the direction of future research; specifically, further investigation of how the organizational environment can be shaped to facilitate leader development more effectively across a broader range of individuals.

Thesis Contributions

The central contribution of my thesis is to provide theoretical advancements to the issues related to leader development that are discussed above; putting forth an empirical investigation of the longitudinal process of how leaders emerge over time within organizations (Ployhart & Vandenberg, 2010; Day & Sin, 2011; Day et al., 2009). This involves a rigorous examination of both the role of the individual in creating changes to their own leader identity (Lord & Hall, 2005; Miscenko et al., 2017), motivation to lead (Chan & Drasgow, 2001; Badura et al., 2020) and leadership behaviours (Strauss et al., 2012; Parker et al., 2010) related to leadership self-regulation (Carver & Scheier, 1998; Heckhausen & Deck, 1998; Day & Sin, 2011; Avolio & Luthans, 2006), and the supportive role that organizations can play in facilitating the leader identity development and enactment of leadership behaviours by their employees (Clapp-Smith et al., 2019; Boyce et al., 2010; Day & Zaccaro,

2004). Overall, this makes the focus of my thesis centred around understanding how the deeper underlying process of leader development shape affective and behavioural responses to opportunities to lead (Carver & Scheier, 1998; Mumford et al., 2015).

My thesis can also be viewed as an effort to build upon the existing work of Day and colleagues (2009; 2011) and Miscenko and colleagues (2017) who also emphasize the importance of approaching leader development as a longitudinal process from which leader identity development plays a central role before more surface-level outcomes such as leadership skills emerge (Day & Dragoni, 2015). To be clear, leader identity represents the self-definition of oneself as a leader (Day & Harrison, 2007) and is a construct that often takes considerable time to strengthen within the individual. Instantaneous changes in how one sees oneself are unlikely to occur for the majority of individuals due to the challenges involved in developing the leadership skills required to lead effectively (Day & Dragoni, 2015). With this in mind, I examine how one's cognition can shape one's leader identity (Strauss et al., 2012; Epitropaki et al., 2017); focusing on how leader identity work can gradually help make leadership a more salient and self-relevant aspect of the self (Epitropaki et al., 2017). My thesis then demonstrates how leader identity is a central part of leadership self-regulation over time because it positively influences important affective and behavioural responses to opportunities to lead and develop (Carver & Scheier, 1998; Parker et al., 2010). Indeed, when the individual is able to self-reflect upon their experiences and engage in future-based thinking and planning for who they want to become as a leader (Metcalf & Shimamura, 1994; Flavell, 1987), the individual can become the focal driver of their own development as a leader over time rather than the organization (Deci & Ryan, 1985; Ellinger, 2004). With this, the role of the organization is then seen as more of a supportive facilitator to this development but not as its primary driver; tasked with providing leadership training (Kwok et al., in press), opportunities to gain further experiences to lead (DeRue & Wellman,

2009) and a work environment that encourages a wider range of individuals to enact an identity as a leader (Clapp-Smith et al., 2019; Ibarra, 1999).

An overview will now be put forth of the four empirical studies within my thesis, outlining the findings and the theoretical contributions that will be made to the scholarly literature on leader development and leader identity along with the practical contributions made that are relevant to organizations and their prospective leaders.

Overview of Thesis

My thesis formulates a longitudinal model of leader development that critically examines how cognitive sense-making and leader identity work influence the long-term affective (motivation to lead) and behavioural (proactive leadership behaviours) responses towards developing as a leader (Day & Sin, 2011; Oyserman et al., 2012; Lord et al., 2016; Ibarra & Barbulescu, 2010). In order to accomplish this objective, longitudinal empirical research is conducted to examine changes in these constructs (Castillo & Trinh, 2018; Fischer et al., 2017; Shipp & Cole, 2015; Shamir, 2011), focusing on the rate of change in indicators of leader development (Miscenko et al., 2017); examining how the broader leadership self-regulatory process emerges over time (Carver & Scheier, 1998; Kark & Van Dijk, 2007) by investigating how one's leader identity is formed through cognition (the creation and development of a future possible self as a leader; see Markus & Nurius, 1986; Strauss et al., 2012) and influences emotions (motivation to lead; see Chan & Drasgow, 2001) and behaviour (proactive leader behaviour; see Parker et al., 2010).

Thesis Structure

My thesis is structured as follows; after providing an in-depth review of the structural processes of leader development that underpin much of its empirical research (Chapter 2), my thesis presents its four empirical studies over the course of three chapters that are described

briefly below. The scales used to measure variables within the four empirical studies are documented in Appendix 1.

Study 1

The first empirical study of my thesis (Chapter 3) addresses the ongoing problem that organizations have with finding a sustainable reserve of employees who identify as leaders and feel intrinsically motivated to lead (Guillén et al., 2015). Affective motivation to lead represents a feeling of leading out of a sense of purpose and enjoyment (Chan & Drasgow, 2001). This is argued to be vital to the long-term process of leader development. Without this aspect of motivation, individuals are likely to remain unwilling to sustain effort towards seeking out opportunities to lead and gain further experience in leading others and to persist in overcoming the numerous challenges and setbacks that occur through developing as a leader (Kanfer et al., 2017; Chan & Drasgow, 2001; Baltes, 1987). Despite the importance of affective motivation to lead in sustaining the process of leadership self-regulation over time (Badura et al., 2020), previous empirical research has not fully addressed what type of cognitive sense-making approach (Strauss et al., 2012; Guillén et al., 2015) to thinking about the self in relation to leadership is most effective for increasing affective motivation to lead within individuals. In response, I draw upon possible selves theory (Markus & Nurius, 1986; Strauss et al., 2012), and I conceptualize a new form of cognitive sense-making about the self in relation to leadership that is termed a ‘future leader self’ that relates to establishing a long-term goal for who one wants to become as a leader in the future (Strauss et al., 2012). This first study ($N = 393$) conducts an experiment using participants from a range of different industries in full-time employment in the United States of America that investigates what form of cognitive sense-making approach to leadership (future possible selves approaches versus self-to-leader comparison approaches) best strengthens the individual’s leader identity and encourages more individuals to feel an intrinsic motivated to lead. The study then uses

structural equation modelling (SEM) to test a moderated mediation model of affective motivation to lead.

The future leader self sense-making approach is self-determined by the individual in relation to both its content and time frame which means that it can be used by a wide variety of individuals (regardless of their prior leadership experiences) to construe a deeper meaning of an identity as a leader (Strauss et al., 2012; Anseel et al., 2017; Waytz et al., 2015).

Preliminary analysis in Study 1 indicated that more future-oriented forms of self-sense-making tend to have a more positive association with leader identity and affective motivation to lead than compared to comparative-based sense-making related to comparing one's own capability to lead relative to that of an exemplar or prototypical leader. Findings from this study also show that a salient future leader self positively impacts on affective motivation to lead via leader identity in a mediation process. This mediation process is moderated by the collective self-concept that supports the relationship between future leader self and leader identity.

Study 2 and Study 3

Drawing upon self-regulation theory (Carver & Scheier, 1998) and possible selves theory (Markus & Nurius, 1986), in Study 2 and Study 3 (Chapter 4), my thesis extends the conceptual model developed in Study 1 by investigating how the broader leadership self-regulatory process emerges over time in which individuals enact proactive leadership behaviours. Proactive leadership behaviours are important to the process of leader development because they involve self-initiated actions taken to try to make further progress towards one's future development as a leader such as by attempting to gain new leadership skills and gaining feedback to improve as a leader in the future (Strauss et al., 2012). My paper (Chapter 4) examines how leader identity acts as a key mediator between salience of a future self as a leader and affective motivation to lead, and how affective motivation predicts

proactive leadership behaviour; reaffirming how leader identity represents the central component of how the broader leader development process works. Study 2 ($N = 186$) includes a sample of employees working at a multinational glass manufacturing company in the UK across two time points that were over a year apart and Study 3 ($N = 275$) is an online panel study conducted with a diverse range of employees from different industries across three time points that were each a month apart. Using cross-lagged and time-lagged analysis, this longitudinal research tests the directions within the hypothesized model.

Findings in both Study 2 and Study 3 provide support for the hypothesized claim that future leader self salience strengthens leader identity and that this relationship is not reciprocal, indicating that leadership self-regulation begins with the construction of a future leader self becoming salient in the individual's mind. Findings in Study 3 also showed support for the hypothesized claim that leader identity positively influences affective motivation to lead and that this relationship is not reciprocal. Supplementary time-lagged analysis conducted in Study 3 also indicates that affective motivation to lead has a positive impact on proactive leadership behaviours. My paper (Chapter 4 that includes Study 2 and Study 3) contributes to the scholarly literature by demonstrating how a salient future leader self encourages a wider range of individuals to explore becoming a leader as a long-term goal to work towards as part of their future. My paper shows how affective motivation to lead is a self-determined outcome derived from one's leader identity and provides a process model of how self-regulation emerges over time; demonstrating how individuals can move from cognition about the self as a leader through to enacting proactive leadership behaviours. In doing so, I emphasize how the establishment of a long-term goal in leader development is one way that individuals can effectively self-regulate their behaviour over time towards becoming a leader.

Study 4

The fourth empirical study of my thesis (Chapter 5) investigates the role of leader identity development training in facilitating leader development over time. Several prior studies have demonstrated how leadership training can positively influence the process of leader development (Kwok et al., in press; Miscenko, et al., 2017; Lacerenza et al., 2017). Study 4 extends this by conducting a longitudinal-based experiment that investigates the impact of a leader identity development training program that focused specifically on participants engaging in leader identity work. Drawing upon multidomain leader identity development theory (Hammond et al., 2017; Clapp-Smith et al., 2019), Study 4 designed and tested the impact of a leader identity development training program on participants under quasi-experimental conditions over several months. The central premise of the training is that by developing each of the four leader identity dimensions; meaning, strength, levels of self, and integration across contexts in the multidomain leader identity theory (Clapp-Smith et al., 2019), individuals can further understand how they can develop further as leaders outside of the training environment through leadership experiences (McCall et al., 1988). This confronts a key gap in the current literature surrounding the extent to which training with a specific focus on leader identity work can positively influence leader identity development and leadership behaviours of training participants, providing realistic insights into what the true impact of leader identity development training is. Study 4 also expands the literature's conceptualization of leader identity that is currently based on its strength alone (Hiller, 2005), looking also at the extent to which the leader identity is prioritized in comparison to other identities within the salience hierarchy of the individual's working self-concept (Ashforth & Schinoff, 2016; Markus & Wurf, 1987; Stets & Burke, 2000). The study was conducted across five time points over several months at an engineering organization and a textiles manufacturing organization ($N = 71$) and uses repeated measures (including pre-test and post-

test measures) to investigate the impact of the training on key leader development indicators (Day, 2011; Riggio & Mumford, 2011). Results were analysed using ANCOVA that compared the results of the training group participants to that of the control group participants over time. Latent growth curve modelling was used to examine the change in trajectory of training participants' over time.

Findings from the study help further our understanding of the extent to which a specific form of leadership training whose content and activities are focused on leader identity development can positively influence leader identity and leadership behaviours. Specifically, ANCOVA and latent growth curve modelling analysis reveal that such training positively influences participants' leader identity prioritization in comparison to alternative work identities and initiating structure leadership behaviours and that this change emerges gradually over time. The study demonstrates that leader identity training can facilitate leader identity development, but that when its results are viewed holistically, it is likely that training will be most effective when combined with other positive support influences such as opportunities to gain further leadership experiences. From this study, several contributions to the scholarly literature are made. First, the conceptualization and measurement of leader identity is expanded to include both its current strength and its priority to the individual in comparison to alternative work identities so as to demonstrate how there are different aspects of leader identity that will develop in different ways and at different stages of an individual's development as a leader. This conceptualization also reflects how, from the individual's perspective, the issue is not only about enacting a leader identity, but whether the utility of enacting such an identity is greater than compared to other identities that could be enacted in the same social context. Second, through its longitudinal and quasi-experimental investigation, Study 4 examines the extent to which leader identity development training influences behaviour and leader identity over time, providing insights into how the 'meaning'

element within the multidomain leader identity development theory was likely developed by the training as participants engaged in deeper self-reflection, but that strengthening the leader identity likely requires real leadership experiences that help demonstrate to the individual that the identity is both self-relevant and socially valid.

General Discussion Chapter

My final chapter (Chapter 6) provides an in-depth discussion on the findings of my thesis and summarises the most important theoretical contributions made to the literature on leader development and leader identity as well as the practical implications of the research. The primary contributions of my thesis are as follows. First, my thesis draws upon possible selves theory (Markus & Nurius, 1986; Strauss et al., 2012) to conceptualize of a novel cognitive sense-making construct in the leader development literature termed ‘future leader self’. My thesis demonstrates how this self-constructed vision for oneself in the future as a leader can strengthen one’s current leader identity and also facilitate the leadership self-regulatory process towards pursuing the long-term goal of becoming a leader (Carver & Scheier, 1998). This is based on the overarching argument that in order for the leader developmental process to be sustained over time, the individual must be guiding the process in a self-determined manner rather than their organization (Carver & Scheier, 1998; Deci & Ryan, 1985).

Second, my thesis integrates possible selves theory (Markus & Nurius, 1986) with self-regulation theory (Carver & Scheier, 1998) to test a serial-mediation model of how the leadership self-regulation process emerges over time; showing the impact of leader identity on affective and behavioural responses to leading others (Kark & Van Dijk, 2007; Strauss et al., 2012) by demonstrating how affective motivation to lead affirms the leader identity through congruent proactive leadership behaviours. Potentially, this could mean that as leadership becomes a self-relevant part of the self it can regulate future behaviour towards

reducing the discrepancy between current and future leader selves (Alvesson & Willmott, 2002; Stryker & Burke, 2000). Affective motivation to lead is the element of motivation to lead theory (Chan & Drasgow, 2001) that my thesis focuses on specifically because it reflects an intrinsic desire to lead that can provide an enduring interest and commitment to continue to persist over time in developing as a leader in the face of setbacks and challenges (Badura et al., 2020; Kanfer et al., 2017).

Third, my thesis investigated leader identity development both in terms of change in the strength of the current leader identity and also its prioritization in comparison to other alternative work identities that could be enacted in the same social context. My thesis designed and tested under a longitudinal quasi-experimental research design a leader identity development training whose content was based specifically on the four elements of the multidomain leader identity development theory (Hammond et al., 2017; Clapp-Smith et al., 2019); demonstrating how organizational support focused on leader identity can positively impact on individuals' leader identity prioritization and initiating structure leadership behaviours. Conclusions were found that such training that is focused on encouraging deeper reflection about the self in relation to leadership can help individuals develop the 'meaning' element of the multidomain leader identity development theory but not the other three elements of the theory which are likely to require enaction of a provisional leader identity in social settings; suggesting that training is one part of a broader leader identity development system that must be combined with other support factors, including one that has leader role models (Lockwood & Kunda, 1987; Brown & Treviño, 2014) and opportunities to lead in practice at an appropriate level for the individual's current stage of development (Ashforth & Schinoff, 2016; McCall, 2010; DeRue & Wellman, 2009).

Chapter 2: The Deeper Level Processes of Leader Development: A Review

“Nothing can stop the person with the right mental attitude from achieving his goal.

Nothing on earth can help the person with the wrong mental attitude.”

- President Thomas Jefferson

Introduction

Organizations want deeper insights into how to develop their *current* leaders and broaden the spectrum of employees who could lead in the future (Deloitte, 2012; Prokopeak, 2018; Badura et al., 2019; Shen & Canella, 2003). According to leader development theory (Day & Sin, 2011; Day et al., 2009), this process can become self-determined by the individual through conscious and deliberate changes to the “deeper level processes” (Day & Sin, 2011, p. 546) of self-identity (Lord & Hall, 2005; Hammond et al., 2017) and self-regulation (Carver & Scheier, 1998; Kark & Van Dijk, 2007) that underpin the more observable outcomes of development such as leadership skills and leadership effectiveness (Mumford et al., 2017; Mumford et al., 2007).

Despite the tangible (higher salaries) and intangible benefits (social status, self-efficacy) that often come from being a leader, many individuals still remain reluctant to lead because the perceived costs and self-sacrifices that leaders have to make over time are often seen to largely outweigh these benefits (Lanaj et al., 2021). Individuals may also judge that the benefits that can come from being a leader can be achieved through focusing their efforts instead towards gaining roles within high-status professions that require expert knowledge and skill or through occupying a formal management position without fully engaging in leading others (Valcea et al., 2011; McCauley et al., 2006). With this in mind, efforts made to develop current leaders and to expand the number of individuals who can lead in the future will need to go beyond simply promoting the personal benefits of leading. Indeed,

organizations and scholars will need to focus on gaining a greater understanding of how the deeper level processes of leader identity and leadership self-regulation that underpin someone's motivation to lead can help sustain the individuals' interest, energy, and persistence in developing as a leader (Lanaj et al., 2021; Savani & Zhou, 2019).

This chapter provides a comprehensive review of the significant factors that underpin leader development. The first section of the review focuses specifically on critically analysing Day and colleagues' theory of leader development (2011; 2009), arguing that there are three central reasons why this theoretical framework can provide a useful structure for how longitudinal empirical research should approach leader development processes that delivers valuable theoretical and practical insights. These reasons include how the theory can be extended to frame leader identity development as a change-centred process over time in which a wide variety of individuals can become engaged in leadership, how leader development can become a sustainable process, and to clarify important differences between leader development and leadership effectiveness. This has significant implications on the expectations of the individual for the speed in which leadership processes will emerge over time. These three reasons are helpful in guiding the direction of the empirical research within my thesis because they provide general principles for how individuals can begin to identify more as leaders and feel motivated to lead as well as how the leader identity development process can become a self-initiated and sustainable process over time for a wider range of individuals. Thus, an in-depth discussion of these reasons is given along with how they guide the empirical studies within my thesis.

After this, the review then channels down into a more in-depth analysis of the processes of leader development that are relevant to the empirical research within my thesis; each of which are structured into their own section within the chapter. These sections are organized as follows. First, there is a section discussing the broad notion of the self and the structure of

one's self-concept from which self-identities operate within. This is important as it provides an explanation of how information is processed relative to the self and leadership. This analysis also includes a discussion about how the different levels of the self-concept (individual, relational, collective) can influence the interpretation of one's leader identity and its subsequent development over time. After this, the review then moves to its primary focus of leader identity, discussing how the individual can self-initiate the process for activating and developing a leader identity. This is then followed with a section on future leader self cognition, a construct that my thesis argues to be a key antecedent of leader identity that provides the long-term goal/direction for how an individual would self-regulate their behaviour towards development as a leader. A final section then shines the spotlight on the significance of affective motivation to lead to the long-term sustainability of leader development. My thesis argues that this form of motivation is a key affective response to becoming a leader that is necessary to sustain interest and persistence in developmental challenges over time.

Leader Development Processes of Leader Identity and Self-Regulation

According to leader development theory (Day & Sin, 2011; Day et al., 2009), there are three tiered levels of within-person processes to which leader development is grounded upon; the surface level relates to the observable leadership behaviours and leadership skills which is then underpinned by a deeper level of psychological processes related to leader identity and leadership self-regulation. These deeper processes are in turn, buttressed by the most foundational level of leader development which relates to one's overall development as a person over one's lifespan (Day & Sin, 2011; Day et al., 2009). As stated earlier, there are three central reasons as to why leader development theory (Day & Sin, 2011; Day et al., 2009) is helpful to understanding how individuals develop an identity as a leader that they feel motivated to express in social contexts through identity-congruent behaviours. These reasons

include how the theory can be used to frame development as a change process in which a wide range of individuals are able to engage in becoming a leader, that leader development can potentially become a self-sustainable process over time, and how leader development and leadership effectiveness are conceptually distinct with very different implications as to how leadership is approached by the individual. The principles drawn from this reasoning are shown to guide much of the empirical studies within my thesis. These reasons are examined below.

Leader Development as a Change-Oriented Process

First, Day and colleagues' theory (2011; 2009) begins by proposing that leader development occurs across multi-level processes within the individual, with growth in leadership skills derived from deeper changes in psychological forces of leader identity and self-regulation that guide behaviour (Miscenko et al., 2017; Day & Harrison, 2007). Specifically, identity is considered a central influence on leader development because it underpins how the individual derives a greater sense of personal purpose and motivation from enacting challenging affective and behavioural responses in social contexts (Day et al., 2009; Leary & Tangney, 2003; Lord & Hall, 2005; Baumeister, 1999; Fiske, 1992). The overall benefit to a focus on identity work is that it enables individuals and organizations to approach leader development as a change-centred process in which many individuals from a diverse range of backgrounds and experiences are able to emerge as leaders at different times and in a variety of formal and informal leadership roles (Day & Sin, 2011; Avolio et al., 2009; McCall, 2010; Lord & Hall, 2005); albeit at different rates and levels of progress (O'Connell, 2014). At the same time, potential sceptics of such an overt focus on psychological process in leader development could misconstrue the meaning of the scholarly literature on leadership skills (Mumford et al., 2017; Mumford et al., 2000; Dragoni et al., 2011; Ericsson & Charness, 1994) and propose that organizations only needed to focus on helping individuals to

develop leadership skills relevant to their particular context. Whilst this might initially seem to be a more pragmatic approach to developing leaders that could save time and effort in engagement in leader identity work, in reality it is unfeasible. These leadership skills become increasingly challenging to develop the more advanced the leadership position becomes (Mumford et al., 2007) and so require the individual to synthesize contextual and principle-based knowledge of how to respond appropriately as a leader (Mumford et al., 2017; Lord & Hall, 2005). Thus, such leadership skills are more likely to be mastered when the individual is genuinely motivated to gain further experiences in learning how to successfully enact them (Newstead et al., in press; Miscenko et al., 2017; Day & Dragoni, 2015; Day et al., 2009; Ashforth, 2001; Borman et al., 1993). So, whilst undoubtedly, leadership skills can be a focus of development in and of themselves (Mumford et al., 2017; O'Connell, 2014; Salas et al., 2012), to simply approach leader development over time from a skills-based focus would be unlikely to result in sustainable development over a long period of time as it does not factor in the need for individuals to identify with being a leader and seek self-directed actions towards further learning and experience in leadership (Day & Harrison, 2007; Hammond et al., 2017). Such a focus alone simply has too many shortcomings. For these reasons, it is suggested that the deeper psychological forces of identity and self-regulatory processes are a necessary part of within-person changes to leadership skills and leadership effectiveness that must be tackled first. Thus, empirical studies will need to investigate what causes leadership self-regulation to begin in order to further our understanding of how individuals change their actions towards behaviours that are congruent with a leader identity.

Self-Sustaining Leader Development Processes and Leadership Experience

Second, leader development theory (Day & Sin, 2011; Day et al., 2009) also suggests that a more concerted emphasis towards understanding how experiential learning in leadership shapes leader identity and leadership self-regulatory processes will produce more insightful

empirical research of how adults/employees actually develop within their organizations (Heslin & Keating, 2017; Van Iddekinge et al., 2009; McCall et al., 1988). In part, Day and colleagues' theory (2011; 2009) suggests that this is because the majority of any biological influences on self-development have already been enacted during one's childhood and adolescence, meaning that any further development at one's adult stages of life is shaped through experiential learning in social environments (Moshman, 2003; Day & Sin, 2011; Hannah et al., 2008). Day and colleagues also alluded to this point in their earlier works, emphasizing how "participating in more leadership experiences strengthens the salience and centrality of a leader identity, especially if the outcomes of the experience are viewed in a positive light" (2009, p. 185). With this in mind, new challenging experiences in leadership roles can be seen to offer a self-directed and proactive way for an individual to build greater self-efficacy in leading others and establish a stronger foundation of self-knowledge that eventually strengthens one's identity as a leader (DeRue & Wellman, 2009; Ashford, 1989). This has both immediate and long-term benefits for the leader development process. Perhaps the most important of these benefits is that leadership experiences provide opportunities to gain contextual knowledge and insights of the social setting that one is leading in, helping the individual to more effectively determine how to respond to different leadership situations and demonstrate to other group members their capability to lead (Mumford et al., 2017; Mumford et al., 2000; Lord & Hall, 2005; Day & Harrison, 2007; Zaccaro et al., 1991). Whilst the quality of leadership experiences varies widely along with the length of time that will be needed to draw further wisdom and understanding from them, experiences are still a highly valuable resource (DeRue & Wellman, 2009). This is because the individual immediately has a greater chance to demonstrate how they can perform more effectively as a leader which increases the likelihood of being granted further opportunities to lead that can develop their skills as leaders from others in the group (DeRue & Ashford, 2010; Hannah et al., 2008). This

is all the more significant when considering how this can potentially create a self-sustaining reciprocal process in which the individual becomes more motivated to gain experiences that develop their own leadership skills even further as a consequence of a strengthened identity as a leader and vice versa (Day et al., 2009; Lord & Hall, 2005; Ashforth, 2001). The benefits of this might vary significantly between individuals as other situational factors might affect the quality and speed in which this cyclical process occurs (DeRue et al., 2009). Yet, it is the *possibility* of this self-sustaining leader development process that can at least provide a platform from which future research can investigate how to best ensure the leader development process continues over time (Day & Sin, 2011; Lord & Hall, 2005; Baumeister, 1999; Fiske, 1992). With all this in mind, empirical work must focus on understanding how individuals can develop a more self-relevant meaning towards becoming a leader that maintains the individual's interest and level of persistence over time in development processes; guiding behavioural responses towards opportunities towards becoming a leader and thus potentially creating a sustainable process for further development.

Leader Development as Conceptually Distinct from Leadership Effectiveness

Third, the longitudinal perspective from which the developmental processes within the theory (Day & Sin, 2011; Day et al., 2009) are grounded upon is useful in helping scholars, prospective leaders, and their organizations appreciate the crucial differences between leader development and leadership effectiveness (Lord & Hall, 2005). This distinction between development and effectiveness is important because it influences the expectations that prospective leaders and their organizations have for the length of time that it will take for leadership processes to emerge (Baltes et al., 1980; Mitchell & James, 2001; Day & Dragoni, 2015). This in turn affects the degree of patience and persistence that both the individual and the organization could be willing to commit to the development process over time (Strauss & Parker, 2018; Hunt & Weintrub, 2007). At first, this might not seem a major problem, but it

becomes more concerning when considering the very different perspective individuals and organizations have on the time it should take to successfully develop leaders. Although there is still broad consensus that being a leader is an inherently challenging role that is enacted with varying degrees of effectiveness by different individuals (Day & Sin, 2011; Baltes, 1997; Day, 2000), often overlooked, is how the length of time it takes to develop into an effective leader varies widely based on the specific individual and their given set of circumstances (Lord & Hall, 2005; Day & Halpin, 2004). Different aspects of one's leader identity might also emerge at different stages in time. There is, however, greater conceptual clarity in leader effectiveness which relates only to the *current* performance of the individual as a leader and is at least in part related to the individual's suitability to meet the needs of others in the given social context (Day & Dragoni, 2015; Douglas & Ammeter, 2004). The perspective that ends up being taken by the prospective leader is important because it will influence whether an individual frames the evaluation of their self as a leader from the perspective of their long-term development trajectory or based on their current effectiveness to lead. This will significantly influence the affective and behavioural responses of the individual towards opportunities to lead in both the short and long-term (Carver & Scheier, 1998). Individuals that only view leadership from an effectiveness-based perspective are more likely to make conclusions about the self as a leader using automatic processes of self-evaluation that rely on implicit assumptions about what a leader ought to be (Ritter & Lord, 2007; Eden & Leviathan, 1975). The downside of this is that if the individual does not perceive that they currently are an effective leader, they are more likely to distance themselves from the possibility of becoming a leader in the future and to instead focus on developing other attributes within the self that appear more feasible to achieve (Anseel et al., 2017; Trope & Liberman, 2010). Meanwhile, organizations that focus only on measuring current leader effectiveness are also inherently expecting leader development to emerge more quickly than is often possible when

considering the length of time that it takes to develop their leader identity and leadership skills (Miscenko et al., 2017). In sum, individuals often fail to consider how they are capable of influencing their own leader identity and leadership skills trajectory over time through deliberate behavioural changes (Day et al., 2014; Day & Sin, 2011). This has important long-term implications for the number of individuals who are willing to view leader development as a legitimate possibility for their future.

How the deeper processes of development of leader identity and self-regulation can be shaped by the individual are discussed in greater detail in the rest of this chapter; considering the implications of each process on how the individual develops as a leader (Day & Sin, 2011; Day et al., 2009).

Self-Concept and the Working Self-Concept

The Self

In order to fully understand how leader development emerges across time, a more critical examination of the most relevant psychological processes that guide an individual's engagement in leadership behaviours in social contexts is needed (Day & Sin, 2011; Day et al., 2009). As a starting point to how this issue can be addressed, there must be greater clarity about how these deeper self-regulatory processes are grounded within an overarching cognitive system of thoughts and knowledge about oneself that are encapsulated within the notion of the *self* (Markus & Wurf, 1987). Nested within this broader concept of the *self* are various aspects of self-knowledge such as the self-concept structure that includes self-defining identities (Ashforth & Schinoff, 2016).

Identities are important because they provide greater understanding into who one is based on one's perceived characteristics, abilities, personal values, possible selves, and long-term goals as well as how the individual think others perceive them as (Ashforth & Schinoff, 2016; Lord et al., 2016; Ashford, 1989; Hitlin, 2003). From a self-regulatory perspective,

identities also enable the individual to interpret what the degree of personal relevance and meaning is of a given task, role, or social environment; providing a self-referencing guide for what the appropriate affective and behavioural responses are to incoming information and feedback which can then be used to evaluate and adjust current behaviour (Markus & Wurf, 1987; Epitropaki et al., 2017; Lord et al., 2016; Oyserman et al., 2012; Lord et al., 1999). This should be taken into account in leader development research because individuals have a much higher degree of control over the self-regulation of their behaviours than compared to their ability to influence their immediate environmental factors such as the degree of available support they currently have access to (Parker et al., 2006; Chen & Kanfer, 2006; Kanfer et al., 2001) and opportunities to lead (Parker et al., 2010) that will also influence the speed in which developmental outcomes can emerge (Shipp & Cole, 2015; Johnson et al., 2012). Thus, if our primary shared objective remains to find comprehensive ways to facilitate leader self-development that are sustainable and accessible to a wider range of potential leaders, it makes sense to be pragmatic and start by examining how the antecedents of development can be shaped by the individual over time (Deci & Ryan, 1985; Higgins, 1987; Parker et al., 2010). Accurate conclusions about how individuals begin identifying as a leader and self-regulating their own behaviour and development progress over time are only going to be possible by first understanding how individuals process information about the self. This leads my review to a discussion on the self-concept below.

Self-Concept

Self-concept is important in leader development because it provides a structure from which we are able to see how information processing about the self is directed; guiding evaluations of the degree of self-relevance of incoming stimuli, events, and situations that the individual is currently operating in; shaping how the self is positioned within social environments and how one feels and behaves in response to these given stimuli (Hall et al.,

2021; Lord et al., 2016; Fiske & Taylor, 2013; Leary & Tangney, 2012; Markus & Wurf, 1987; Lord & Brown, 2004). Taking this into account is all the more important to leader development processes because it impacts on the current and future decision-making of the individual (Lord & Hall, 2005); both in terms of what an individual chooses to focus their attention and efforts towards on a consistent basis as well as how they understand their identity in a given social context (Brewer & Gardner, 1996; Lord & Brown, 2004; Johnson & Chang, 2006).

Working Self-Concept

Leader identity and leadership self-regulation are flexible processes that can be adjusted over time within the self-concept and are only likely to influence the affective and behavioural responses of the individual at the surface level if kept salient. This is best understood through the notion of a working self-concept. According to dynamic self-concept theory (Markus & Wurf, 1986), individuals have an activated *working* self-concept which includes the aspects of their self-concept that are salient and conscious at a given moment in time. The notion of a working self-concept helps to illustrate how information processing in the brain is limited by the amount of content that can be kept salient at any given moment point in time (Markus & Wurf, 1986; Lord et al., 1999; Kihlstrom & Klein, 1994). This is important to our understanding of how cognitive processes in development emerge for several reasons.

First, the notion of a working self-concept enables us to recognize that the individual is unlikely to ever use a full assessment of all components of the self because only a select number of elements are ever activated at a given point in time for context-specific information processing (Lord et al., 1999; Kihlstrom & Klein, 1994). Taking this into account means recognizing that it is what is cognitively salient at a given moment in time that will have the most impact on the behavioural decisions an individual makes in relation to their

own development. This is because the salient self-knowledge in the working self-concept is what guides the perceptions, emotions, and behavioural responses to the current context and situation the individual is operating in (Markus, 1977; Markus & Kunda, 1986).

Second, is the increasing emphasis on the level of self-importance attached to beliefs within each level of self-construal (individual, relational, collective) which will vary significantly between individuals (Brewer & Gardner, 1996; McCormick et al., 2018); as will the perception of one's own self-attributes as representing either more stable trait like features or as representing fluid states of construal to the individual that change over time (Lord & Brown, 2004; Lord et al., 1999). Thus, conscious elements within the working self-concept at a given moment in time can be guided either by *automatic* self-schema or *consciously* developed self-identities; suggesting that there will be variation in individuals' openness to developing new identities (Lord et al., 2016).

This point is highlighted further when the notion of a working self-concept is contrasted to the notion of a *chronic* self-concept which represents the aspects of one's self-concept that are perceived to be relatively stable across one's lifetime (Johnson et al., 2006). The content of this self-knowledge is often shaped by the previous socialization and upbringing processes experienced by the individual in the past (Oyserman, 2001; Baltes et al., 1980). As a recent empirical paper on the construct validation of the 'levels of self-concept scale' measurement by Hall and colleagues (2021) suggests, when a particular aspect of self-knowledge is firmly established within the self-concept and is highly familiar, the individual becomes more willing to apply this self-knowledge across a wider range of different social contexts that they operate in. These differences are partially based on the extent to which each level is salient and what identities and behaviours the individual chooses to enact at a given moment in time (Epitropaki et al., 2017; Johnson et al., 2006). An

overview of this multi-level structure for processing information about the self is discussed below.

Multi-Level Structure

Developing this understanding begins by first appreciating why the structure of self-concept is conceptualized across three distinct levels; the *individual*, *relational*, and *collective* self (Brewer & Gardner, 1996; Sedikides & Brewer, 2001) that can affect the deeper processes of leadership self-regulation and leader identity. Brewer and colleagues (1996) argue that the individual level of self-construal is typically centred around pursuing one's own perceived self-interests whilst the relational level of self-construal processes information in relation to one's feelings towards the salient interpersonal relationships one has in the given context. Finally, the collective level of self-construal reflects how one perceives oneself within a group dynamic or social context (Brewer & Chen, 2007). Each of these levels holds unique personal beliefs and values that the individual has about themselves, their relationship to others, and the collective entities that they are members of that influences how they approach the self in the social environment in different ways (Fiske & Taylor, 2013; Baumeister, 1999; Kihlstrom & Cantor, 1984).

Consider the implications of these differences. Self-concept becomes significant to any form of development process because as the individual shifts from one level of self-construal to the next, they are in effect adjusting what they prioritize and how they self-regulate their own behaviour and construe their own identity (Lord et al., 2016; Markus & Wurf, 1987; Lord & Hall, 2005). As such, each level of self-construal activates very different forms of *social motivation*, *self-evaluation*, and *frame of reference* within the individual that then subsequently direct how the self is interpreted in its current social environment along with what one's emotional and behavioural responses will be (McClintock, 1972; Brewer & Gardner, 1996). This means that the level of construal that an individual frames their leader

identity at a given moment in time will have significant consequences to the way in which they perceive what effective leadership ought to be, as well as how others will perceive them (Johnson et al., 2006). This matters in the long-term because individuals that are perceived by others in their social context to be effective leaders will end up gaining much greater exposure to opportunities for experiences in leadership that can improve their leadership skills over time (DeRue & Wellman, 2009). Therefore, I will briefly review each of the three levels of self-concept and then discuss their significance to leader development over time.

At the *individual* level of self-construal, the goals and motives of the individual tend to end up becoming prioritized towards one's perceived self-interests and are often expressed through behavioural attempts at distinguishing oneself from others in the same social context (Cross et al., 2011; Lord et al., 1999; Markus & Kitayama, 1991). The individual then seeks to protect their own sense of uniqueness over time in order to enhance their sense of self (Ashforth & Schinoff, 2016; Cooper & Thatcher, 2010). Thus, at the individual level of construal, one's self-evaluation process is focused much more than at other levels of self-construal on assessing oneself in comparison to other people; most often those in the surrounding context (Sedikides & Brewer, 2001).

At the *relational* level, the self becomes oriented towards the interests of other people that one has affinity for; prioritizing the development and maintenance of these relationships that have perceived value to the self (Andersen & Chen, 2002). This causes incoming information to be viewed based on its connection to its potential influence and impact on one's relationship with others (Brewer & Gardner, 1996). This is then used to create a very different self-evaluation process than at the individual level because behavioural decisions are now assessed in terms of whether it appropriately meets the needs of others and fulfils the perceived obligations that they believe they have (Flynn, 2005).

Finally, at the *collective* level, the individual shifts towards a more holistic motivation that prioritizes focus towards fulfilling what they perceive to be in the group's best interests (Lord et al., 1999; Miscenko & Day, 2016). Self-evaluations then become focused more on assessing the self as a group member, particularly one's ability to act as a prototypical member of the group who can uphold its values and standards (van Knippenberg et al., 2004). The individual is more likely to think about what they can do to best influence and support the collective groups that they are a member of such as by offering a greater level of welfare and support for the group (Jackson et al., 2006; Lord et al., 1999; Tajfel & Turner, 1986), and to possibly prioritize the greater good of the collective over individual benefits (Flynn, 2005). The individual also references how their own group compares to other outside groups in relation to issues such as their comparative attributes and achievements (Brewer & Weber, 1994). Thus, with these differences in mind, evaluating what level of self-construal (individual, relational, collective) is ultimately most relevant for leader development is important to finding solutions as to how a wider range of individuals can identify as a leader and sustain development of a leader identity in social contexts. How these three levels of self can influence the interpretation of one's approach to leader development are reviewed below.

Levels of the Self in Leader Development

From a longitudinal perspective, each level of the self-concept is likely to become appropriate for guiding interpretations of the social context at different moments in time in the leader development process (Lord & Hall, 2005; Lord & Brown, 2004; Hogg & Van Knippenberg, 2003). However, for prospective leaders in practice, particularly for those starting out, this proposition could easily appear far too general to help them achieve their objective of finding clear principles for how they should enact their leader identity in a way that will be successfully received by followers on a consistent basis (Mumford et al., 2017; DeRue & Ashford, 2010; Shamir et al., 1993). Perhaps in partial response to this issue,

empirical research has begun to test the perceived effectiveness of each level of construal (individual, relational, and collective) for interpreting one's leader identity and has found that collective construal is more closely associated with transformational leadership behaviours that are perceived by most team members as the most effective leadership style (Johnson et al., 2012; Conger & Kanungo, 1998; Kark & Shamir, 2002). A likely reason for this is that collective-based approaches match very well with what most team-members are looking for in their leaders (Chrobot-Mason et al., 2016). This is often because collective-based leadership approaches typically focus on the more typical role requirements of leading others such as giving support (Judge & Piccolo, 2004) and inspiring followers towards greater collectivism that is prioritized over the leader's own self-interest (Lord & Brown, 2004; van Knippenberg et al., 2004). Such expressions of collectivism are also more likely to be endorsed by organizations who are under increasing pressure to find leaders who can improve teamwork and orientate other employees towards more collective behaviours (Brewer & Schneider, 1990; Stam et al., 2014; Johnson et al., 2012; Shamir et al., 1993; Bass, 1990). Having said this, prospective leaders may still need to use each level in different contexts or situations (Lord & Hall, 2005). For example, the individual level of self-construal might be useful for gaining a deeper understanding about what one's motives are in investing time and energy into development as a leader into the future, whilst the collective level of self-construal might be used to formulate appropriate approaches to motivating and organizing other people towards a common objective. Whilst this provides a legitimate reason to be sceptical in definitively claiming one level of self-concept as more effective for leading others over another, there are currently more empirically verified reasons as to why the collective level approach for leader development is the most effective general approach for prospective leaders to take in most social situations that supersede these concerns (Johnson et al., 2012). Most notably, for individuals to be able to consistently claim and maintain

leadership roles that provide experiences that facilitate leadership skill development, prospective leaders need to enact behaviours that appeal to followers (DeRue & Ashford, 2010) and such behaviours have been shown to be closely linked to collective-based leadership (Johnson et al., 2012). Therefore, the level of self from which one's development is interpreted from must be recognized as a key factor that has long-term implications on the individual's ability to gain leadership experiences and the speed in which they are able to develop. Yet, in order for development to be considered in the first place, it will have to become a meaningful and salient component within the working self-concept. Thus, the review will now turn to the issue of how a given leader identity develops within the working self-concept.

Leader Identity

Self-identities offer flexible self-definitions that help the individual answer the question of "*who am I?*" and are nested within the more stable structure of the self-concept (Ashforth et al., 2008, p. 327; McCall & Simmons, 1978). Specifically, leader identity can be defined as "the sub-component of one's identity that relates to being a leader or how one thinks of oneself as a leader" (Day & Harrison, 2007, p. 365). Identities emerge in the working self-concept from the integration of self-schemas that form a current outlook of who one is and what one's role ought to be in a given social context; making many self-identities capable of changing much more rapidly than compared to more stable self-knowledge found within the chronic self-concept (Hammond et al., 2017; Brown, 2015). It is this flexibility that makes identities such focal points of influence in change processes like leader development.

The fundamental influence of leader identity on development is best seen from the perspective of the individual in their given context. For prospective leaders, strengthening one's identity as a leader is an important part of the broader leader development process because identities shape the attitudes and responses towards incoming stimuli and

opportunities related to being a leader that affect how resources of time and energy are prioritized (Stryker & Burke, 2000; Markus & Wurf, 1987). This is also seen by how the content of one's identity is often closely related to the goals and ambitions that the individual prioritizes (Flynn, 2005), including whether their self-development in a given area should be spotlighted considering its degree of importance to their sense of self (Fiske & Taylor, 2013; Markus & Wurf, 1987; Oyserman et al., 2012; Lord et al., 1999; Banaji & Prentice, 1994). The long-term impact of this can be that identities act as a significant influence on self-regulation (Day & Sin, 2011; Parker et al., 2010; Lord & Brown, 2004) and how the individual believes they should behave in specific contexts that are salient (Lord et al., 2016; Ashforth & Schinoff, 2016; Oyserman et al., 2012; Baumeister & Vohs, 2003). Following on from this issue is the question of whether leader identity development requires combinations of different processes and if these processes are more or less relevant at particular stages of one's development as a leader. As a consequence, the processes for how leader identities are developed within a wide range of individuals are investigated further below.

Leader Identity Development

The process of leader identity development emerges as a gradual progression in one's defined image as a leader (Miscenko et al., 2017; Day & Harrison, 2007; Lord & Hall, 2005). This is expressed in terms of both the extent to which the individual defines leadership as an important part of their sense of self along with how willing they are to verify this identity publicly through their own behaviours (Day & Harrison, 2007; Lord & Hall, 2005; Foote, 1951). This is pivotal to ensuring that a prospective leader can continue to develop because social validation of the identity by others is what is best known to enable the individual to access experiences in leadership that further advance their leadership skills (Epitropaki et al., 2017; DeRue & Ashford, 2010; DeRue & Wellman, 2009). Leader identity development is often seen to emerge through the individual engaging in leader identity work (Epitropaki et

al., 2017) which is defined by Sveningsson and Alvesson (2003) as a process of “people being engaged in forming, repairing, maintaining, strengthening or revising the constructions that are productive of a sense of coherence and distinctiveness” (p. 1165). The notion of such identity work is helpful to our understanding of how individuals can self-construct their own identity as a leader because it is a process that is guided by the individual and allows the individual to approach their development in a way that accounts for the context they are operating in and their current stage of development and prior experiences. At the same time, there are also some clear principles that underpin successful leader identity work for all prospective leaders. As a social phenomenon, leader identity cannot merely be considered a personal identity in the same way that a perceived personality trait or quality could be because leader identity is also social in nature in that it requires social validation from others in a group in order to be authentically enacted in social contexts (Ashforth & Schinoff, 2016). With this in mind, identity work for leadership can be done on different fronts/levels (Epitropaki et al., 2017). First, at the intrapersonal level (within-person processes), identity work involves individual processes within the self that relate to internal cognitive and affective elements that shape the individual’s self-views about themselves and their goals for the future; it is at this level of analysis of leader development to which my thesis is primarily focused upon (Day & Dragoni, 2015). Second, the interpersonal level (between-person processes) refers to identity enaction through the dyadic social processes; such an identity work at this level involves having the identity validated by others (DeRue & Ashford, 2010; Ferster & Skinner, 1957). Indeed, the scholarly literature emphasizes both identity work at the *intrapersonal* level (Lord & Hall, 2005; Day & Harrison, 2007; Sveningsson & Alvesson, 2003; Ashforth & Schinoff, 2016; Ibarra, 1999) and experiences in leading others in social environments at the *interpersonal* level (DeRue & Ashford, 2010; Howell & Shamir, 2005) as necessary at various points in time in order for leader identity to develop as a more

significant element of the self (Day & Sin, 2011; DeRue et al., 2012; Day et al., 2009). The need to focus on the combined benefits of both intrapersonal and interpersonal identity work is important for achieving several broader objectives that we are interested in (Day et al., 2009). First, taking this self-determined perspective suggests that individuals can change their role in social settings over time through developing greater self-awareness and through experiences in leadership (Epitropaki et al., 2017; Sveningsson & Alvesson, 2003) which widens the potential number of individuals who could become willing to consider viewing themselves as current and future leaders, placing more control of the development process with the individual (Clapp-Smith et al., 2019; Hammond et al., 2017). This can increase the number of individuals who are willing to step up and lead in organizations. Second, this approach accounts for how both processes become important at different stages of leader development, whilst also appreciating how both processes may often occur simultaneously once the individual is ready to enact their personal identity as a leader in a social context (DeRue et al., 2009; Moorosi, 2014). How these broad objectives can be best achieved at both the intrapersonal and interpersonal level are discussed below.

Leader Identity Development at the Intrapersonal Level

Leader identity work involves building a greater degree of self-awareness about who one is in relation to leadership; particularly what meaning and relevance leadership has for current and future processing of the self in social contexts (Alvesson et al., 2008; Ashforth & Schinoff, 2016). Depending on the individual's current stage of development as a leader, identity work can relate to either the construction of an entirely new identity as a leader or the reaffirmation of one's current leader identity that helps the individual to configure the relevance and meaning of leadership to their sense of self (Sveningsson & Alvesson, 2003; Hammond et al., 2017; Snow & Anderson, 1987). Yet, regardless of the individual's stage of

development, leader identity work has several important long-term consequences for how leader development unfolds that are analysed below.

First, consider the issue of how self-cognition factors affect an individual's ability to productively engage in leader identity work (Markus, 1977). A problematic assumption to make would be that engagement in the same particular form of leader identity work by the same participants will result in relatively homogenous changes in participants across time when in actual fact, individuals hold very different perspectives on what identity actually is as well as the extent to which they are capable of adjusting their own self-perception over time as well as their motivations because of each individuals' different self-attributes, upbringings, and life experiences (Ashforth & Schinoff, 2016; MacDonald et al., 2008). This is important because these perspectives inevitably influence the quality of engagement in this leader identity work (Avolio & Hannah, 2008; McAdams & McClean, 2013; Avolio, 2005). These perspectives are influenced by persistent self-schemas of the individual which provide "cognitive generalizations about the self, derived from past experience, that organize and guide the processing of self-related information contained in the individual's social experiences" (Markus, 1977, p. 64). These generalizations provide an, '*easy-to-access*' source of information that can be recalled upon to make quick judgments about whether one believes their identity can change and what their future behaviour and emotions in a specific context should be (Lord et al., 2016; Markus, 1977), including whether it is both possible and desirable to pursue further development of one's leader identity (Day, 2011).

Schemas that indicate how one's identities are *stable* constructs over time signal to the individual that their self-identity is unlikely to change drastically so long as the context that they operate in remains mostly unchanged (Ouellette & Wood, 1998), with further engagement in identity work unlikely to be seen as able to affect this (Alvesson & Willmott, 2002; Stryker & Burke, 2000; Markus, 1977; DeRue & Ashford, 2010). On the other hand,

active self-schemas that construe self-identities as more *flexible* constructs of self-knowledge encourage the individual to engage in more conscious self-reflection about who one is now as well as who one could be in the future because the individual believes that it is possible for their self-identity to be changed (Lord et al., 1999). This might include exploring the possibilities for new identities to be constructed and/or for current self-identities to be revised and strengthened through developmental experiences over time (Lord et al., 1999; Oyserman et al., 2012; Alvesson & Willmott, 2002). This would enable an individual to understand how they could potentially function differently than they currently are in a particular context (Ashforth et al., 2014; Weick, 1995). Building on this premise, when a leader identity is repeatedly activated, it could eventually become internalized within the self-concept (Lord et al., 1999) and be used in more situations to further development (Markus & Wurf, 1987; Lord et al., 1999). Hence, an individual's perspective on their capability to shape their own identity as a leader over time has cascading effects on leader identity development.

But how can those individuals with schemas that portray leader identity as stable begin to see change? After all, a significant goal of research and organizational investment into leader development is not simply to understand the current situation, but to learn how it can be positively influenced in order to encourage a wider range of people to engage in leadership (Athanasopoulou & Dopson, 2018; Epitropaki, 2018; Day & Dragoni, 2015; Deloitte, 2012). Answers to this start through first configuring how identity work can become more impactful to a wider range of people with different experiences and current perceptions of themselves (Hammond et al., 2017).

First, identity work that allows individuals to reflect and analyse what they want to become in the future could directly challenge this assumption of identity stability and help the individual move towards viewing identities as malleable and developmental constructs within their self-concept rather than as a fixed trait-based phenomenon (Dehaene, 2014; Lord

& Hall, 2005). Through future self-exploration of different potential identities, self-schemas linked to leadership can then become activated in the working self-concept and can then over time begin to activate a leader identity in more situations and environments than was previously possible (Hammond et al., 2017; Markus & Wurf, 1987; Lord et al., 1999; Hooijberg et al., 1997).

Second, conscious and deliberate identity work can help individuals (particularly those starting off in leadership) to challenge existing limiting beliefs and pre-conceived assumptions about their own capability to lead in the future (Hammond et al., 2017; DeShon & Gillespie, 2005; Alvesson & Willmott, 2002; Snow & Anderson, 1987; Louis & Sutton, 1991). This is of particular importance to our broader objective of encouraging a more diverse range of people to consider leading others because for many individuals, negative past experiences in leadership are often what prevent them from pursuing further self-development opportunities, whether that be to begin to lead, or to assume a leadership role that is more challenging than one the individual has previously occupied (Higgins, 1989; Lord et al., 1999; Baltes et al., 1980). The importance of conscious identity work is best shown by considering the consequences of when it is absent. When reactions to social situations are only based on *automatic* self-schemas about one's role within a group setting, they are often only derived from one's past experiences (Lord et al., 2016; Dehaene, 2014; Taylor & Crocker, 1981). When repeated, these automatic self-schemas can eventually create *cognitive scripts* for behaviour that direct how the individual interprets and responds to sequences of events over time throughout their life (Epitropaki et al., 2017; Lord et al., 2016; Schank & Abelson, 1977; Oyserman et al., 2012; Foti & Lord, 1987). For example, a cognitive script about the self as a follower that has been repeatedly used to regulate behaviour in a variety of different social situations could ultimately restrict any further consideration by the individual of responding as a leader in any of these social contexts in the

future (Hammond et al., 2017; Louis & Sutton, 1991; Schank & Abelson, 1977; Cunliffe & Linstead, 2009). The motivation to develop a leader identity would also be suppressed further unless some of the cognitive script's assumptions are challenged through effortful identity work (Higgins, 1989; Lord et al., 1999). To do this, consistent engagement in leader identity work helps salient leadership roles become more likely to be explored within the working self-concept as a viable alternative option for self-regulating one's future behaviour (Clapp-Smith et al., 2019; Hammond et al., 2017; Lord et al., 1999). As the individual becomes more familiar with this process, they can also advance their metacognitive level of self-awareness about *how* their self-perception and experiences are influencing their current emotions and behaviour and thus, have a greater level of awareness of the reasons for the outcomes being generated within their life and career (Metcalf & Shimamura, 1994; Flavell, 1987). Such an understanding would ultimately enable the individual to have a much greater influence on the direction of the development process. Undoubtedly though, this process will be easier for those who find greater meaning from leadership which will make them more willing to think critically about how such an identity can be developed further (Hammond et al., 2017).

Third, neurological research also suggests that consciously constructed identities enable the individual to find a deeper level of meaning and understanding of the self in context (Dehaene, 2014; Lord et al., 2016). Dehaene and Naccache's (2001) original theory conceptualizes a global neuronal workspace (GNW) that acts as a self-information processing network between different parts of the brain, providing conscious thoughts about the self and the creation of new and active self-identities and one's future. This workspace interprets self-schema in a given context and forms *conscious* and *global interpretations* of the self that the individual is actively aware of as their salient identity within the given context (Lord et al., 2016; Dehaene, 2014). This is important because self-relevant meaning is what sustains interest in pursuing the development of an identity over a considerable amount of time and in

the face of setbacks and challenges (Lord et al., 1999; Ashforth & Schinoff, 2016).

According to this neurological research, as an identity becomes more of a priority in the cognitive global neurological workspace (Dehaene, 2014), it becomes controlled under a reward-based feeling of dopamine that regulates and prioritizes an individual's concentration on developing that identity further (Lord et al., 2016). This focuses information-processing towards enacting that identity and away from other distractions (Epitropaki et al., 2017; Ashforth et al., 2008), directing the individual towards proactive leadership behaviour and opportunities to reaffirm the leader identity (Lord et al., 2016; Johnson et al., 2006; Kark & Van Dijk, 2007; Chan & Drasgow, 2001). In light of these advantages, it becomes clear that consciously guided leader identity work could provide an effective approach to how the process of leader identity development can be sustained over time within a more diverse range of individuals and could also form the basis for how leader identity development trainings are designed.

Leader Identity Development at the Interpersonal Level

Due to the long-term influence of underlying psychological processes on leader development, it can be easy to forget that leadership roles by definition are socially constructed and thus require the verification of others within the group in order to be enacted (Ashforth & Schinoff, 2016; Markus & Nurius, 1986; Goffman, 1959). Undoubtedly, the motivation of the prospective leader to verify their identity as a leader (Hoyle & Sherill, 2006; Shamir & Eilam, 2005; Swann et al., 2003) and to further develop their leadership skills (Miscenko et al., 2017; Day et al., 2009; Lord & Hall, 2005) will always remain essential to this process. However, this alone does not account for the role of the follower in leader development. The significance of this role is best illustrated by DeRue and Ashford's (2010) leader identity construction theory which highlights how followers' direct and/or implicit acceptance of a prospective leader's claim to a leadership position are usually what

determines whether the individual can go on to access social experiences in leadership roles that further their self-development as a leader (Epitropaki et al., 2017; Lord & Brown, 2001; Day & Dragoni, 2015; Day & Harrison, 2007). The implications for how prospective leaders should approach their development over time in social contexts are considered below.

First, without one's identity as a leader being socially accepted by others within the group, the individual cannot access the experiences in leadership positions that enable the identity to materialise further into a more complex and meaningful self-definition in which they are influencing others in practice (Riley & Burke, 1995; DeRue et al., 2009; Bartel & Dutton, 2001; Goffman, 1959). From the perspective of the individual, this reality means that developing a greater level of self-awareness about the mechanics of the claiming and granting process eventually become a necessary step in order to strengthen one's leader identity and access leadership experiences (DeRue & Wellman, 2009; DeRue & Ashford, 2010; Gagnon & Collinson, 2014). The implications of how well a prospective leader understands this claiming and granting process can be best explained by the differences that lie between a *novice* perceiver of leadership (who often has limited experiences) compared to an *expert* leader who has significant experience in leading others (Lord & Hall, 2005). Expert leaders learn to consciously analyse and evaluate various factors and perspectives in a given social situation, developing a deeper-personal understanding of what they want to achieve as a leader and for the wider group that they are a member of (Day & Harrison, 2007; Day & Lance, 2004). From their experiences in leading in social context, expert leaders also recognize how leading others is a developmental process in which extensive experiences in challenging roles provide opportunities to improve their leadership skills in influencing others and to thus sustain the validation of their identity as a leader (Lord & Hall, 2005; Day & Harrison, 2007). This shows how the process of leader development is not only influenced by the self-motivation of the individual, but also about the individual's capability to provide

what those in the given social context want from their leader (DeRue & Ashford, 2010). Building on this premise, the benefits of understanding this social process of claiming and granting largely outweigh the effort required to master it because such skills have positive long-term implications in terms of further strengthening one's leader identity. However, understanding of how this process can be successfully enacted is far more challenging and complex than simply appreciating its importance to leader development.

The first issue is that DeRue and Ashford's (2010) theory cannot be applied homogeneously to all prospective leaders because each social context varies significantly in the level of discretion they allow individuals to enact the identity they want to express. For example, some social environments will be far more competitive than others and might employ specific standards for which an identity as a leader can be granted (Meyer et al., 2010; Ashforth & Schinoff, 2016; Thornborrow & Brown, 2009). These contextual and situational differences mean that prospective leaders need to be closely aware of the specific social cues from the given context that they are operating in that indicate what behaviours and attitudes they ought to demonstrate in order to have their *claimed* identity as a leader *granted* by others in the context (DeRue & Ashford, 2010; Ashforth, 2001; Bartel & Dutton, 2001). Such cues are important to see from the followers' perspective because self-perception of oneself as a leader are often very different to other followers' perception which tends to focus more on evaluating the given individual's current capability to lead rather than on the individual's future potential to lead (Markus & Nurius, 1986; DeRue & Ashford; DeRue et al., 2009). Understandably, this is so embedded in unknown contextual factors it means that individuals will likely need to garner further feedback over time from followers about the favourability of specific identity claiming strategies (Shamir et al., 1993). This is a vital part of how individuals can ensure their identity as a leader can be socially enacted (Carver &

Scheier, 1998; Langer et al., 1978; DeRue et al., 2009; Pratt et al., 2006; Snow & Anderson, 1987).

On this basis, leader identity is expected to create the affective and behavioural responses necessary for an individual to make sustained progress in development as a leader over time (Lord & Hall, 2005). In particular, leader identities evoke the motivation within the individual to seek out opportunities to learn these advanced leadership skills and develop leadership as a social identity (Miscenko et al., 2017). Having said this, in the scholarly literature, less is known about what the individual can do to implement this themselves. My thesis suggests that this will involve individuals framing their own leader identity development as a long-term goal for the future; something that will be discussed in extensive detail in the first two empirical studies of my thesis. My thesis focuses specifically on intrapersonal identity work whilst also appreciating how interpersonal identity work is an essential part of the process of leader development. Therefore, how a leader identity can begin to be developed by the individual through cognitive processes is discussed below along with how future possible selves cognition can positively influence how an individual begins to self-regulate their behaviour towards pursuing leader development opportunities.

Future Possible Selves

Possible selves express aspirational and feared mental representations of who one could become in the future, with each individual tending to have a relatively even spread of various *positive*, *negative*, and *neutral* possible selves that they can imagine for their future (Markus & Nurius, 1986). My thesis draws upon future possible selves theory (Markus & Nurius, 1986; Strauss et al., 2012) to conceptualize the notion of a future leader self that represents conscious self-cognition about becoming a leader in the future as a long-term goal; with leader identity viewed as a malleable component of the self that can be changed over time through adjusting their behaviour in the social context (Kivetz & Tyler, 2007). Salience of

this future leader self represents the degree to which the person can clearly describe their own expectation of being in a leadership role in a way that is suitable and desirable for what type of leader they want to be in the future (Oyserman et al., 1990). When the future leader self is active in the working self-concept it can help frame decision-making within social contexts towards seeking opportunities to develop further as a leader (Markus & Wurf, 1987).

For a variety of reasons, it often remains a struggle for many people to see themselves as a leader now, and in the future (Epitropaki, 2018; Guillén et al., 2015), which means that many individuals become reluctant to engage in further leader identity work. My thesis suggests that future leader self cognition can provide a solution to this; helping a broader range of people from all backgrounds and experience levels to find a self-relevant meaning of becoming a leader through self-reflection on who one is *currently*, as well as who one wants to be in the *future* (Markus & Nurius, 1986; Vignoles et al., 2006). Furthermore, as a long-term goal, future leader self can be shown to impact on leadership self-regulation over time by moving the individual towards becoming intrinsically driven to affirm their leader identity through proactive leadership behaviours taken in pursuit of a future-desired outcome in developing as a leader (Carver & Scheier, 1998). Hence, a future leader self is highly relevant to leader developmental research for several reasons that are discussed below.

First, self-regulation theory suggests that in order to sustain interest and proactivity towards leader development over time, individuals require a meaningful justification for continuing to strive for further self-advancement that extends beyond simply wanting to be competent at a given task (Carver & Scheier, 1998; Markus & Nurius, 1986; Bandura, 1982). By comparing the present and the future self in context, the individual can gain a greater understanding of the level of change that must occur over time through the process of development, appreciating how this is unlikely to ever be an instantaneous transition (Oettingen et al., 2001; Kappes & Oettingen, 2014). Admittedly though, this will be one of

many factors that shape one's perspective on future development because there are distractions and alternative pursuits that the individual will also consider allocating their time and energy towards at a given moment in time (Burke & Stets, 2009). Yet, provided that the specific future possible self is salient and viewed as more self-relevant than other possible selves (Stryker, 1984), an individual may start to view the possible self as a more important long-term goal of the self that they want to actualize in the future, even if they have little prior experience of enacting leadership behaviour successfully (Markus & Nurius, 1986; Garrison, 1997; Stiehl et al., 2015; Day et al., 2014). Indeed, possible selves position self-identity as capable of being reformed over time through changes in one's behaviour and through gaining the right leadership experiences. These experiences can develop leadership skills and capabilities, provided that the individual's behavioural responses are appropriate for the current situation and that the experience does not seem too overwhelming to the individual at their current stage of development as a leader (Anseel et al., 2017). Hence, unlike in immediate comparisons between the self and other leaders, future possible selves provide a perceived gap in time for this progression and change to emerge (Schlenker & Weigold, 1989; Trzebinski, 1989) that enables the individual to consider achieving the given pursuit through strategically planning what actions they should take to reduce this discrepancy between current and future selves (Strauss et al., 2012; Markus & Ruvolo, 1989; Kappes & Oettingen, 2014; Oettingen et al., 2001; Fite et al., 2017; Wong & Vallacher, 2017).

Second, the self-determined nature by which possible selves are constructed means that their substantive content is often based upon core self-conceptions that have the deepest meaning to the individual and which symbolise the key characteristics, roles, and group memberships that are most important to their sense of self and understanding of what possible directions the self can take going forwards (Markus & Nurius, 1986; Markus, 1977).

This enables the individual to gain a more in-depth understanding of who they are as a leader in the context and how they want to influence the group; helping individuals with the direction that they want to pursue (Day & Dragoni, 2015) that fits within their life (Conway & Pleydell-Pearce, 2000).

Third, neuroscientific research on conscious processing of information reaffirms this argument about the importance of the individual being actively involved in shaping the direction of their own development; indicating that self-relevant future goals play an important role in self-regulation of behaviour over time (Lord et al., 2016; Dehaene, 2014). Specifically, when the goal of becoming a leader is consciously activated in the dorsal lateral-pre-frontal cortex of the brain, incoming information is adjudged based on its relevance to the goal and how to respond with behaviours that can help the individual move closer towards that goal (Lord et al., 2016; Dehaene, 2014; D'Argembeau et al., 2010). The individual can then begin to make clearer distinctions between information and activities that can help move them towards achieving the goal of becoming a leader versus those that do not help them achieve these objectives (Johnson et al., 2006; Lord et al., 2016). This can subsequently increase the level of intrinsic motivation to lead to pursue the enactment of the possible self as a leader in practice (Pratt et al., 2006). Responses to social settings that require leadership might then become regulated by increases in positive dopamine signalling that such a situation is self-relevant to one's goal of becoming a leader, whilst information interpreted as unrelated to the goal will not spark the dopamine increase that is necessary for proactive responses to the incoming stimuli such as directing actions and efforts towards reducing the discrepancy between the current and future-desired state (Johnson et al., 2006; Lord et al., 2016; Strauss et al., 2012). Thus, a possible leader self for the future can become a sense-making approach that can be used to self-regulate behaviour over time according to the

progress that is being made towards achieving the desired self (Zhang et al., 2014; Carver & Scheier, 1998).

Building upon this, when a perceived discrepancy between a current self and a future self as a leader is salient in the individual's mind, this can cause the individual to view new stimuli such as leadership trainings as relevant opportunities that can help towards reducing the discrepancy between their current and desired future leader self (Carver & Scheier, 1998; Johnson et al., 2006). As development is likely to emerge in non-linear patterns at different rates of change based on a process of "maximizing gains and minimizing losses" (Day & Sin, 2011, p. 548), the ability to self-regulate behaviour in pursuit of a developmental goal will be important to ensure that sustained progress towards development can be accomplished (Carver & Scheier, 1998; Strauss et al., 2012). At the same time, the salience and meaning of the possible self are likely to deplete if progress in reducing the discrepancy between the current and possible state is not reduced at a rate that is deemed satisfactory by the specific individual; essentially, if the gains are not adequate and are less than the losses, the selection of behaviours are likely to change over time towards more familiar behaviours that the individual receives positive affirmation for (Baltes, 1997). With all this in mind, future leader self sense-making represents a key construct within my thesis that can help provide a solution to how more people can identify and feel motivated to lead.

Motivation to Lead

The examination of the leader development process must also be done with consideration of the individual's day-to-day contextual realities. Individuals have a limited amount of time, energy, and effort that they can use for regulating behaviour on a consistent basis towards a given goal and motivation shapes where these resources are allocated over time (Baumeister et al. 1998; Lanaj et al., 2021). In developmental psychology, motivation represents a central affective response that influences how individuals react, select,

remember, and process information in their social context that then guides the self-regulation of their behaviour over time and helps them move towards a specific objective (Anseel et al., 2017; Eccles & Wigfield, 2002). The following section argues for the importance of motivation to lead in longitudinal leader development research and suggests that intrinsic (affective motivation to lead) will be the most useful form of motivation for facilitating greater proactivity and persistence in leader development (Chan & Drasgow, 2001).

First, motivation to lead can be considered an essential component of leader development because it positively affects behavioural responses to leadership opportunities (Badura et al., 2020), including leader emergent behaviours like acts to claim leadership roles in social context in order to be perceived by others as a more prototypical leader (Judge et al., 2002). This perspective is premised on the notion that regardless of the individual's current stage of development and degree of self-confidence in their capability to lead, leadership behaviours by nature remain inherently voluntary and self-directed because the individual has to feel compelled for some reason to lead and to enact such actions (Eccles & Wakefield, 2002). Indeed, long-term leader development is simply not feasible unless there is some form of self-guided motivation to lead because this orientates the individual's attention, intensity, and persistence towards strengthening their identity as a leader and improving their leadership skills over time through related experiences and tasks (Kanfer et al., 2017; Kanfer & Ackerman, 1989; Campbell & Pritchard, 1976). Characterizing the issue in these terms also shows that the leader development process can be started and sustained by the individual themselves as they regulate their own behaviour towards developing as a leader (Eccles & Wakefield, 2002; Carver & Scheier, 1998) and this provides future research opportunities to explore in greater detail how this motivation can be activated.

Second, different forms of motivation to lead can influence leadership behaviour in different ways (Deci & Ryan, 1985; Parker et al., 2010). This can be understood through the

framework of motivation to lead theory which conceptualizes the desire to lead others as a three-pronged construct in which an individual's reason for leading varies from affective motivation to lead (enjoyment and purpose), social-normative motivation to lead (a sense of duty), to non-calculative motivation to lead (automatic process for leading) (Chan & Drasgow, 2001). Affective motivation to lead should immediately draw the most attention for leader development research because it is based upon leading out of an intrinsic passion to lead that is usually founded from having a promotive purpose for pursuing leadership now, as well as into the future (Guillén et al., 2015; Badura et al., 2020). This form of motivation is also closely related to self-improvement intentions that typically generate a positive reaction towards furthering leader identity and leadership skill development via further leadership experiences (Badura et al., 2020). In contrast, social-normative motivation to lead tends to be underpinned by a preventative goal that involves leading out of a sense of duty or responsibility to others whilst non-calculative motivation to lead is more neutral and has neither a promotive nor preventative goal-orientation focused on leading without weighing the costs and benefits of assuming the leadership role (Chan & Drasgow, 2001). From the perspective of organizations who simply want more of their employees to step up to lead, it might be argued that so long as the individual take steps towards leadership, the reasons behind why someone feels motivated to lead simply represents a between-person difference that is not of high importance. Yet, this reasoning is flawed on two grounds; different motivations are likely to change what leadership behaviours are enacted and will also affect the intensity and persistence by which this behaviour is enacted (Kanfer et al., 2017).

First, the three different forms of motivation to lead (affective, social-normative, non-calculative; Chan & Drasgow, 2001) have different effects on behavioural responses (Kanfer et al., 2017) in the leader developmental process (Badura et al., 2020). Affective motivation to lead is derived from having a promotive purpose for pursuing leadership that provides a

key source of energy to enact proactive leadership behaviours such as seeking to acquire new knowledge and skills that can further one's capabilities as a leader (Van Iddekinge et al., 2009; Carver & Scheier, 1998; Amabile et al., 1994). This passion is what is then likely to sustain proactive leadership behaviour over time even if opportunities to lead are not readily presented in the social context (Strauss et al., 2012; Guillén et al., 2015; Lanaj et al., 2019; Lord et al., 2010). Meanwhile, non-calculative motivation to lead and social-normative motivation to lead are both based more on being situationally reactive in a given moment in time to lead when necessary, but not in proactively seeking out new opportunities to lead and to develop one's leadership skills and knowledge further (Chan & Drasgow, 2001; Parker et al., 2010).

Affective motivation to lead might be best understood as a deeply meaningful 'reason to' response to leadership opportunities which is more preferable compared to other forms of motivation felt by the individual because it involves proactively engaging and seeking opportunities to lead and to enact the behaviour for a given purpose that is future-oriented towards developing as a leader as opposed to being based on reactions to potential stimuli (Kanfer et al., 2017; Amabile et al., 1994). This is because intrinsic motivation is derived from "self-determination, competence, task involvement, curiosity, enjoyment, and interest" (Amabile et al., 1994, p. 950) and so when individuals care about the outcome they are more likely to want to influence the processes that are perceived to be related to achieving the given outcome directly and to confront related challenges over time (Kanfer & Ackerman, 1989; Gottfried et al., 2011; Amabile et al., 1994; Gottfried, 1985; Deci & Ryan, 1985). Thus, if we know that leader identity development in social contexts requires successful claiming behaviours (DeRue & Ashford, 2010), such proactivity is at least a starting point from which this is more likely to be achieved.

Second, affective motivation to lead is more likely to further greater self-persistence of an individual in leader development than compared to alternative forms of motivations to lead because it is derived from a desire to achieve a self-relevant and long-term objective (Locke, 1997; Kirkpatrick et al., 1996), meaning that other opportunities and tasks are far less likely to distract from one's development as a leader than would more extrinsically-centred forms of motivation or leading out of a sense of duty or habit (Amabile et al., 1994; Badura et al., 2020; Cascón-Pereira & Hallier, 2012). This is all the more important when considering the influence that this motivation has in practical issues with how individuals approach learning to lead in social settings. For example, a common issue is that over time repeated failures or rejected attempts to lead others will have a negative impact on the individual's self-efficacy and self-worth; frequently causing the individual to lose interest in making further progress in developing as a leader and to even to possibly abandon this pursuit altogether (Johnson et al., 2006). However, intrinsic motivation to lead is likely to be enduring across time and so this affective response can help the individual in overcoming specific challenges when developing as a leader that require energy and intensity to confront (Van Iddekinge et al., 2009; Chan & Drasgow, 2001; Kanfer, 1990) successfully such as by claiming leadership roles and managing a diverse group of followers (Guillén et al., 2015). Thus, affective motivation to lead can be seen as a central construct of leader development that is worthy of further investigation because over a longer-period of time, affective motivation to lead could encourage the individual to continue to make progress into an expert leader with a range of leadership skills and a strongly held and internalized identity as a leader (Lord & Hall, 2005; Van Iddekinge et al., 2009).

Review Summary and Conclusions

This review examines how leader development theory (Day & Sin, 2011; Day et al., 2009) can shape the direction of empirical research in the field based on three central reasons;

how the theory can be used to help frame leader identity development as a change-centred process over time, how leader development can become a self-sustainable process, and how the differences between leader development and leadership effectiveness impact on the expectations individuals have for the speed in which leadership processes emerge. Building upon this reasoning, the review provided an in-depth assessment of the deeper processes that underpin leader development; including how incoming information is processed relative to leadership and the self through the self-concept and how this effects leadership self-regulation. In particular, the review clarifies the differences between intrapersonal leader identity work and interpersonal leader identity work; appreciating how an amalgamation of both are likely to be important for an individual's leader identity development over the long-term. There is great value in investigating this further because such empirical work could find that different forms of leader identity work are important at different stages of development.

Beyond just directing our attention to leader identity and leadership self-regulation, my review demonstrates how leader identity development can in fact be a self-initiated process through future leader self sense-making that can become sustainable when the individual self-regulates affective and behavioural responses towards developing as a leader. My review also highlights the importance of affective motivation to lead in sustaining interest and persistence in leader development over time. Overall, my review suggests that leader development should be approached as a self-initiated and sustainable process, and that further empirical work must demonstrate how such leader identity development processes discussed in theory can be implemented to encourage a wider range of individuals to take action towards becoming a leader.

Chapter 3: ‘I Want to Lead’: The Role of a Salient Future Leader Self and Leader Identity and the Moderating Influence of Collective Self-Concept

Abstract

An ongoing dilemma that organizations face is in how to encourage more of their employees to identify as leaders and feel intrinsically motivated to lead. My study aims to resolve this by investigating how different cognitive sense-making approaches impact leader identity and motivation to lead. My study uses MANOVA analysis to contrast the impact of future possible selves cognitive sense-making to self-comparative cognitive sense-making in order to determine what approach to thinking about the self as a leader is most effective in strengthening leader identity and affective motivation to lead. My study then tests a moderated-mediation model that explains in greater detail how affective motivation to lead can be activated when one’s future leader self is salient via leader identity ($N = 393$). My study then focuses on assessing the broader moderated-mediation model through structural equation modelling, demonstrating how the relationship between a salient future leader self and affective motivation to lead is mediated by leader identity and moderated by collective self-concept. The different experimental conditions that were discussed in the preliminary analyses are still accounted for in the moderated-mediation model as control variables.

Keywords: future leader self, leader identity, motivation to lead, collective self-concept, moderated-mediation model

Chapter 3: ‘I Want to Lead’: The Role of a Salient Future Leader Self and Leader Identity and the Moderating Influence of Collective Self-Concept

“The best way to predict your future is to create it.”

- President Abraham Lincoln

Introduction

Leader development represents “the road less travelled” for most individuals; its challenging terrain far less familiar than that of followership (Frost, 1916; DeRue & Ashford, 2010; Gentry et al., 2014). In workplaces around the world, employees make judgements about which identity they will enact in their social environment, along with the degree of effort they will apportion towards developing an identity (Brown, 2015; Lanaj et al., 2019; Watson, 2008; Alvesson et al., 2008; Pratt et al., 2006; Sveningsson & Alvesson, 2003; Brown, 2001). Many individuals choose to focus on their individual career goals (Strauss et al., 2012; Ibarra & Barbulescu, 2010; Ibarra, 1999; Seibert et al., 2001; Carson & Bedeian, 1994; Meara et al., 1995), and seek to establish a general sense of stability in their own self-perception of who they are by upholding more familiar current identities in the work context such as that of a follower or as a professional (Petriglieri, 2011; Brown, 2015; Cascón-Pereira & Hallier, 2012). Yet, on the flipside of this, individuals are often much more hesitant to step up to identify as leaders, weary of the expected risks and costs associated with being the leader (Lanaj et al., 2021; Griffin et al., 2007). Such concerns often cause individuals to discount any deeper consideration of the possibility of assuming leadership roles at work (DeRue et al., 2009; Cunliffe & Linstead, 2009). For organizations looking to expand their portfolio of available leaders; the current problem centres around how employees can become more willing to identify as leaders and feel motivated to lead (Epitropaki, 2018).

Prior research has demonstrated that leader identity is the keystone element of the development process that future research should play close attention to in terms of how leader

identity emerges and how this self-view can be strengthened over time (Lord & Hall, 2005; Day & Harrison, 2007; DeRue & Ashford, 2010; Baumeister, 1986). Through perceiving oneself as a leader and internalizing a deeper sense of meaning from leading others, the individual becomes more likely to step forth to lead in real situations so as to better align their behaviour with their own self-perception of how they want to see themselves and how they want others to see them (Day & Harrison, 2007; Day & Sin, 2011). This is important for long-term development as it is those individuals that go on to access leadership experiences that are the ones that ultimately develop leadership skills over time (Lord & Hall, 2005; DeRue et al., 2012; DeRue & Wellman, 2009; Day et al., 2009; Kwok et al., 2018). Having the motivation to seize opportunities in leadership is also pivotal to ensuring that the individual maintains a greater level of persistence so that leader development processes remain sustainable (Kanfer et al., 2017; Hong et al., 2011; Chan & Drasgow, 2001). More specifically, as one of the three dimensions of motivation to lead theory (Chan & Drasgow, 2001), affective motivation to lead reflects an intrinsic desire to lead out of a sense of enjoyment and purpose.

Unfortunately, previous empirical research has not fully resolved this issue; focusing instead on the influence of deterministic antecedents of motivation to lead such as the individual's genetic personality traits (Arvey et al., 2006; Erez & Judge, 2001; Sackett et al., 1998), general cognitive ability (Lord et al., 1986), and current level of leadership self-efficacy (Chan & Drasgow, 2001). Such findings could be of use to organizations who are simply trying to identify and recruit *ready-made* leaders, yet the downside of this approach is that it becomes inefficient as a long-term strategy, with employees who have these traits and abilities potentially not identifying as leaders themselves and so never fully committing to developing further as a leader (Kwok et al., 2018). Furthermore, cognition antecedents such as 'self-to-leader' comparisons have been seen to only influence leader identity and affective motivation to lead if the comparison being made by the individual is a positive one that matches well with

the self (Guillén et al., 2015; Bandura, 1982; Buunk & Gibbons, 2007). The limitation of this approach is that less experienced individuals who do not currently identify as leaders but who might have high potential to lead are likely to continue to struggle to conceive of leadership as a legitimate option for their future and remain unlikely to consider how they can begin to identify as a leader of the future (Day & Sin, 2011; Hannah et al., 2008).

My current study provides an alternative solution to this current dilemma. Drawing upon possible selves theory (Markus & Nurius, 1986), I introduce the new cognitive sense-making of a ‘future leader self’ which is defined as a desirable possible self in the future as a leader which can also come to represent a long-term self-development goal (Strauss et al., 2012; Markus & Nurius, 1986; Oyserman & Markus, 1990). By thinking about a future leader self, the individual frames the process of leader development as a gradual pursuit of incremental progress over time; enabling a broader range of individuals to view leader identity as a flexible component of self-knowledge that can be strengthened through their own actions (Brown, 2015; Markus & Nurius, 1986).

My current study delivers four key contributions to leader development theory and practice. First, in my study’s preliminary analysis, the impact of different cognitive sense-making approaches to the self as a leader; ‘self-to-leader prototype’ (Guillén, et al., 2015; Ritter & Lord, 2007; Lord et al., 1984) and ‘self-to-leader exemplars’ (Guillén, et al., 2015; Andersen & Chen, 2002; Smith & Zarate, 1992) are contrasted to more future-oriented approaches to thinking about the self in relation to leadership that are self-constructed like ‘future leader selves’ and ‘future career selves potentially involving leadership’ on leader identity and affective motivation to lead (Strauss et al., 2012). By testing the impact of these different cognitive sense-making approaches, my study aims to highlight the crucial distinction between self-focused development across time versus momentary comparisons of current leadership capability (Liberman & Trope, 1998; Fujita et al., 2006; Trope & Liberman, 2003).

Such an investigation enables my current study to provide some preliminary insights into what form of self-cognition best help individuals to strengthen their identity as a leader and become intrinsically motivated to lead.

Second, I investigate how a salient future leader self positively relates to one's current leader identity. Future leader self helps construe self-identity towards a more dynamic and temporally-fluid perception of oneself as a leader across time in which the individual can see their current identity in transition towards a new self-determined identity in the future (Strauss, et al., 2012; Markus & Nurius, 1986; Lord et al., 1999). In doing so, individuals freely determine who they want to become as a leader, which may or may not involve a formal management position. This then provides greater opportunities for the individual to claim leadership roles that would not typically have been viewed by them as self-relevant or as feasible to obtain (Ashforth, 2001; Stryker & Serpe, 1994; Stryker & Burke, 2000).

Thirdly, my current study provides a cognitive-based framework for understanding how the initial phase of leader development unfolds through becoming intrinsically motivated to lead (Badura et al., 2020; Kark & van Dijk, 2007; Chan & Drasgow, 2001). To do this, my current study examines how one's current leader identity mediates the relationship between one's salient future leader self and affective motivation to lead. This shifts the field's thinking about leader development towards a much more self-determined process in which a wider variety of individuals may set an appropriate course for their own development over time, regardless of the amount of prior leadership experience they have or the current role they have within their organization (Lord & Hall, 2005; Kark & Van Dijk, 2007; Weick, 1995).

Finally, my current study examines how collective self-concept acts as a positive moderator to the mediated relationship between future leader self salience and affective motivation to lead via leader identity (Selenta & Lord, 2005; Johnson et al., 2012; Miscenko & Day, 2016). My current study proposes that collective self-concept activates a form of self-

identification as a leader that is centred around how one can best support the interests of the group's welfare as a leader (Sluss & Ashforth, 2008), which strengthens the relationship between a salient future leader self and leader identity. These insights help organizations develop leaders who are more closely orientated towards team building and the protection of the group's overall welfare (Cross et al., 2011).

Conceptual Framework and Hypotheses Development

Cognitive sense-making relates to the process of how individuals come to interpret their own environment and their position within it (Ashforth & Schinoff, 2016). Future possible selves theory (Markus & Nurius, 1986) argues that interpretations of the self are at least partially influenced by the temporal lens (past, present, or future perspective) from which the self is being viewed from. As such, axiomatic of this is how the individual can play a central role in shaping their own destiny because they are capable of looking far beyond their *current* self in order to imagine new desirable mental representations of the self in the future that they can work towards actualizing (Markus & Ruvolo, 1989; Markus & Nurius, 1986; Mitchell & Beach, 1990). In support of this argument, I put forth several reasons as to why this future-centred approach to self-development as a leader is useful.

First, individuals who develop a meaningful understanding of the self in relation to becoming a leader find a clearer direction as to what type of leader they *want to* become (Strauss et al., 2012; Cross & Markus, 1991; Dunkel, 2000) and how this relates to their long-term goals (Fujita et al., 2006; Fite et al., 2017; Nussbaum et al., 2003). In contrast, the more day-to-day cognitive sense-making about the self tends to centre around concrete information and is thus only orientated towards understanding the *current self* in greater detail (Förster et al., 2004; Fujita et al., 2006). This often limits conscious consideration of alternative possibilities in the future (Markus & Nurius, 1986; Cunliffe & Linstead, 2009). The difference between these two broad approaches to cognitive sense-making about the self in relation to

leadership matters to development processes because individuals that have a more self-determined outlook on their future are much more likely to feel motivated to take further proactive steps towards achieving it (Higgins, 1998; Kark & Van Dijk, 2007; Ashforth, 2001; Carver & Scheier, 1998).

Second, future perspectives enable identity construction to be seen as a self-determined process in which the distance into the future of the possible self can be set by the individual (Fujita et al., 2006; Trope & Liberman, 2003). This enables the approach to occur gradually as a transition over time; making it seem practically possible and feasible for a wider range of individuals to eventually achieve (Brown, 2015; Pratt et al., 2006). In contrast, individuals who make immediate judgments about the self as a leader tend to only use default reasoning processes that rely on recalling previous knowledge and experiences to make decisions about the identity they should enact in a social context (Cross & Markus, 1994; Fallesen & Halpin, 2004). This can be full of inaccurate conclusions that are based on generalized impressions which could halt new alternatives considerations for the individual (Hansbrough et al., 2015; Shondrick et al., 2010).

Third, sense-making about a future leader self enables a broader range of individuals to make positive projections of the self in the future as leaders even if they have no prior experience in leadership roles (Strauss et al., 2012). This is because a future leader self involves construal of the self at an abstract level in which self-identities are seen as flexible (Manzi et al., 2010); creating a feeling of the identity being capable of being changed over time (Hoyle & Sherill, 2006; Carver & Scheier, 1998; Festinger, 1957). Individuals are free to focus on how leadership relates to the more abstract aspects of their self-knowledge such as personal ideals, ambitions, and goals in order to consider what the best course for the future as a leader would be (Trope & Liberman, 2003; Lord et al., 1999; Mitchell & Beach, 1990; Banaji & Prentice, 1994). Individuals are then more likely to take progressive actions that

would reduce the perceived discrepancy/gap between current and future self as a leader (Strauss, et al., 2012; Markus & Ruvolo, 1989; Dunkel & Anthis, 2001). Attention is shifted away from the immediate constraints in the present time that make the goal appear less feasible to achieve (Forster et al., 2004; Fujita et al., 2006) and that limit consideration of alternative possibilities for the future (Markus & Nurius, 1986; Cunliffe & Linstead, 2009) and is instead reoriented towards pursuit of a future goal; helping individuals to establish greater focus, effort, and a willingness to confront challenges of leader identity development over time (Lord et al., 1999; Markus & Wurf, 1987).

Future Possible Selves and its Distinction to Self-Comparative Cognitive Sense-Making

Past research into the cognitive sense-making process of becoming a leader has primarily focused on understanding more about how self-to-leader comparisons shapes one's general expectations of becoming a leader and one's feeling of affective motivation to lead (Guillén, et al., 2015; Ritter & Lord, 2007; Lord et al., 2001). These comparisons provide concrete mental representations of one's perceived current self as a leader that can be evaluated in comparison to other leaders' perceived capabilities which acts as a standard from which to determine whether one has the current capability to lead (DeRue et al., 2009; Buunk & Gibbons, 2007; DeRue & Ashford, 2010; Ashforth & Kreiner, 1999; Lockwood & Kunda, 1997; Festinger, 1954).

Two primary forms of comparative cognition exist within the scholarly literature; 'self-to-leader prototype' and 'self-to-leader exemplar' (Guillén, et al., 2015). First, when the individual engages in 'self-to-leader prototype' cognitive sense-making, focus is based upon assessing the similarities and differences between one's own perceived capabilities as a leader compared to a category-based representation of the perceived archetypical leader's characteristics and capabilities (Lord et al., 1984; Zarate & Smith, 1990) that are derived from

implicit leadership theories of what the qualities of an outstanding leader are (Ritter & Lord, 2007; Ibarra, 1999; Lord, 1985).

Second, a 'self-to-leader exemplar' involve a more specific form of comparison that is focused on evaluating the similarities and differences between the individual's own capabilities as a leader to a specific leader that they are familiar with currently or have known previously (Guillén et al., 2015; Andersen & Chen, 2002; Smith & Zarate, 1992). Exemplars of leadership are more specific and contextual than prototypes of leadership because they are comprised of descriptive knowledge and memory about a specific leader exemplar that the individual is familiar with (Andersen & Glassman, 1996). Prior empirical research suggests that both of these self-comparative cognitive sense-making approaches can activate affective motivation to lead when strongly mediated by the individual's self-efficacy at the given moment in time (Guillén et al., 2015). Yet, the comparison's positive impact on leader identity and affective motivation to lead is dependent on the individual perceiving a close congruence between their perception of the self and the subject of comparison; something that is only likely to occur from the individual already having previous successful experiences in leading others (Greenberg et al., 2007) or through the subject of comparison being a leadership figure that is relatable and close enough to one's own sense of self to seem feasible to try to emulate (LeBoeuf et al., 2010).

For individuals with little prior experience in leadership and who are only at the initial stage of thinking about pursuing a leadership role, this expectation of holding an identity as a leader may be too early and will likely highlight the individual's current limitations as a leader when compared to that of their perception of a more advanced leader with the capabilities and skills of an ideal leader (Lockwood & Kunda, 1997; Tesser, 1988). Uncertainty about whether one is capable of leading is likely to make the individual feel like they want to instead avoid

identifying with leadership roles so as to distance themselves from situations that are uncertain or create further ego depletion (Epitropaki, 2018; Leary, 2007; Hogg, 2000).

My current study proposes that future possible self cognitive sense-making can encourage a more diverse range of individuals to think about themselves in relation to leadership in a positive way regardless of their current level of identification as a leader (Strauss et al., 2012; Markus & Nurius, 1986; Anseel et al., 2017; Hoyle & Sherril, 2006). This form of cognitive sense-making can provide the necessary temporal space between current and future leader self in which participants feel like they have time to work to reduce the discrepancy because the current and desired self and that this does not have to be accomplished immediately (Carver & Scheier, 1998; Lord et al., 1999; Lockwood & Kunda, 1997). The long-term implications of this are that the individual is then more focused on self-regulating future behaviours towards removing the discrepancy between their current self as a leader and the desired future self as a leader (Strauss, et al., 2012; Carver & Scheier, 1998; Hoyle & Sherrill, 2006; Markus & Nurius, 1986; Higgins, 1998; Ibarra, 1999) which subsequently makes part of one's self-concept appear malleable and able to change over time (Markus & Kunda, 1986). As a consequence of this dynamic, my current study proposes that future leader self sense-making has a more positive impact than compared to self-to-leader comparative sense-making cognitions on three key indicators of leader development for most individuals; their future leader self salience, leader identity, and affective motivation to lead. Hence, the first hypothesis is as follows:

Hypothesis 1: The future-based cognitive manipulations will result in higher levels of future leader self salience, leader identity, and affective motivation to lead than compared to the self-to-leader comparison (exemplar and prototype) cognitive manipulations.

Salient Future Leader Self and Leader Identity

Future leader self salience is defined as the level of ease and clarity in which an individual is able to imagine their future as a leader (Strauss, et al., 2012; King & Smith, 2004). When the future leader self is perceived as a realistic possibility, individuals are then able to envision potential changes related to how they currently perceive themselves and can approach their current leader identity as a flexible component of self-knowledge that can be *strengthened* or *weakened* over time depending on their own actions and experiences (Alvesson & Wilmott, 2002; Johnson et al., 2006; Austin & Vancouver, 1996). For this reason, individuals who clearly and confidently visualise themselves as a leader in the future can come to appreciate possible discrepancies between their *current* and *desired* identity state and in doing so, think about the type of behaviours and experiences that would reduce this discrepancy so that their identity as a leader gradually strengthens over time (Fite et al., 2017; DeRue & Ashford, 2010; Oyserman et al., 2006; Alvesson & Wilmott, 2002; Campbell et al., 1996). This acts as a type of identity motive which orientates the individual towards the pursuit of this identity as a leader (Ashforth & Schinoff, 2016; Vignoles et al., 2006; Pratt, 2000). On this basis, my current study proposes that when a future leader self is salient in the individual's working memory, it can direct self-regulation towards future development of the leader identity and reduce the discrepancy between the current and desired future state as a leader. Hence, the hypothesis is as follows:

Hypothesis 2: Future leader self salience is positively related to leader identity.

Leader Identity as a Mediator

Affective motivation to lead embodies the intrinsic passion and enjoyment that an individual has for leading others that then directs their self-regulatory focus towards pursuing the achievement of one's desired state as a leader over time (Badura et al., 2020; Kark & van Dijk, 2007; Chan & Drasgow, 2001). A salient future leader self is likely to become

intrinsically motivational when it reflects the pursuit of a self-constructed possible self that is connected to the values within one's own sense of self (Brown, 2015; Vignoles et al., 2008; Markus & Nurius, 1986; Hitlin, 2003). This can help sustain interest and persistence in developing as a leader over time (Fite et al., 2017; Campbell et al., 1996; Oyserman & Markus, 1990) because the individual has come to define their *own* personal standard for leadership that they are motivated to uphold (Kark & van Dijk, 2007; Swann, 2012).

My current study argues that when a future leader self becomes salient, one's leader identity becomes more central to one's sense of self (Markus & Nurius, 1986) which in turn increases affective motivation to lead as the individual seeks further opportunities to reduce the discrepancy between current and future leader self (Ashforth, 2001; Stryker & Serpe, 1994; Stryker & Burke, 2000). Thus, it is anticipated that this positive relationship between future leader salience and affective motivation to lead emerges via leader identity. The process is likely to be stronger when the possible leader self becomes more than an *abstract* thought and emerges as a detailed construal of the self in the future that one identifies with that creates a positive affective reaction (Brown, 2005). In other words, when new content related to an identity one wants to continue on into the future is assimilated into one's current identity (Vignoles et al., 2008). A strengthened identity as a leader increases the motive for gaining further knowledge about oneself in leadership situations and the desire to express the values associated with this self-definition so as to best ensure the identity continues to develop over time (Ashforth & Schinoff, 2016; Lord & Maher, 1993; Hitlin, 2003). Thus, the level of persistence and intensity that an individual is willing to commit to related developmental pursuits over time such as the future leader self could increase (Kanfer et al., 2017; Chan & Drasgow, 2001). In sum, through conscious sense-making about one's future leader self, a leader identity has greater meaning to the individual and it is more likely to motivate the

individual to enact identity in social contexts (Weick et al., 2005). Thus, my current study makes the following proposal:

Hypothesis 3: Leader identity mediates the relationship between future leader self salience and affective motivation to lead.

The Moderating Role of Collective Self-Concept

My current study also proposes that higher levels of collective self-concept will moderate the relationship between future leader self salience and leader identity in the hypothesized model. Self-concept includes three distinct levels of self-construal: *individual*, *relational*, and *collective* that each prime different social motivations and aspects of information about the self (Brewer & Gardner, 1996; Mescenko & Day, 2016). At the collective level of self-concept, individuals are orientated towards how they view themselves in a wider group and their connection to social groups they are a member of (Kashima & Hardie, 2000; Brewer & Gardner, 1996). Activating a leader identity at the collective level ensures that the individual's attention is kept focused on understanding how one wants to influence the group and followers in the given context (Cross et al., 2011); representing a more dynamic conceptualization of leader identity than compared to at the individual level of self-concept in which one's identity as a leader is focused on distinguishing oneself from others (Johnson et al., 2012; Lord & Hall, 2005; Sluss & Ashforth, 2008).

At the collective level of construal, leadership roles are seen to provide a platform to have a greater degree of influence on shaping the organizational values and norms of the group's identity (Lord & Brown, 2001). The individual is more inclined towards pursuit of leadership roles in the groups that they feel a close affinity towards and/or want to influence its future direction (Jackson et al., 2006; Ashforth & Johnson, 2001; Kashima & Hardie, 2000). Empirical research has also demonstrated how individuals who present themselves as a prototypical member of the group are generally perceived as more effective leaders by

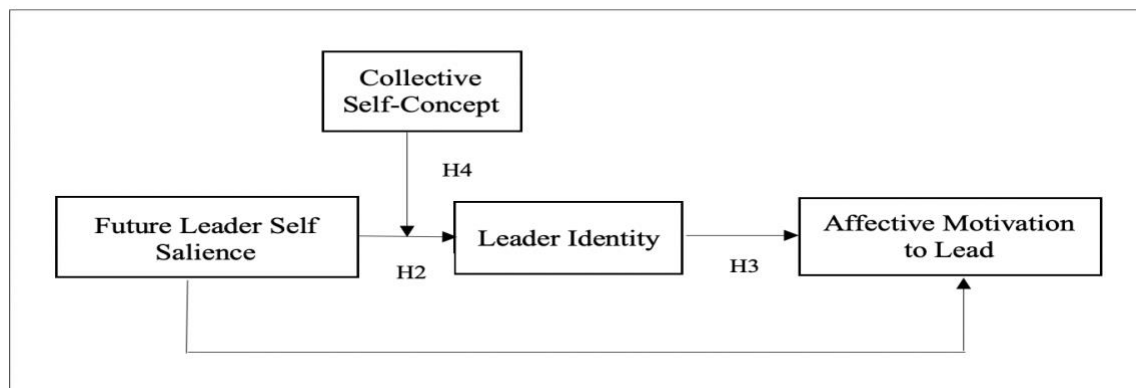
followers and are subsequently more likely to be granted leadership roles (Johnson et al., 2012); thus, providing further opportunities for self-development as a leader (DeRue & Ashford, 2010). Given arguments made by Brewer (1991) that humans have dual needs for both a sense of belonging with others in a group as well as a need to feel unique as an individual entity, it is likely that individual's identity as a leader also needs to include both a personal purpose for leading as showing oneself as unique (future leader self salience) and also for a sense of social belongingness (collective self-concept). When both these needs are met, the individual's leader identity is likely to be strengthened more than if the individual only draws upon a personal reference when conceptualizing a future leader self (Brewer, 1991). As a consequence, the effect of salient future leader self on leader identity is therefore conditional as the magnitude of its effect can change depending on the participant's level of collective self-concept (see Figure 1 below).

It is therefore proposed that when collective self-concept is high, the individual is more likely to identify as a leader as they seek to influence the group that they feel they have a connection with. In contrast, individuals who are lower in collective self-concept are less likely to identify as a leader who would want to influence the group as the group has less self-relevance and value to them. As a consequence, my current study proposes the following:

Hypothesis 4: Collective self-concept will moderate the relationship between future leader self salience and leader identity. This relationship will be stronger when collective self-concept is high and weaker when collective self-concept is low.

Figure 1

Study 1 Model of the Moderated-Mediation of Affective Motivation to Lead



Method

Participants and Procedure

A total of 500 initial participants were recruited to participate in my study through the crowdsourcing site, Amazon Mechanical Turk (MTurk). Participants had varying levels of managerial experience but were all citizens of the United States of America (USA) and in full-time employment (35 or more hours of work per week) at the time of participation and had a 95% or higher assignment approval rating from previous requesters. Participants who repeated the survey ($N = 6$), who gave invariable responses ($N = 5$), who failed attention checks ($N = 14$), who failed manipulation checks ($N = 63$), or who failed two or more of the three outlier tests ($N = 29$) (Mahalanobis distance, Cook's distance, leverage value) were removed from my study (Field, 2013; Treiblmaier & Filzmoser, 2010). This gave the final sample to test the hypotheses ($N = 393$). Of the remaining participants that were included in my study analysis, 56.7% were female compared to 43.3% male and 71.7% of participants were between 26–45 years of age. A total of 46.1% of participants were from 'non-management' positions whilst 15.5% were 'junior managers', 27.5% were 'middle managers', and 8.1% were in 'upper-level management'. The remaining 2.8% of the participants were 'executives'. Participants were employed in organizations in a variety of industries within the USA economy including

marketing, social services, food and hospitality, healthcare, mechanical design, education, psychology, real estate, business analysis, the military, and construction management.

Participants also had different amounts of work experience.

Between-Subject Conditions

My current study applies a between-subjects design in which each participant was randomly assigned to one of four self sense-making conditions ('future leader self', 'future career self potentially linked to being a leader', 'self-to-leader exemplar comparison', 'self-to-leader prototype comparison'; see Appendix 2) before completing the same survey as one another. Participants assigned to complete the first condition completed a written activity centred around constructing a future leader self that is connected to their personal values (Kark & Van Dijk, 2007; Schwartz, 1992; Lord & Brown, 2001). Those participants in the second condition were given a slightly broader focus, engaging in a written activity in which they construct a future career self that potentially includes leadership and was connected to their career ambitions (Kira & Balkin, 2014; Pratt & Ashforth, 2003). These elaborations of the future self can enable the individual to explore the meaning of events and past experiences and to reorient and organize these into a meaningful understanding of why things are the way they are and how they can be improved by the individual (Kappes et al., 2013; Pennebaker & Beall, 1986; Taylor et al., 1998). In contrast, participants in the third and fourth conditions had to complete activities related to sense-making about their current self as a leader in comparison to another leader. In the third condition, participants were asked to write about a specific leader that they had interacted with currently or in the past that is significant to them, explaining how they acted and behaved as a leader (Guillén et al., 2015). Participants then wrote the ten most important leadership traits and characteristics that this exemplar leader has and then rated the extent to which they believe they possessed these same leadership traits and characteristics as the exemplar leader (1 = *Strongly disagree*, 7 = *Strongly agree*) (Guillén et al., 2015; Andersen

& Chen, 2002; Smith & Zarate, 1992). In the fourth condition, participants wrote about what leadership means to them and then wrote the ten most important leadership traits/characteristics that they associate with typical leaders and rated the extent to which they believe that they themselves possess these ten leadership traits and characteristics (1 = *Strongly disagree*, 7 = *Strongly agree*) (Lord et al., 1994; Ritter & Lord, 2007; Guillén et al., 2015).

Measures

All measures in the study were self-reported by the participants. Unless stated otherwise, items were measured on a 7-point Likert scale (1 = *Strongly disagree*, 7 = *Strongly agree*).

Salience of Future Leader Self

To measure salience of future leader self, the 5-items scale of Strauss and colleagues (Strauss et al., 2012; King & Patterson, 2000; King & Raspin, 2004; King & Smith, 2004) was adapted by adjusting the wording of each item to more closely reflect about an individual's future leader self as opposed to their general future work self ($\alpha = .95$). An example of an items of this scale is "I can easily imagine my future self as a leader" (See Appendix 3A).

Leader Identity

Leader identity was measured using the Hiller (2005) scale which is structured around four key items that are then repeated across three different subscale stems (descriptiveness, certainty, importance) in order to provide a final 12-item scale that measures leader identity ($\alpha = .96$). The scale items are measured on 7-point Likert scales: descriptiveness (1 = *Not at all descriptive*, 7 = *Extremely descriptive*), certainty (1 = *Not at all certain*, 7 = *Extremely certain*), and importance (1 = *Not at all important*, 7 = *Extremely important*). An example of an item is "I prefer being seen by others as a leader" (See Appendix 3B).

Affective Motivation to Lead

Affective motivation to lead ($\alpha = .92$) was measured using the subscale of Chan & Drasgow's (2001) overall motivation to lead scale. An example item from the subscale was

“Most of the time, I prefer being a leader rather than a follower when working in a group.” The item “I am seldom reluctant to be the leader of a group” was removed because it had a poor standardized loading (0.403) in comparison to the other items in the affective motivation to lead subscale, likely because it caused confusion amongst participants about whether the term “seldom reluctant” was a positive or negative statement (see Appendix 3C).

Collective Self-Concept

Collective self-concept was measured using the subscale from the Selenta and Lord (2005) levels of self-concept scale ($\alpha = .87$). This measured the level of importance the individual places on being able to be connected and included in the social groups that they are a part of (Sedikides & Brewer, 2001; Kashima & Hardie, 2000). An example item from the ‘Group Achievement’ subscale is “I feel great pride when my team does well, even if I’m not the main reason for its success.” An example item from the ‘Group Identity’ subscale is “I am quite sensitive to what people think of the group to which I belong.” Items were scaled separately to highlight their differences but combined as one in the data analysis stage as they still represent elements of the same latent variable construct of collective self-concept.

Control Variables

In examining the relationships between cognitive sense-making, leader identity and affective motivation to lead, my current study controlled for a variety of variables that could help explain some of the variance between participants’ results (Cohen et al., 2003). These variables included: future orientation, leadership experience (in terms of position ranging from a non-management position to an executive), and leadership self-efficacy.

Future Orientation

Having a high future-orientated perspective is often associated with being able to demonstrate a strong degree of self-discipline in pursuing one’s long-term goals because such individuals can hold out for larger rewards in the future by foregoing immediate gratification

(Strauss, et al., 2012; Strathman, et al., 1994; Shipp et al., 2009). Using Strathman and colleagues' (1994) consideration of future consequences scale ($\alpha = .85$), I controlled for future orientation in my study to ensure that the effects of a salient future self as a leader were a result of the construct itself and not because of differences in participants' perception towards the future (Strathman, et al., 1994; Joireman et al., 2008; Marko & Savickas, 1998; Parker & Collins, 2010). An example of an item is "I am willing to sacrifice my immediate happiness or well-being in order to achieve future outcomes." All 12-items of the scale were measured on a 7-point Likert scale (1 = *Extremely uncharacteristic*, 7 = *Extremely characteristic*).

Leadership Experience

Participants were directly asked about the formal leadership role that they were currently in, asking for their level of management in their organization (executive, upper-level manager, middle manager, junior manager, and non-management position).

Leader Self-Efficacy

Leader self-efficacy represented the confidence a participant has in their current ability to lead and was measured using Hardy and colleagues' (2010) scale ($\alpha = .96$). The scale included the stem "Compared to the most confident leader you know, how would you rate your confidence in your ability to..." for participants to answer each of the ten items. An exemplar item asks participants to rate the extent they are confident to "Perform the tasks necessary to be a successful leader" on a 7-point Likert scale (1 = *Very low*, 7 = *Very high*).

Results

Descriptive statistics and inter-correlations for my study variables are presented below in Table 1. Of note, leader identity was strongly correlated in a positive and significant way with future leader self salience ($r = .73$) and affective motivation to lead ($r = .71$). Collective self-concept was also positively and significantly correlated with salience of future leader self ($r = .43$), and leader identity ($r = .51$) and affective motivation to lead ($r = .80$).

Measurement Model

My current study conducted confirmatory factor analysis to demonstrate the distinctiveness of the constructs studied using reputable scales of model fit. This includes absolute fit indexes such as RMSEA with scores; of 0.01 or less indicating an ‘excellent’ model fit, 0.05 indicating a ‘good’ fit, and 0.08 representing a ‘mediocre’ model fit (MacCallum et al., 1996; Hu & Bentler, 1998). Meanwhile, comparative fit indexes such as CFI are acceptable when scores are 0.90 or higher. Overall, absolute and comparative fit indexes of the hypothesized model (future leader self salience, collective self-concept, leader identity, affective motivation to lead) suggested a fairly good fit with the data, $\chi^2(225) = 652$, $p < 0.01$, RMSEA = 0.069, SRMR = 0.058, CFI = 0.93, 95% CI [0.063, 0.076]. The model also controlled for the initial cognitive sense-making activity condition the participant had been assigned to before completing the survey (future leader self, future career self potentially involving leadership, self-to-leader exemplar comparison, and self-to-leader prototype comparison). The final four-factor model was compared to nested models (see Table 2): a three-factor model that allowed salience of future leader self and leader identity to load onto the same factor ($\Delta\chi^2(df+72) = -982.05$, $p < 0.01$), a two-factor model that allowed salience of future leader self, leader identity, and collective self-concept to load onto one factor ($\Delta\chi^2(df-611) = -592.41$, $p < 0.01$), and a one-factor model where all four factors were allowed to load onto one item ($\Delta\chi^2(df-6) = -6.17$, $p < 0.01$). Overall, other comparative models showed a significantly worse fit compared to my current study’s hypothesized four-factor model (see Table 2).

Table 1*Descriptive Statistics and Correlation Coefficients, and Reliabilities of Major Study Variables*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. Future leader self salience	5.36	1.43	(.95)						
2. Leader identity	4.77	1.5	.73***	(.96)					
3. Collective self-concept	5.19	.98	.43***	.51***	(.87)				
4. Affective motivation to lead	4.66	1.47	.71***	.80***	.40***	(.92)			
5. Leadership experience	2.10	1.15	.29***	.36***	.17***	.35***	--		
6. Leader self-efficacy	5.30	1.21	.71***	.68***	.44***	.67***	.31***	(.96)	
7. Future orientation	5.01	.90	0.1	.05	.09	.11*	.03	.17*	(.85)

Note. (*N* = 393).

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 2*Comparison of Nested Measurement Models*

Model	χ^2 (<i>N</i> = 393)	<i>df</i>	$\Delta\chi^2$	Δdf	CFI	RMSEA	RMSEA 95% Confidence Intervals		SRMR
							Low	High	
Model 1	652	225			0.93	0.07	0.063	0.076	0.058
Model 2	1634.05	153	982.05	-72	0.90	0.08	0.075	0.083	0.079
Model 3	2226.46	764	1574.46	539	0.89	0.07	0.066	0.073	0.096
Model 4	2232.63	770	1580.63	545	0.89	0.07	0.066	0.073	0.096

Note. Model 1, hypothesized four-factor model; Model 2, three-factor model (future leader self salience, leader identity onto one factor); Model 3, two-factor model (future leader self salience, leader identity, collective self-concept onto one factor); Model 4, single-factor model (null model). CFI = comparative fit index; RMSEA = root-mean-square error of the approximation; SRMR = standardized root mean squared residual.

Preliminary MANOVA Analysis

The cognitive sense-making conditions overall had a significant effect: Pillai's trace, $V=.18$, $F(27, 1140) = 2.64$, $p < .001$; Wilke's statistic, $\Lambda = .83$, $F(27, 110) = 2.70$, $p < .001$; Hotelling's trace statistic, $T=.20$, $F(27, 1130) = 2.76$, $p < .001$; Roy's largest root, $\Theta = .15$, $F(9, 380) = 6.38$, $p < .001$. As highlighted in the post-hoc testing illustrated in Table 3 below, there was some partial support for Hypothesis 1 as participants who completed the future leader self cognitive sense-making activity (Condition 1) and the future career self in relation to leadership cognitive sense-making activity (Condition 2) had higher ratings on the key leadership variables than compared to participants who completed the reflective comparison conditions of self-to-leader exemplar (Condition 3) and self-to-leader prototype (Condition 4). Unsurprisingly, results indicated that future leader self salience was higher for participants in future possible selves conditions than for those participants who engaged in self-to-leader comparative work. Having said this, the leader identity responses of participants in the future possible selves sense-making conditions (Conditions 1 and Conditions 2) were only significantly more positive than for participants in the self-to-leader prototype condition (Condition 4); suggesting that possible selves thinking was an effective sense-making process in positively influencing leader identity but that specific self-to-leader exemplars (Condition 3) could also still possibly be used in some form to positively influence leader identity. Condition 2 participants also had higher ratings for the more intrinsic dimension of motivation to lead (affective motivation to lead) than did those participants in Conditions 3 and Condition 4, suggesting that future possible selves cognitive sense-making is also an effective way of stimulating intrinsic motivation to lead.

Table 3*MANOVA Results of Significant Mean Differences between Cognitive**Manipulations*

Effect	Cognitive Sense-making Comparison	Mean Difference	LLCI 95%	ULCI 95%
Future leader self salience	FSL–STE	.73	.37	1.1
	FSL–STP	.54	.22	.86
	FCL–STE	1.06	.67	1.45
	FCL–STP	.86	.51	1.21
Affective motivation to lead	FCL–STE	.56	.16	.95
	FCL–STP	.59	.23	.94
Leader identity	FSL–STP	.43	.09	.77
	FCL–STP	.43	.05	.80

Note. FSL = future leader self condition; FCL = future career self involving leadership condition;

STE = self-to-leader exemplar condition; STP = self-to-leader prototype condition.

LLCI = lower confidence interval limit; ULCI = lower confidence interval limit.

Structural Equation Modelling

The moderated-mediation model that I hypothesized was then tested as a Structural Equation Model (SEM) using the Mplus software 7.3 (Muthén & Muthén, 2012-2017). SEM was a suitable analytical tool for testing the model because it enabled measurement error to be assessed and for the original measurement model to be extended further into analysis of relational paths between the variables (Stride, 2017). This made it the most effective method of testing for interaction effects as all latent constructs are from multiple indicators (Marsh et al., 2006). Maximum Likelihood Robust (MLR) was used as an estimator which is based on the multivariate normality of the indicators and also accounts for any violations against non-normality such as kurtosis (Hau & Marsh, 2004). This was more effective than other estimates (Jaccard & Wan, 1995). In the structural model, control variables were allowed to regress onto the mediator (leader identity) and dependent variable (affective motivation to lead) and to covary with each other and with future leader self salience and collective self-concept. Results indicated that the control variables had not had a significant impact on the results. All standard

errors, indirect effects, and confidence intervals within 95% were calculated through the bootstrapping option to test the reliability of the indirect effect of the moderated mediation. Confidence intervals represent the lower and upper limits of what a value could be at a given level of the moderator and so if the confidence intervals do not overlap zero (i.e., the high and low intervals are both positive *or* are both negative), then the effect is deemed to be statistically significant (Preacher et al., 2007).

Hypothesis 2 suggested that the clarity of seeing oneself in the future as a leader would be positively related to leader identity. Path a was supported as future leader self salience to leader identity was positive and significant ($\beta = .625$, standard error = .069, $p < 0.001$, 95% CI [0.489, 0.761]). Next, Hypothesis 3 was also supported through demonstrating how leader identity mediates the relationship between salience of future leader self and affective motivation to lead. Path b was supported with leader identity positively related to affective motivation to lead ($\beta = .684$, SE = .053, $p < 0.001$, 95% CI [0.580, 0.787]). Suggestion of full mediation would be that the entire effect of salient future leader self goes through leader identity which would mean Path c' will be zero (Shaver, 2005). Path c' showed that affective motivation to lead was no longer positively related to salience of future leader self when the mediator was included ($\beta = .112$, SE = .061 $p > 0.05$, 95% CI [-0.009, 0.232]). This indicates that there is support for a level of mediation from leader identity. Hypothesis 3 was therefore supported (see Table 4).

Table 4*Results for Testing Mediation in Hypothesis 2 and Hypothesis 3*

Variables	β	SE	LLCI 95%	ULCI 95%	<i>p</i>
Dependent variable: Affective Motivation to Lead					
Leadership experience	0.03	.033	-0.032	0.098	0.119
Leader self-efficacy	0.03	0.054	-0.073	0.140	0.173
Future perspective	.0018	0.044	-0.067	0.104	0.130
Salience of future leader self	.112	0.061	-.009	0.232	.069
Leader identity	.684	0.053	0.58	0.787	.000
Dependent variable: Leader Identity					
Salience of future leader self	.625	.069	0.489	0.761	.000
Bootstrap results for indirect effect	0.106	0.035	0.038	0.174	0.002

Note. LLCI = lower limit of confidence interval. ULCI = upper limit of confidence interval. Bootstrap

sample size = 5000. (β) represents the beta coefficient.

Hypothesis 4 proposed that the mediation of the relationship between salience of future leader self and leader identity was moderated by the participants' level of collective self-concept. Specifically, the hypothesis predicted that higher levels of reported collective self-concept would strengthen the relationship at this early stage of leader development. The indicator of this latent interaction (XW) was the multiplication of future self as a leader and collective self-concept. As Table 5 indicates, the indirect effect of collective self-concept interaction with future leader self salience (XW) was statistically significant on leader identity ($\beta = .106$, $SE = .035$, $p < 0.01$, 95% CI [0.038, 0.174]). This suggests that collective self-concept was acting as a moderator. In this case, there are observed differences in the independent variable to mediator paths from different levels (low, medium, high) of the moderator (Preacher et al., 2007; James & Brett, 1984). This indirect effect was significant at low, medium, and high values of collective self-concept (in this case, it was the mean +1 SD from the mean of collective self-concept; Preacher et al., 2007). The null hypothesis is rejected

as the confidence intervals do not pass through zero; providing the best indication that the moderating effect of collective self-concept is seen at each level (Preacher et al., 2007; see Kragt & Guenter, 2018, p. 412). However, there is also some overlap in the confidence intervals between different levels of the moderator. Therefore, whilst confidence intervals relate to the estimate of the mean at each level of the moderator as opposed to a direct assessment of the differences between the means at each level of the moderator; this overlap means that the possibility of non-significance cannot be fully ruled out. Table 5 illustrates the effect of the moderator. At low levels of collective self-concept, the indirect effect was weaker ($\beta = .467, p < .001, SE = .073, 95\% CI [0.238, 0.473]$) than at high levels of collective self-concept in which the indirect effect was stronger ($\beta = .612, SE = 0.073, p < .001, 95\% CI [0.375, 0.625]$). Therefore, as the moderator increases, so does the conditional indirect effect. As a result, findings provide support for Hypothesis 4.

Table 5

Moderation effect of Collective Self-Concept in Hypothesis 4

Level of the moderator	Conditional Indirect Effects	SE	<i>p</i>	LLCI 95%	ULCI 95%
Low	0.36	0.06	.000	0.238	0.473
Medium	0.43	0.057	.000	0.316	0.539
High	0.50	0.064	.000	0.375	0.625

Note. Low and high level of the moderator estimated at +/- 1 SD.

LLCI = lower limit confidence interval. ULCI = upper limit confidence interval. Bootstrap sample size = 5000.

Due to the high correlation between collective self-concept and affective motivation to lead ($r = .80$), whether the mediator (leader identity) to dependent variable (affective motivation to lead) path was moderated by collective self-concept was also tested. This enabled my current study to assess whether collective self-concept impacted on the relationship between leader identity and affective motivation to lead; which was then proved

non-significant ($\beta = -.027$, $SE = .027$, $p > 0.05$, 95% CI [-0.08, 0.026]). This demonstrated that collective self-concept is only moderating the relationship between the independent variable (salient future leader self) and the mediator (leader identity) but is not a moderator between the mediator (leader identity) and the dependent variable (affective motivation to lead).

Discussion

Through applying possible selves theory into the leader development domain (Strauss et al., 2012; Markus & Nurius, 1986), my current study explores how future leader self sense-making is positively related to leader identity and affective motivation to lead. My current study findings provide initial support for the hypothesized moderated-mediation model which proposed that a salient future leader self positively relates to affective motivation to lead others via leader identity, and that higher level of collective self-concept strengthens this effect of salient future leader self on leader identity further; thus, advancing our overall understanding of how individuals can become intrinsically motivated to lead. Indeed, in order for the individual to feel motivated to lead in practice, the individual must *want* to lead and interpret leadership roles and opportunities as self-relevant and part of a possible future for themselves (Badura et al., 2020). Findings that future leader self salience positively related to leader identity (path a) indicates that a future-orientated approach to leader development is self-directed and grounded in values and ambitions that are of high personal importance to the individual which can positively support leader identity in a broad range of individuals who have varying levels of experience as leaders (Brown, 2015; Strauss et al., 2012; Markus & Nurius, 1986). In addition, results indicate that leader identity mediates the relationship between future leader self salience and affective motivation to lead in that leader identity positively related to affective motivation to lead (path b) and after accounting for leader identity, salience of future leader self no longer predicted affective motivation to lead (path c'). The significant effect leader identity has on the relationship between a salient future leader self

(cognition) and affective motivation to lead (affect) suggests that in setting a clear self-determined goal, an individual can strengthen their current identity as a leader and then draw a positive feeling of a desire to lead and to move towards reaching their long-term goals in leadership (Strauss et al., 2012; Markus & Nurius, 1986; Oyserman & Markus, 1990). Findings from my study also suggest that collective self-concept positively moderates the relationship between future leader self salience and leader identity, with higher levels of collective self-concept strengthening this relationship as expected; indicating that leader identity can be strengthened through the individual taking a more collectivist perspective towards leading others. This is likely because individuals with a higher collective self-concept are able to internalize the values and goals of the group that they are in (Jackson et al., 2006; Ashforth & Johnson, 2001; Kashima & Hardie, 2000). This may suggest that the individual can align both their leader identity and an organizational collective identity within their self-concept (Brewer, 1991).

Whilst descriptive statistics indicated a high correlation between each of these constructs, the confirmatory factor analysis in which both factors were tested in nested model comparisons demonstrated that they were conceptually different constructs. It is also worth noting that the preliminary MANOVA analysis findings suggest that the priming of future-orientated forms of cognition (Condition 1 and Condition 2) were overall more effective in strengthening leader identity, affective motivation to lead, and future leader self salience than compared to comparative-based sense-making approaches that related to self-to-leader exemplars and self-to-leader prototypes (Condition 3 and Condition 4) that required participants to evaluate their current self as a leader in comparison to more experienced leaders. At the same time, the impact of such findings should be kept in perspective as these differences were only found in one-to-one comparisons between each cognitive sense-making condition in the post-hoc analysis. None of the four cognitive sense-making conditions had

significantly different results to all of the three other cognitive sense-making conditions on a given leader development variable (future leader self salience, leader identity, affective motivation to lead). Yet, there was still a clear pattern of participants in the future possible selves sense-making conditions having more positive levels of these core leader development constructs than the participants who were in the self-to-leader comparative sense-making conditions.

Overall, findings show that regardless of the initial sense-making activity condition that participants were in (future self as a leader, future career self involving leadership, self-to-leader exemplar, self-to-leader prototype) at the start of my study, the hypothesized model in which a salient future self as a leader positively related to affective motivation to lead via leader identity as a mediator with collective self-concept then acting as a moderator was still supported as the between-subject condition was controlled for in the structural equation modelling tests. Therefore, whilst the way participants think about the self as a leader can be seen to affect the strength of the variables in some cases, the actual relationship between the constructs of salience of future leader self, leader identity, affective motivation to lead, and collective self-concept in the moderated-mediation model did not change based on which cognitive sense-making condition the participant was in.

Theoretical Implications

The primary contribution of my current study is to draw greater attention to the role of cognitive sense-making in leader development, emphasizing the important role that cognitive focus plays in shaping how the individual makes sense of, interprets, and ultimately defines their role within their current social environment (Ashforth & Schinoff, 2016; Ashforth, 2001; Ibarra, 1999). Before individuals can step up and claim leadership roles (DeRue et al., 2012; DeRue & Wellman, 2009), they must internalize leadership within their self-concept (Lord & Hall, 2005) and understand what they want to be as a leader in the future; including the values

they want to express whilst operating in a leadership position in the social context (Strauss et al., 2012). In response to this reality, my current study draws upon possible selves theory (Markus & Nurius, 1986; Strauss et al., 2012) to develop a new form of cognitive sense-making (future leader self) that can help orientate the individual towards taking a more self-determined approach to leader development. Overall, my study provides four theoretical contributions to the scholarly literature.

Firstly, initial findings from my current study suggest that future-oriented possible selves (Strauss et al., 2012) rather than ‘self-to-leader’ comparisons (Guillén et al., 2015) are generally a more effective sense-making approach for predicting core leader development antecedents like leader identity, affective motivation to lead, and future leader self salience; particularly more than the self-to-leader prototype cognitive sense-making approach. The fact that significant differences were not found for one condition compared to all other three conditions is likely because the future-based sense-making processes of future leader self (Condition 1) and future career self potentially involving leadership (Condition 2) had very similar effects. It also indicates that future possible selves must be elaborated upon in greater detail and constructed over time (Strauss et al., 2012) in order to be more positively related to leader identity and affective motivation to lead. The process of shifting one’s self-definition will take longer than just the completion of one simple written activity before a survey. Meanwhile, self-to-leader comparisons are only likely to be effective in motivating individuals to lead when they can make one’s own future possible self as a leader appear more conceivable such as by providing a greater understanding for how this future possible self as a leader can be achieved in the social context (Lockwood & Kunda, 1997; Meichenbaum, 1971). Potentially, self-to-leader exemplar comparisons could become a positive influence on one’s leader identity when they are framed from the perspective of a leader role-model as this would mean that the individual construes the exemplar as a source of knowledge that one can learn

more about how to lead effectively from, but to which one is not expected to match in terms of skills and abilities in the current moment in time in which the comparison is being made (Lockwood & Kunda, 1997; Blanton et al., 1999). This extends Guillén and colleagues' (2015) work of accounting for the individual's own leadership standards, to actually encouraging the individual to set their own standard for leadership as well as a timeline for meeting those standards that accounts for the need to reduce the gap in knowledge and leadership skills that they might have between current and future leader selves (Higgins, 1987; Strauss & Parker, 2018).

Second, my current study tested a moderated-mediation model in which a salient future leader self positively relates to affective motivation to lead via leader identity. This model demonstrated how a participant's interest in becoming a leader can begin through cognitive sense-making that frames the possibility of becoming a leader as a progressive and attainable process in which a known discrepancy between one's current and future leader self are seen to be capable of being reduced over time through further engagement with leadership roles and opportunities (Strauss et al., 2012; Anseel et al., 2017; Guillén et al., 2015; Lockwood & Kunda, 1997). The salience of a future leader self then provides a greater sense of meaning and purpose for the specific individual which in turn increases their motivation to change and test a provisional identity out as a leader in a social context (Strauss et al., 2012; Waytz et al., 2015; Ibarra, 1999). This is also well aligned with self-determined goal theory which indicates that there will likely be differences later on in leadership effectiveness between an individual who closely identifies as a leader from within compared to an individual who identifies only because their role has implicit associations with leadership such as in management (Deci & Ryan, 2000; Johnson et al., 2006). Thus, my current study findings are likely most relevant to the field's understanding of how novice-level leaders who do not currently identify as leaders can begin the process of strengthening their identity as leaders (Ashforth, et al., 2014; Lord &

Hall, 2005). At the same time, the model was tested using a diverse participant sample that had varying levels of leadership experiences. The fact that leadership experience did not significantly impact on the results suggests that the benefits of this form of cognition can also be helpful for more experienced leaders to establish further self-development goals for their future and/or to ensure that they maintain progress over time in developing as a more effective leader (Carver & Scheier, 1998; Markus & Nurius, 1986).

Third, my current study advances our understanding of the significance of cognitive sense-making and self-identity processes that underpin one's affective motivation to lead (Chan & Drasgow, 2001). The current findings demonstrate that self-cognition in the form of future possible self as a leader and leader identity positively relates to affective motivation to lead regardless of the current level of leadership self-efficacy or experience the individual has (Badura et al., 2020). Thus, individuals can become intrinsically motivated to lead when they are able to connect leadership to important self-relevant knowledge that is extended into one's future leader self.

Finally, my current study demonstrates how a higher level of emphasis on the collective self-concept provides a positive impact on the leader development process; acting as a moderator between the positive relationship between future leader self salience and leader identity (Lord et al., 1999). A desire to see the group achieve along with a closer identification with the group (van Knippenberg & Hogg, 2018) causes individuals to feel greater affinity to their group and become more inclined to seek out opportunities to lead it. In addition, if the prospective leader can identify with the group and is also seen as an archetypical group member they become more likely to be viewed as a leader, or to at least be given the opportunity to lead the group in the future (Giessner et al., 2009). Hence, collective self-concept is likely a key part of beginning to identify as a leader of a collective as well as for

effective leadership in terms of those leaders who can successfully build a group identity within the team (Day & Harrison, 2007).

Practical Implications

Findings from my current study suggest that development as a leader can be a legitimate possibility for more people (Epitropaki, 2018); showing how future leader self salience positively relates to leader identity because it provides a self-determined approach to deriving a deeper level of understanding about becoming a leader (Strauss et al., 2012). Findings suggest that most individuals are well-suited to this future-based approach to viewing their own development as leaders because it is a self-constructed cognitive process that encourages the individuals to approach their self-development as leaders over time from a mindset towards discrepancy reduction between their current and future leader self (Higgins, 1987; Strauss et al., 2012; Anseel et al., 2017; Hoyle & Sherril, 2006; Cross & Markus, 1994; Inglehart et al., 1988). This promotes the individual to engage in further planning and assessment for how they will achieve this desired future outcome of development through proactive leadership behaviours within their own specific set of individual circumstances that can reduce the discrepancy between the current and future self as a leader (Parker et al., 2018; Johnson et al., 2006; Austin & Vancouver, 1996).

As an effortful and self-determined form of cognitive sense-making, future leader self thinking encourages the individual to consider leadership in many different forms beyond just leadership in formal management roles so that a more diverse range of individuals beyond just those currently in management positions can challenge current self-assumptions about who they are in relation to leadership and determine whether they still reflect the best interests and desires of the self (Yeager & Callahan, 2016; Avolio, 2005; Gecas, 1982). Meanwhile, intermediate and more advanced leaders can still benefit from engaging in future leader self sense-making because it enables such individuals to plan for further improvement as a leader

in the future; directing their self-regulation processes towards further advancement in their capabilities and skills as leaders (Mumford et al., 2017; Lord & Hall, 2005; Carver & Scheier, 1998; Kark & Van Dijk, 2007).

My current study's findings also provide useful insights for organizations seeking new ways of supporting leader development in a broader range of employees (Brown, 2015; Ibarra, 1999). Activating an intrinsic motivation to lead is essential for ensuring that individuals persist in continuing to develop as leaders and feel committed to overcome unexpected challenges that emerge over the course of their development as a leader (Badura et al., 2020; DeRue & Myers, 2014; DeRue et al., 2012). This means that intrinsic self-motivation should first be established within individuals because this pushes the individual to take steps towards reducing the discrepancy between their current and desired future state over time (Markus & Wurf, 1987; Swann, 2012). This enables the individual to approach their own development as a leader from a feasible perspective in which it is seen as a long-term goal of developmental pursuit in which obstacles can be overcome through enacting proactive leadership behaviours. These behaviours reflect efforts to shape and manage the direction of one's development as a leader; enabling the individual to access further development opportunities and to further develop their leadership skills and knowledge (Kappes & Oettingen, 2014; Kirk et al., 2011; Oettingen, 2000; Oettingen et al., 2001).

Limitations and Future Research

Whilst my current study helps advance the field's current understanding of the importance of self-cognition in leader development, there are also several limitations that provide important lessons for how future empirical research can be improved. Most significantly, my hypothesized conceptual model was tested under a research design in which (whilst participants were part of different manipulations) the experimental condition was only a control variable when testing the broader theoretical model and the model was not tested

separately based on each of the four experimental manipulations. This indicates that definitive causal claims cannot be made about my current study's results. Therefore, future research should test the conceptual model longitudinally with multiple repeated measurement at different time points so that there are adequate time lags between each of the key hypothesized variables (salient future leader self, leader identity, affective motivation to lead, collective self-concept) that are based on the minimum amount of time it would take for the relationship to emerge over time (Podsakoff et al., 2003; Johnson et al., 2011; Mitchell & James, 2001). Cross-lagged analysis could then be conducted to test for reciprocal effects between the hypothesized relationships within the model so that a more rigorous investigation of the suggested causal claims could be made (Fischer et al., 2017; Farrell, 1994; Zapf et al., 1996).

Collective-level construal of one's leader identity is likely to be perceived in social situations by followers as highly effective; increasing the individual's likelihood of claiming and maintaining an identity as a leader (Johnson et al., 2012; Chrobot-Mason et al., 2016; Conger & Kanungo, 1998; Kark & Shamir, 2002). However, there could be certain situations in which individual and/or relational-based self-construal of oneself as a leader are useful for developing one's leader identity (Lord & Hall, 2005). For example, through the individual level of self-construal of one's leader identity, the person would be encouraged to reflect upon what personal interests, values and goals they have in becoming a leader that would motivate them to invest their time and efforts towards developing further as a leader (Johnson et al., 2012). Meanwhile, when the relational level of the self-concept is activated, the individual could become focused on ensuring that they enact their leader identity in a way that develops and maintains positive interpersonal relationships with their followers which could also help them to maintain their role as a leader in the social context. Therefore, future studies might also look to investigate the impact of the individual level of self-construal and the relational level of self-construal on leader identity.

Given that a future leader self is a possible self that simulates a discrepancy between current and future selves, it is likely that this will also make decision-making surrounding behaviours that might reduce this gap relevant (Carver & Scheier, 1998). Thus, it will be important for future research to extend the current model to conceptualize progression from cognition to behaviour over time (Higgins, 1987; Markus & Nurius, 1986; Parker et al., 2010; Johnson et al., 2006). Specifically, future studies will need to explore how the affective motivational response to increased leader identity is expressed over time through proactive leadership behaviours. These behaviours are important to the process of leader development because they represent future-oriented actions taken by the individual to shape and manage the direction of their development as a leader that involve active decisions to express their intrinsic motivation to lead and to make efforts towards reducing the discrepancy between their current and future leader self (Strauss et al., 2012; Parker et al., 2010; Parker et al., 2006). This means that individuals have to plan and strategize for ensuring they make successful progress towards their future leader self in order for the future leader self to remain salient and relevant (Boyce et al., 2010). This can possibly be linked down to lower-levels within the individuals goal-hierarchy such as the multiple tasks, roles, and opportunities that can help the individual to enact the future self as a leader in practice (Lord et al., 1999; Cropanzano et al., 1993).

A central reason as to why this will be important is that leader development is an inherently longitudinal process (Day & Sin, 2011), meaning that my current study findings must be placed in perspective of the broader leadership self-regulatory process that can occur over a lifetime (Carver & Scheier, 1998). Without behavioural proactivity, and ultimately progress being made towards the future leader self, eventually, the individual might revise the selection of their future leader self goal and/or reallocate their personal resources of time and energy into different pursuits if they feel that adequate progress is not being made in developing as a leader (Freund & Baltes, 1998; Parker et al., 2010; Lanaj et al., 2021).

Inevitably, sustainable leader identity development will require both the individual to perceive themselves as leaders in the context of their organization, and for others to perceive them as a leader over time so that they can access experiences that provide knowledge and opportunities to enhance their leadership skills (Ashforth & Schinoff, 2016; DeRue & Ashford, 2010). Thus, the individual's initial conceptualization of a salient future leader self at the intrapersonal level is just the first step in a long process of leader identity development that must also involve behavioural and experiential changes later on over a sustained period of time (Lord & Hall, 2005).

Finally, future research will need to investigate how future possible selves sense-making and self-to-leader comparison can complement one another. A potential starting point for this could be to investigate how comparative thinking based on implicit theories could be used to better understand leadership from the perception of followers in order to successfully adjust one's claim to leadership in the context and make further progress towards one's future leader self (DeRue & Ashford, 2010).

Conclusion

Individuals are often reluctant to identify as leaders and there are even less individuals who feel intrinsically motivated to step up and seize opportunities to lead others. Future leader self cognition can act as the catalyst for which this can change. Findings show that this is an effective cognitive approach that positively relates to affective motivation to lead via leader identity. As a self-determined approach to becoming a leader, this means that individuals can consider both formal and informal leadership roles which in turn, enables a more diverse range of leaders to emerge within an organization.

Chapter 4: Pursuing A Future Leader Self: A Longitudinal Investigation of Leader Identity and Its Motivational and Behavioural Outcomes

Abstract

Becoming a leader is widely recognized as a challenging endeavour that takes time. However, little longitudinal research has been done to explain how individuals can become motivated to pursue leadership as part of their identity. Drawing upon both possible selves and self-regulation theory and data from two studies, my current paper tests a longitudinal serial-mediation model of leadership self-regulation in which a ‘future leader self’ strengthens the individual’s current leader identity which then subsequently increases affective motivation to lead, with affective motivation to lead then positively related to proactive leadership behaviour. Study 2 ($N = 186$) was conducted at two time points over a year apart in a manufacturing context. Study 3 ($N = 265$) included three time points, each a month apart, using a diverse range of employees from different industries. Through time-lagged and cross-lagged analysis, I found general support for the causal directions within its hypothesized longitudinal model. The theoretical implications for leader identity, motivation to lead, and leadership self-regulation are discussed along with the practical implications for prospective leaders and their organizations.

Keywords: possible selves, leader identity, motivation to lead, proactive leadership behaviour, self-regulation

Pursuing A Future Leader Self: A Longitudinal Investigation of Leader Identity and Its Motivational and Behavioural Outcomes

“The future influences the present just as much as the past.”

–Friedrich Nietzsche

Introduction

The number of individuals who identify as leaders does not match the demand organizations and communities have for individuals who are willing and able to take the lead (e.g., Epitropaki, 2018; Gentry et al., 2014; Deloitte, 2012). Identifying as a leader is often only ever seen as possible if one is bestowed with a managerial title (DeRue et al., 2009) *or* if one’s own current identity is perceived to match a relatively narrow prototype of what a leader *ought* to exemplify (Guillén et al., 2015). The scholarly literature is beginning to recognize the centrality of leader identity in determining “who will lead and who will follow” (DeRue & Ashford, 2010, p. 627) and the positive role that leader identity plays in the advancement of an individual’s leadership skills over time (Miscenko et al., 2017; Lord & Hall, 2005). Overlooked, is how for many people, it is a struggle to envision a possible future in which they would identify as a leader (Epitropaki, 2018; Guillén et al., 2015).

For most individuals, particularly those with little to no experience in leadership (Kwok et al., 2018; DeRue et al., 2012; Day & Sin, 2011; DeRue & Wellman, 2009), who lack leader role models (Dragoni et al., 2014; Lockwood & Kunda, 1997), or who are without a supportive work climate (Chen & Kanfer, 2006; Kanfer et al., 2001), the prospect of stepping up to leadership roles can be a daunting task. In addition, enacting a leadership identity has been shown to be costly on a day-to-day basis (Lanaj et al., 2021). With all this in mind, many are likely to wonder, ‘why *lead*, when one can *follow*?’

Extended to this problem, the motivations of our current leaders remain widely varied; some leaders have an intrinsic desire to make a positive difference whilst for others, leadership

is just a part of their wider career plans (Badura et al., 2020; Rus et al., 2010; Chan & Drasgow, 2001). For most individuals, reflexive and duty-bound answers to the *why* question of leadership are unlikely to provide sustainable justifications for one to activate an identity as a leader and to become motivated to express this identity through congruent leadership behaviours (Parker et al., 2010; Deci & Ryan, 2000). These justifications represent “secondary influences” (Badura et al., 2020, p. 332) of motivation to lead that are unlikely to evoke a deeper level of passion and interest in leadership that is necessary for sustaining leadership behaviours over time (Kark & van Dijk, 2007).

However, I argue that there is a viable solution to this problem that has yet to be applied to the leadership domain. The theories of possible selves (Markus & Nurius, 1986) and self-regulation (Carver & Scheier, 1998) have been effectively applied in research on a range of other challenging self-endeavours such as career pursuits (Strauss et al., 2012) and becoming an entrepreneur (Seibert et al., 2020). This suggests that challenging roles that are reframed towards a goal-oriented construal, sustain interest and persistence in pursuit of the given role over time (Strauss, et al., 2012).

In my current paper, my theoretical framework focuses on addressing the need for a longitudinal model of the process of how individuals can identify as leaders, which in turn facilitates their affective motivation to lead. Affective motivation to lead derives from leading out of a sense of enjoyment and purpose and so is intrinsic in nature (Chan & Drasgow, 2001). I propose that one possible influence on leader identity is the emergence of a salient and future-based goal of becoming a leader which the individual can continue to recall back on in order to sustain affective motivation to lead over time (Lanaj et al., 2019; Carver & Scheier, 1998; Johnson et al., 2006; Lord et al., 2010). I conceptualize a new form of cognitive simulation in leadership self-regulation theory as a *future leader self*; representing conscious self-cognition the individual can engage with in an effort to construct a vision/long-term goal

for their own desired self in the future as a leader in which self-identity is construed as malleable over time (Strauss et al., 2012; Markus & Nurius, 1986; Kivetz & Tyler, 2007). By shining the spotlight on the impact of future leader self cognition on leadership self-regulation, I address a critical gap in our current understanding of how a broader spectrum of individuals can begin to identify as leaders, even when they may not currently see themselves as a leader or may not have had any past experiences in leadership roles (Brown, 2015; Ibarra, 1999). I propose that by strengthening one's leader identity through holding a salient future leader self, one then becomes more intrinsically self-motivated to affirm this identity through congruent proactive leadership behaviours. Such actions can involve efforts taken by the individual to shape and manage their own future progression as a leader through leadership skill development, by networking and learning from more advanced leaders, and by planning for future development as a leader (Parker et al., 2010; Strauss et al., 2012).

Integrating possible selves theory (Markus & Nurius, 1986) with self-regulation theory (Carver & Scheier, 1998), my current paper delivers four significant contributions to the literature on leader identity and leadership self-regulation. Firstly, in drawing upon possible selves theory (Markus & Nurius, 1986; Strauss et al., 2012), I define a novel cognitive construct that is termed a *future leader self*. My paper shows how this cognitive simulation can strengthen leader identity by facilitating self-regulatory focus towards the goal of becoming a leader (Carver & Scheier, 1998). In doing so, my paper provides critical insights into how one's identity as a leader can be self-constructed by the individual.

Secondly, I test how the affirmation of a leader identity can be expressed through affective motivation to lead (Guillén et al., 2015). Most previous research has looked at how stable antecedents such as personality (Erez & Judge, 2001; Sackett et al., 1998), general cognitive ability (Lord et al., 1986), and self-efficacy (Chan & Drasgow, 2001) influence motivation to lead. Implicitly, this focus seems to imply that becoming motivated to lead is

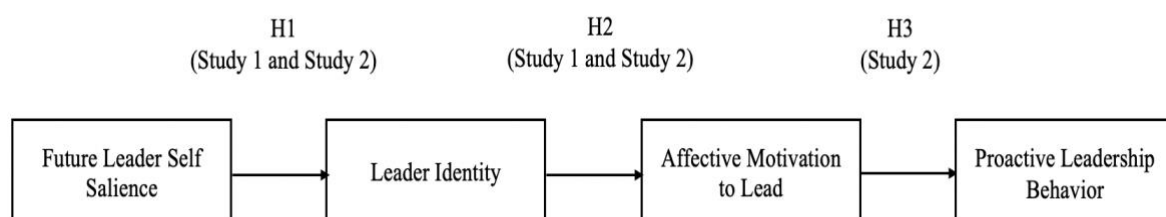
largely a pre-determined outcome based on self-attributes that remain constant across one's lifetime. However, alternative perspectives highlight how the self-regulatory focus of the individual also shapes this motivation to lead (Kark & Van Dijk, 2007).

Thirdly, I provide insight into temporal elements of leader identity construal (Castillo & Trinh, 2018; Fischer et al., 2017; Shipp & Cole, 2015; Shamir, 2011). In two studies that were conducted over different lengths of time (i.e., two time points over a year apart in Study 2; three time points that are each one month apart in Study 3), I investigate whether both the antecedent (future leader self salience) and outcome (affective motivation to lead) have a reciprocal relationship with leader identity through cross-lagged analysis.

Finally, I draw upon research on work goals and proactivity to test a serial-mediation model of how the leadership self-regulation process can emerge over time (Strauss et al., 2012). Figure 1 illustrates my conceptual model which proposes that future leader self salience can strengthen leader identity and further increase intrinsic motivation to lead and proactive leadership behaviour over time.

Figure 1

The Hypothesized Research Model



Conceptual Framework and Hypotheses Development

Possible selves theory (Markus & Nurius, 1986) proposes that each individual is capable of reflecting on who they could be in the future in order to shape the direction of their current identity (Hoyle & Sherill, 2006). Similarly, Epitropaki and colleagues (2017) suggest

that leader identity is a “sub-component of one’s working self-concept that includes leadership schemas, leadership experiences and future representations of oneself as a leader” (p. 107).

This conceptualization demonstrates how an identity as a leader can be strengthened or weakened over time depending on changes in the social context and the actions of the individual (Lord et al., 2017). In light of this, I posit that there are three significant reasons why possible leader selves that individuals hold in relation to their future can facilitate the process of leadership self-regulation over time.

First, deriving self-relevant meaning from one’s current behaviours in relation to one’s future is a significant part of general human functioning (Ashforth & Schinoff, 2016; Harquail, 1998); with individuals constantly striving to gain a deeper sense of coherence between their past, present, and future actions in order to then feel a wider sense of purpose in their life (Waytz et al., 2015; Heintzelman & King, 2014) and to envision desirable future conceptualizations of the self (Markus & Nurius, 1986; Bandura, 2001; Bunge, 1977). Implicit in this process is the notion that individuals do not merely react to their environments, they also try to shape their own position in them in order to influence the direction of their future (Lanaj et al., 2012; Johnson et al., 2006; Carver & Scheier, 1998; Bandura, 1982).

Second, individuals are capable of setting the direction of this future through their ability to mentally time-travel forwards and backwards in time in exploration of what possible identities they could enact in the future; with certain aspects of self-identity being approached as malleable constructs that can change over time (Waytz et al., 2015; Markus & Wurf, 1987; Lord & Brown, 2004; Frese & Fay, 2001). As one’s leader identity is strengthened, opportunities to lead in social settings subsequently become more self-relevant and the individual is more likely to care about their own emergence as an effective leader over time (Lanaj et al., 2021; Day et al., 2009; Strauss et al., 2012; Anseel et al., 2017; Ashforth & Schinoff, 2016).

Third, self-comparisons between future and current selves can create a self-motivating discrepancy that directs self-regulation towards behaviours that bring the individual closer towards the self-determined goal of the future leader self (Higgin, 1987; Strauss et al., 2012; Anseel et al., 2017; Hoyle & Sherril, 2006; Cross & Markus, 1994; Inglehart et al., 1988). It then becomes possible for the individual to identify themselves as a prospective leader; capable of proactively self-regulating their own actions towards identity-congruent behaviours (Carver & Scheier, 1998; Johnson et al., 2006; Lord & Levy, 1984; Kivetz & Tyler, 2007; Dutton et al., 2010; Cross & Markus, 1991). These proactive actions represent a type of “motivated behaviour” (Barrick et al., 2013, p. 132), centred around the individual becoming willing to take the initiative in trying to progress further towards achieving their long-term goal in developing as a leader (Parker et al., 2006; DeShon & Gillespie, 2005; Locke & Latham, 2002; Crant, 2000). This includes accessing leadership experiences which can facilitate leadership skill development (DeRue & Wellman, 2009; Lord & Hall, 2005).

Future Leader Self and Leader Identity

A future leader self becomes salient when the goal or vision for one’s future as a leader is clear in the individual’s mind (Strauss et al., 2012; Markus & Nurius, 1986; Markus & Wurf, 1987). However, empirical research suggests that the process for cognitively construing a challenging and aspirational identity of a leader is not easy for most individuals, and that the process can even become demotivating when the identity is perceived to be too difficult to ever attain in a reasonable amount of time (Savani & Zou, 2019). As such, it is paramount that the pursuit of leadership be construed as a salient long-term goal for the future that the individual feels they can gradually work towards achieving rather than as a seemingly insurmountable challenge that must be resolved immediately (Day & Sin, 2011). This enables the individual to configure holding a leader identity more dynamically beyond just the current tense, but also into the future tense (Belding et al., 2015; Fujita et al., 2006; Schutz, 1964). As the leader

identity is strengthened, it can begin to represent a deeper expression of the individual's true sense of self that eventually becomes fully integrated into the self-concept (Hammond et al., 2017; Lord & Hall, 2005; Stryker & Burke, 2000). Over the long-term, the individual is then more likely to strive towards seeking self-relevant opportunities to lead that move the individual closer towards their envisioned future self as a leader (Parker et al., 2010). Hence, establishing a clear self-projection of oneself as a leader in the future that feels personally meaningful is likely to strengthen one's current identity as a leader (Kwok et al., in press; Middleton et al., 2019; Komives et al., 2006; Garrison, 1997). Thus, my current paper hypothesizes the following:

Hypothesis 1: A salient future leader self will be positively related to leader identity.

Leader Identity and Affective Motivation to Lead

Motivation to lead embodies a positive affective response towards opportunities to lead others which increases the level of attention, effort, and persistence that a prospective leader invests into occupying a leadership role (Kanfer et al., 2017; Chan & Drasgow, 2001; Kanfer & Ackerman, 1989). Motivation to lead theory (Chan & Drasgow, 2001) conceptualizes a framework of motivational responses to leadership roles and opportunities that is founded on three unique dimensions of motivation that help to explain why an individual feels driven to lead others and would elect to enact the behaviours of a leader. Affective motivation to lead characterizes the intrinsically centred dimension of the framework because it relates to the individual feeling a desire to lead out of a greater sense of purpose and enjoyment in leading others (Badura et al., 2020).

Intrinsic motivations often emerge from a desire to achieve a long-term objective and are comprehensively recognized as a more enduring and reliable predictor of effective self-regulation of behaviour over time than more externally incentivized forms of motivations (Amabile et al., 1994). The importance of intrinsic motivation is also acknowledged in the

context of leadership; meta-analytic findings by Badura and colleagues (2020) suggest that affective motivation to lead is a stronger predictor than social-normative and non-calculative motivation of key leadership outcomes such as leader emergence and transformational leadership. At the same time, developing an identity as a leader is usually seen by individuals as highly challenging because “there is no easy and clear path to acquiring the leader identity right away” (Savani & Zhou, 2019, p. 246) and individuals do not have full control over accessing leadership roles which must be granted by others within the social context (DeRue & Ashford, 2010). With this in mind, it is likely that a salient leader identity will only motivate the individual to engage further in enacting identity-congruent behaviours when the identity is framed by the individual in a way that makes it seem both desirable to develop and possible to acquire over time in spite of the known challenges in developing the identity further (Savani & Zhou, 2019). A future leader self is a future-directed mental simulation for determining who one wants to become as a leader over time. This simulation involves elaborating upon a desirable and possible goal for the self as a leader to work towards accomplishing. In keeping this objective salient, leadership is also then interpreted as relevant for construing who one is in the current moment of time because one’s leader identity is now seen as a greater priority to enact in social contexts and to develop further so as to move closer towards actualizing the future leader self (Shipp & Jansen, 2021). As such, when interpreted through the lens of a future leader self (Ashforth & Mael, 1989; Savani & Zhou, 2019; Dweck, 2006; Dweck & Leggett, 1988), one’s leader identity can become a motivating force that encourages the individual to enact identity-congruent behaviours (Oyserman et al., 2017; Savani & Zhou, 2019). This signifies how the affirmation of one’s leader identity can be expressed by the individual feeling motivated to align their behaviour with the specific content of the salient identity that represents the standards, beliefs, and values that are internalized within the self-concept (Chan & Drasgow, 2001; Foote, 1951; Hitlin, 2003).

For these reasons, a salient future leader self will likely increase affective motivation to lead via leader identity being strengthened as this makes leading others an enduring and self-relevant pursuit through which individuals seek to uphold the standards of the identity (Guillén, et al., 2015; Van Iddekinge et al., 2009; Chen & Kanfer, 2006; Lord & Hall, 2005). As such, I propose the following:

Hypothesis 2: Leader identity mediates the positive relationship between a salient future leader self and affective motivation to lead.

Affective Motivation to Lead and Proactive Leadership Behaviour

As an intrinsic affirmation of one's leader identity, affective motivation to lead orientates the individual towards expressing this emotion through identity-congruent proactive leadership behaviours that can move the individual closer towards their long-term goals as a leader (Badura et al., 2020; DeRue & Ashford, 2010; Parker et al., 2019; Baltes, 1997). Self-identification with becoming a leader in the future prompts the individual to make additional efforts in gaining leadership roles that are important to them (Anseel et al., 2017; Parker & Collins, 2010; Gottfried, et al., 2011) and to verify this identity in social contexts through proactive leadership behaviours (Badura et al., 2020; Strauss et al., 2012; Swann, 1987). Such behaviours represent purely self-determined actions that are enacted when the individual cares about the expected future outcomes of the behaviour and views such outcomes as worthy of expending the additional effort required to enact the behaviour consistently (Parker et al., 2010; Deci & Ryan, 2000; Sonnentag, 2003). In other words, such behaviours are only likely to be enacted when the individual feels motivated by a proximate sense of enjoyment and a deeper meaning to one's sense of self and future goals (Parker et al., 2010; Wegner et al., 1986).

For these reasons, I propose that affective motivation to lead reflects an intrinsic enjoyment that is a central and enduring driver of proactive leadership behaviour (Parker et al., 2010; Deci & Ryan, 1985). Consequently, my final hypothesis is as follows:

Hypothesis 3: The positive relationship between a salient future leader self and proactive leadership behaviour is sequentially mediated by leader identity and affective motivation to lead.

Longitudinal and Reciprocal Effects

The primary objective of my current paper is to rigorously examine the causal directions within my hypothesized model over time. Leadership process models in general are self-enforcing and thus have a high chance of including reciprocal processes over time (Fischer et al., 2017; Shamir, 2011). Given the argument that antecedents and outcomes of leader identity within leadership self-regulation processes can have reciprocal relationships with leader identity over time (Day et al., 2009), my current research focuses on investigating the possibility of such effects emerging between future leader self salience, leader identity, and affective motivation to lead.

Firstly, it could be possible that the hypothesized relationship in which future leader self salience positively influences leader identity could become reciprocal over time. As one's leader identity is strengthened, over time the individual's future leader self could also become more salient as the individual is able to elaborate in more concrete detail of who, where, and when they will be leading others, and how this relates to other aspects of their own sense of self (Day et al., 2009; Strauss et al., 2012). In light of this possibility, I explore whether there is a mutually reinforcing relationship between future leader self salience and leader identity.

Secondly, it might be conceivable for the hypothesized relationship between leader identity and affective motivation to lead to become mutually reinforcing. Increased affective motivation to lead encourages the individual to enact a leader identity more frequently in social

settings which could then further strengthen this leader identity and potentially create a reciprocal effect between leader identity and affective motivation to lead over time (Day et al., 2009; Day & Harrison, 2007; Gagne´ & Deci 2005). For this reason, my current research also investigates whether the relationship between leader identity and affective motivation to lead is reciprocal.

Finally, it is also plausible that an increase in affective motivation to lead could inspire the individual to become more ambitious in their pursuit of becoming a leader and to make upwards revisions of their initial future leader self that then subsequently become more salient within the working self-concept (Day & Sin, 2011; Ilies & Judge, 2005; Oettingen et al., 2005). With this possibility in mind, I examine whether there are reciprocal effects between future leader self salience and affective motivation to lead.

An important part of testing for all of these possible reciprocal effects is to ensure that the minimum time lag (gap in time) between each measurement point provides adequate time for the theoretically plausible reciprocal relationships to emerge (Mitchell & James, 2001; Castillo & Trinh, 2018; Podsakoff et al., 2003; Johnson et al., 2011). I also recognize that the processes within my hypothesized model are based on changes and that the influence of cognition (future leader self) on identification (leader identity) is likely to take the most time of any of the hypothesized relationships in question to become reciprocal because it would require the individual to take time to elaborate on what their future leader self would look like in more concrete detail (Day et al., 2009; Strauss et al., 2012). Thus, I choose one month as a reasonable approximation for the *minimum* length of time that would be needed for reciprocal effects in the hypothesized model to fully emerge. This estimation is also consistent with leadership time-lag theory. Fischer and colleagues (2017) note that “a relatively long time lag (e.g., 3 to 12 months)” is appropriate for longitudinal research that investigates multi-level processes within organizations. As my hypothesized model investigates individual change

only, it will take less time for effects to emerge. Hence, using time lags that were shorter than three months in Study 3 appeared reasonable.

In the following sections, I report the results from cross-lagged analysis in both Study 2 and Study 3 that enabled my current paper to test the causal directions proposed in Hypothesis 1 and Hypothesis 2. To further test the full hypothesized longitudinal model including affective motivation to lead predicting proactive leadership behaviour (Hypothesis 3), I conducted a time-lagged analysis in Study 3.

Study 2

Method

Procedure and Participants

Employees from a multinational manufacturing company in the United Kingdom (UK) were recruited to participate in my study. Surveys were administered manually in paper-and-pen format during the company's annual employee well-being day offsite. Participants created their own anonymous code so that Time 1 and Time 2 survey responses could be matched. The results were collected at two separate time points that were over a year apart: August 2018 (Time 1) to November and December 2019 (Time 2). From the original total population sample of 332 participants, I removed those participants who failed two of three outlier checks (Mahalanobis distance, Cook's distance, leverage value) ($N = 15$), who failed the attention checks questions ($N = 29$), and if the standard deviation of their answers were frequently zero on all items of neighbouring scales ($N = 11$). Of the remaining 323 participants who had completed both surveys (Time 1 and Time 2), the results of 186 participants were matched up across Time 1 and Time 2, giving my study a final sample of 186 participants (response rate: 57.58%). In this final sample, the mean age of participants was 39 years and 2 months ($SD = 15.46$) and the average tenure with the company was 12 years ($SD = 10.51$). Participants had a range of different job occupations within the company, the majority of which were dayworkers

(23.7%) and shift workers (53.2%), and a minority worked in management positions that included executives (3.2%), departmental supervisors (13.4%), departmental managers (2.7%) and senior managers (2.7%), whilst the remaining participants (1.1%) were undeclared. Almost all of the participants were male (98.4%).

Measures

All measures were self-reported by the participants and unless stated otherwise, items were rated by participants on a 7-point Likert scale (1 = *Strongly disagree*, 7 = *Strongly agree*). Measures were repeated for Time 1 (T1) and Time 2 (T2), unless otherwise noted.

Salience of Future Leader Self

Salience of future leader self was measured by asking participants to respond to a revised 5-item measure of the Strauss and colleagues' (2012) salience of future work selves scale. These items asked the individual to consider how they would see themselves as a leader in the future (T1, $\alpha = .95$; T2, $\alpha = .95$). An example of an item was "I am very clear about who and what I want to become as a leader in my future work."

Leader Identity

Hiller's (2005) scale was used to measure leader identity (T1, $\alpha = .94$; T2, $\alpha = .96$). The original scale in total has 12-items, with four identical items that are repeated across three different subscales (descriptiveness, importance, certainty). I used the descriptiveness and importance subscales.¹ These two subscales included identical items and so were answered under two different stems "How descriptive is each statement of you?" for the descriptive subscale, and "How important to you is this view?" for the importance subscale. Each item was rated by participants on a 7-point Likert scale (1 = *Not at all important*, 7 = *Extremely important*). Overall, this gave us an 8-item leader identity scale.

¹ The *certainty* subscale was excluded because the wording of the subscale stem had created confusion amongst most of the participants with many interpreting the subscale to be in relation to the level of certainty they had about their original answers from the *descriptive* subscale.

Affective Motivation to Lead

The affective motivation to lead subscale from Chan and Drasgow (2001) was used (T1, $\alpha = .81$; T2, $\alpha = .81$). One item of the scale (“I am seldom reluctant to be the leader of a group”) was excluded due to persistently poor factor loadings across each measurement time point. This meant my study used an 8-item affective motivation to lead scale. An example of an item from the scale is “Most of the time, I prefer being a leader rather than a follower when working in a group.”

Control Variables

In all of the analyses conducted, I controlled for Time 1 collective self-concept and leader self-efficacy based on theoretical reasons for inclusion (Becker, 2005).

Collective self-concept represents the individual’s connection to the group which can influence the individual’s interest in influencing the group as a leader (Miscenko & Day, 2016; Lord et al., 2016).² It was measured using a 9-item ($\alpha = .81$) collective self-concept subscale of the revised levels of self-concept scale (Hall et al., 2021; Selenta & Lord, 2005). An example of an item from the scale was “I feel great pride when my team or work group does well, even if I’m not the main reason for its success.”

Leader self-efficacy gauges participants’ confidence in their ability to lead others effectively (Guillén et al., 2015). A reduced, 5-item ($\alpha = .94$) leader self-efficacy scale was used to measure leader self-efficacy that was comprised of the Hardy and colleagues’ (2010) scale items that had the highest factor loadings. The scale included the stem “Compared to the most confident leader you know, how would you rate your confidence in your ability to...”, for participants to respond to items such as to “Adapt to different leadership situations and be successful.”

² In Study 1 of my thesis, collective self-concept was shown to be a moderator between future leader self salience and leader identity at all three levels (‘low’, ‘medium’, ‘high’) and so for the purposes of Study 2 and Study 3 which investigate a broader leadership self-regulation model, collective self-concept was included only as a control variable.

Method of Analysis

Due to sample size limitations, the item parcelling approach was followed in order to ensure that the hypothesized model could include all of the relevant theoretical constructs as well as key control variables that had large numbers of items (Eby et al., 2015; Mathieu & Farr, 1991). In addition, the study was conducted over two time points which meant that the overall model would be difficult to estimate at item-level correctly even if my study's sample sizes had been larger. Item parcelling represents a partial disaggregation approach to testing structural equation models. It reduces specific variances of items in a way that maintains the true representation of the measurement construct (Eby et al., 2015). Parcels that hold similar items to one another are less likely to obscure the structure of the variable in question (Little et al., 2013). With this in mind, parcels of items were made for each variable based on correlation scores and factor analysis so as not to bias the parameters that are being estimated (Little et al., 2013; Landis et al., 2000; Hall et al., 1999).

Results

The descriptive statistics and correlations among study variables at both time periods are presented in Table 1.

Measurement Invariance

I tested measurement and structural models using Mplus 8.2 (Muthén & Muthén, 2018), using a Maximum Likelihood Estimator to estimate model parameters. All models that were tested included: future leader self salience, leader identity, affective motivation to lead, collective self-concept, and leader self-efficacy. I tested for measurement invariance through two models; a *configural invariance* model in which the specified factor structure was the same across both time points and a *metric invariance* model in which factor loadings were constrained to be equal over time to determine whether the items and respective latent variables are consistent across time points. My study's configural invariance model results

were, $\chi^2(70) = 134.72$, $p < 0.001$, CFI = 0.973, RMSEA = 0.071, SRMR = 0.036. The study's metric invariance model results were as follows, $\chi^2(73) = 135.18$, $p < 0.001$, CFI = 0.974, RMSEA = 0.068, SRMR = 0.036. Overall, the non-significant difference between the two models, $\Delta\chi^2 = 0.046$, $\Delta df = 3$, $p = ns$, provides support for the consistency of the model over time. Following the process for conducting cross-lagged analysis outlined by Farrell (1994) as well as Zapf and colleagues (1996), my study then proceeded to test a range of different structural cross-lagged models in order to examine the causal directions between variables over time and to test for the possibility of reciprocal effects between variables in the model.

Table 1

Study 2 Descriptive Statistics and Correlations Between Major Study Variables at Time 1, Time 2

Variable	Time 1			Time 2			1	2	3	4	5
	<i>M</i>	<i>SD</i>	α	<i>M</i>	<i>SD</i>	α					
1. Future leader self salience	4.70	1.55	.95	4.31	1.81	.95	.71***	.72***	.71***	.42***	.62***
2. Leader identity	3.98	1.40	.94	3.57	1.67	.96	.66***	.66***	.77***	.40***	.56***
3. Affective motivation to lead	4.32	1.16	.81	4.16	1.22	.81	.64***	.82***	.69***	.33***	.51***
4. Collective self-concept	4.89	.84	.81	4.77	.89	.82	.38***	.42***	.34***	.54***	.41***
5. Leader self-efficacy	5.20	1.08	.94	5.05	1.22	.95	.66***	.54***	.60***	.30***	.56***

Note. ($N = 186$). Time 1 correlations are shown above the diagonal and Time 2 correlations are shown below the diagonal. Coefficients in boldface type across diagonal are test-retest correlations.

*** $p < 0.001$.

Cross-Lagged Models

In order to demonstrate the likely direction of cause and effect between variables, autoregression effects are included so that each T1 variable is proposed to directly influence itself at T2. This means that the effects of constant third variables can be ruled out as having a

possible causal effect; thus, saving the need for instrumental variables (Lian et al., 2014). My study was focused on testing the hypothesized relationship between variables simultaneously as part of a mediation model with the other variables in question so as to advance our understanding of leadership self-regulation over time. There was not an experimental intervention used and so I did not expect to find statistically significant increases in the same variable from Time 1 to Time 2 (autoregression effects). My study included testing of the relationship between future leader self salience and affective motivation to lead in all of the models of this study to check that the theoretically proposed order of the hypothesized variables in the model was accurate. My study also controlled for the effects of leader self-efficacy and collective self-concept.

First, my study tested a full cross-lagged model that acts as a saturated model in which all effects from T1 variables to all T2 variables were tested with the aim of uncovering whether there are reciprocal effects (Model 1). Second, my study tested the hypothesized model which specified time-lagged effects of the hypothesized causal order (i.e., future leader self salience at T1 was expected to predict leader identity at T2, and leader identity at T1 was expected to predict affective motivation to lead at T2). This model also included autoregression and synchronous correlations (Model 2). The following nested model was more restricted and tested the specified time-lagged effects of the reverse hypothesized causal order (i.e., leader identity at T1 predicting future leader self salience at T2, and affective motivation to lead at T1 predicting leader identity at T2) and also included synchronous correlations and autoregression effects (Model 3). The next nested model was similar to Model 1 but excluded synchronous correlations and included cross-lagged effects (Model 4). The final nested model included synchronous effects among variables at both T1 and T2 and excluded cross-lagged effects (Model 5). Finally, a null model with no specified relationships with variables was tested (Model 6). Table 2 provides a summary of the results of each of these models.

Table 2

Study 2 Nested Model Comparisons for the Cross-Lagged Model of Reciprocal Effects Among Salient Future Leader Self, Leader Identity, and Affective Motivation to Lead

Model	χ^2 ($N = 186$)	df	χ^2/df	$\Delta \chi^2$ ^a	Δdf	CFI	RMSEA	SRMR
Model 1	135.18***	73	1.85			0.974	0.068	0.036
Model 2	139.88***	76	1.84	4.70	3	0.974	0.067	0.037
Model 3	140.00***	76	1.84	4.82	3	0.973	0.067	0.037
Model 4	135.18***	73	1.85	0	0	0.974	0.068	0.036
Model 5	145.16***	79	1.84	9.98	6	0.973	0.067	0.039
Model 6	342.49***	82	4.18	207.31***	9	0.892	0.131	0.270

Note. Model 1 = fully cross-lagged model with all reciprocal effects and synchronous correlations included

(saturated model); Model 2 = only cross-lagged effects of the original partially mediated causal order (e.g. future leader self salience at Time 1 to leader identity at Time 2 and leader identity at Time 1 to affective motivation to lead at Time 2); Model 3 = only cross-lagged effects of the reverse partially mediated causal order (e.g. leader identity at Time 1 to salient future leader self at Time 2 and affective motivation to lead at Time 1 to Leader Identity at Time 2); Model 4 = only cross-lagged reciprocal effects (no synchronous correlations); Model 5 = only synchronous effects among each of the three variables at each time point (no cross-lagged effects); Model 6 = null model; CFI = comparative fit index; RMSEA = root-mean-square error of the approximation; SRMR = standardized root mean squared residual.

^a All alternative models are compared to the saturated model (Model 1).

*** $p < 0.001$.

Table 2 illustrates how the hypothesized model (Model 2) provided a good fit to the data, $\chi^2(76) = 139.88$, $p < 0.001$, CFI = 0.975, RMSEA = 0.067, SRMR = 0.037. This model has a comparative fit to other possible models, its chi-square ratio ($\chi^2/df = 1.84$) was nearly identical to that found in other comparative models (Model 1: $\chi^2/df = 1.85$), and it had a non-significant chi-square difference, $\Delta\chi^2(3) = 4.70$, $p = ns$, from the saturated model (Model 1). Confidence in the plausibility of Model 2 is further strengthened by how the results in the full cross-lagged model (Model 1) were not reciprocal in that future leader self salience at T1 did predict leader identity at T2 but not vice-versa. The results of Model 2 which represented the

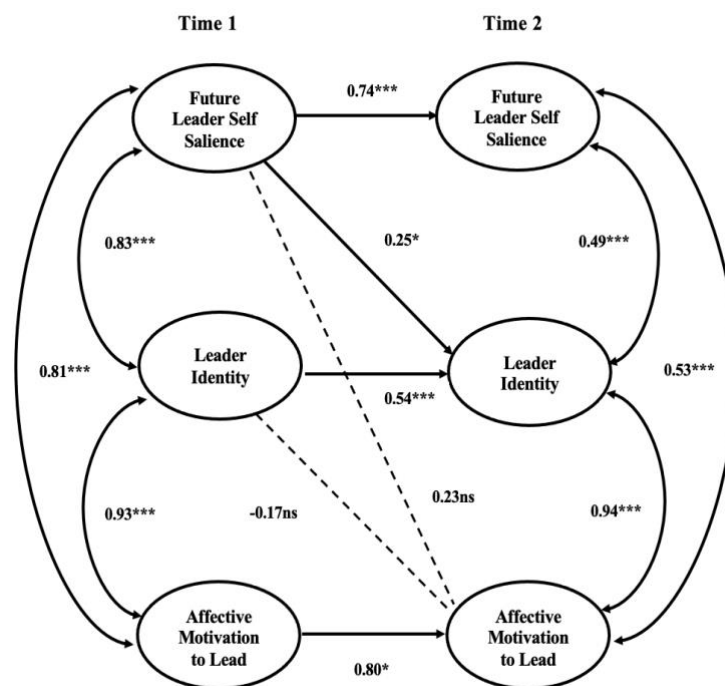
hypothesized causal order of variables showed a significant path from salient future leader at T1 to leader identity at T2 ($\beta = 0.25$, $SE = 0.11$, $p < 0.05$, 95% CI [0.03, 0.47]), providing support for Hypothesis 1. However, the results did not show leader identity at T1 predicting affective motivation to lead at T2 ($\beta = -0.17$, $SE = 0.36$, $p > 0.05$, 95% CI [-0.88, 0.54]), and so Hypothesis 2 was not supported. Future leader self salience at T1 also did not significantly predict affective motivation to lead at T2 ($\beta = 0.23$, $SE = 0.12$, $p > 0.05$, 95% CI [-0.02, 0.47]).

Figure 2 summarizes the maximum-likelihood standardized path estimates for Model 2.

Overall, results of Study 2 provided initial support for hypothesized direction of effects in Hypothesis 1, but not for Hypothesis 2.

Figure 2

Model 2 Hypothesized Model of the Causal Direction of Variables for Study 2



Note. Hypothesized paths that are non-significant are shown as dotted lines. For simplicity, the effects of control variables are not presented in the figure.

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$. ns = not statistically significant.

Discussion

While Study 2 showed a relationship between future leader self salience and leader identity, it was only conducted across two time points, a consequence of the practical constraints that frequently arise in collecting longitudinal data from organizations. In addition, the sample was from a manufacturing context and was predominantly male. With this limitation in mind, I conducted another study that included three time points of measurement and involved a more diverse sample of participants who were employed in a range of different industries across the UK and held a more balanced split between male and female participants. This enabled the research to gain further insights into the causal direction of the hypothesized variables; particularly the relationship between leader identity and affective motivation to lead over time. Conducting two studies on the same theoretical model also helps in evaluating the consistency of the empirical results (Kuiper & Ryan, 2020).

Study 3

In Study 3, I tested all three of my hypotheses, including the direct relationship between future leader self salience and leader identity (Hypothesis 1), the mediation to affective motivation to lead (Hypothesis 2), and the serial mediation to proactive leadership behaviour (Hypothesis 3).

Method

Procedure and Participants

Responses in Study 3 were collected from participants at three time points with a minimum interval of one month between completing each questionnaire. Responses were collected online through the panel service company, Respondi. I established high standards for data quality that included two attention checks (Porter et al., 2019), that were carefully applied

in each of the three measurement waves.³ Participants who failed any one of these tests at any of the three measurement waves were excluded from the three-wave data sample entirely: Time 1 ($N = 858$), Time 2 ($N = 509$) and at Time 3 ($N = 265$). As I only analysed the data of participants who had completed all three waves successfully, my current study obtained a final sample of ($N = 265$). All of the participants were in full-time employment in organizations and 55.8% of the final sample were female and 44.2% were male. The mean age of the final sample at Time 1 was 44 years, 10 months ($SD = 10.25$). The average amount of leadership experience at Time 1 was 8 years, 3 months ($SD = 9$).

Measures

All measures were self-reported by the participants and unless stated otherwise, items were measured in the exact same way as in Study 2. All repeated measures used identical measures across the three measurement time points, apart from proactive leader behaviour (T3 only) and control variables (T1 only). As in Study 2, unless stated otherwise, items were rated by participants on a 7-point Likert scale (1 = *Strongly disagree*, 7 = *Strongly agree*).

Salience of Future Leader Self

As in Study 2, future leader self salience was measured by asking participants to respond to a 5-item future leader self salience scale that was revised from Strauss and colleagues' (2012) salient future work selves scale (T1, $\alpha = .97$; T2, $\alpha = .96$, T3, $\alpha = .98$).

Leader Identity

Leader identity was measured using a 6-item scale that combined the four core descriptiveness items of Hiller's (2005) scale with two items from the Rus and colleagues' (2010) leader self-definition scale (T1, $\alpha = .95$; T2, $\alpha = .96$, T3, $\alpha = .96$). An example item of the scale is "If I had to describe myself to others, I would include the word 'leader.'" All 6-

³ "In this survey I am answering all items without reading them." and "I am not reading the survey questions carefully." Participants who gave a 'relatively high' response or above were deleted from the study entirely.

items of the scale were rated by participants on a 7-point Likert scale (1 = *Not at all descriptive*, 7 = *Extremely descriptive*).

Affective Motivation to Lead

As in Study 2, the 8-item version of Chan and Drasgow's (2001) subscale was used to measure affective motivation to lead (T1, $\alpha = .94$; T2, $\alpha = .95$, T3, $\alpha = .95$).

Proactive Leadership Behaviour

Proactive leadership behaviour was measured using a revised worded of 13-item proactive career behaviour scale used by Strauss and colleagues (2012) into a proactive leadership behaviour scale (T3, $\alpha = .98$) (Bachman et al., 1978; Penley & Gould, 1981). The re-worded scale included items that measured four types of proactive leadership behaviour: proactive leadership skill development, networking in leadership, leader development consultation, and leader development planning. An example of an item from the scale is "I seek advice from my supervisor(s) or colleagues about additional training or experience I need in order to improve myself as a leader." Each item was rated by participants on a 5-point Likert scale (1 = *Strongly disagree*, 5 = *Strongly agree*).

Control Variables

The same control variables in Study 2, collective self-concept ($\alpha = .86$) and leader self-efficacy ($\alpha = .93$), were used for the cross-lagged analysis in Study 3. In the time-lagged analysis in Study 3, Hypothesis 3 was investigated and so the model included proactive leadership behaviour. As a consequence, I included proactive personality, future-orientation, leadership experience, and leader role-modelling as control variables in addition to collective self-concept and leader self-efficacy.

Individuals that have a more proactive personality tend to feel more motivated towards persistently pursuing the new future because they believe that their actions influence important outcomes in their life (Seibert et al., 1999). Proactive personality was measured using an

abridged 5-item version of the proactive personality scale ($\alpha = .86$) developed by Bateman and Crant (1993). An example of an item from the scale was “If I believe in an idea, no obstacle will prevent me from making it happen.”

Individuals who are future orientated find it easier to project into the future and envision a future leader self (Stratham et al., 1994). Future orientation was measured using an abbreviated 6-item version ($\alpha = .78$) of the consideration of future consequences scale (Strathman et al., 1994; Joireman et al., 2008). The items selected were those that had the highest factor loadings in a previous study in which the scale was used. An example of an item from the scale was “Often, I engage in a particular behaviour in order to achieve outcomes that may not result for many years.” All items were rated by participants on a 7-point Likert scale (1 = *Extremely uncharacteristic*, 7 = *Extremely characteristic*).

Leader role modelling provides a source of insight and knowledge about how to lead in a specific social context that the individual operates in (Brown & Treviño, 2014; Gibson, 2004; Bandura, 1977). To measure the strength of leader role modelling that participants felt they had in their work context, my current study revised the three items in the leader ethical role modelling scale developed by Ogunfowora (2013) and asked participants about their leadership role models in their social context ($\alpha = .87$). An example of an item included “When faced with a dilemma at work, I usually follow the examples of what my supervisor did in the past.”

Leadership experience was measured by asking how much experience the participant had in formal leadership roles over their entire career (in years).

Results

The means, standard deviations, reliabilities, and correlations of the study variables at each of the three time points are reported in Table 3.

Table 3*Study 3 Descriptive Statistics and Correlations Between Major Study Variables at Time 1, Time 2, and Time 3*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11	12	13
Future leader self salience															
1. Time 1	4.41	1.75	(.97)												
2. Time 2	4.50	1.71	.79***	(.96)											
3. Time 3	4.39	1.78	.81***	.82***	(.98)										
Leader identity															
4. Time 1	3.89	1.75	.85***	.73***	.76***	(.95)									
5. Time 2	3.82	1.71	.74***	.86***	.77***	.79***	(.96)								
6. Time 3	3.74	1.75	.75***	.77***	.84***	.81***	.87***	(.96)							
Affective motivation to lead															
7. Time 1	4.15	1.49	.83***	.74***	.76***	.86***	.79***	.80***	(.94)						
8. Time 2	4.17	1.56	.73***	.80***	.76***	.75***	.87***	.82***	.87***	(.95)					
9. Time 3	4.04	1.57	.73***	.76***	.80***	.75***	.82***	.88***	.87***	.91***	(.95)				
Leader self-efficacy															
10. Time 1	4.73	1.26	.69***	.67***	.67***	.66***	.65***	.60***	.68***	.65***	.63***	(.93)			
11. Time 2	4.70	1.28	.60***	.73***	.67***	.60***	.68***	.60***	.63***	.69***	.64***	.77***	(.94)		
12. Time 3	4.69	1.30	.59***	.67***	.67***	.59***	.69***	.68***	.65***	.73***	.73***	.75***	.77***	(.94)	
Proactive leadership behaviour															
13. Time 3	2.95	1.18	.72**	.76***	.82***	.71***	.74***	.80***	.70***	.73***	.77***	.60***	.59***	.64***	(.98)

Measurement Invariance

The study tested measurement and structural models using a Maximum Likelihood Estimator. The configural invariance model for this cross-lagged analysis fit the data reasonably well, $\chi^2(136) = 211.50$, $p < 0.001$, CFI = 0.99, SRMR = 0.022, RMSEA = 0.046. The metric invariance results were, $\chi^2(142) = 216.60$, $p < 0.001$, CFI = 0.99, SRMR = 0.025, RMSEA = 0.045. Overall, there was no significant difference between the two models, $\Delta\chi^2 = 5.10$, $\Delta df = 6$, $p = ns$, which provides support for the consistency of the model over time. The reasonable fit to the data of the measurement model allowed my study to proceed to testing a series of structural cross-lagged models that ranged from a fully saturated model to more constrained models.

Cross-Lagged Models

To examine the causal claims within the hypothesized model, my study investigated the relationships between future leader self salience, leader identity, and affective motivation to lead over the three measurement time points via cross-lagged analysis. My study is focused on testing the relationship between variables as part of a serial-mediation model as a whole simultaneously with the other variables in question. As in Study 2, there was not an experimental intervention and so I did not expect to find statistically significant increases in the same variable over time. The first model tested represented the fully saturated cross-lagged model that included all cross-lagged effects for future leader self salience and leader identity and for leader identity and affective motivation to lead across the three time points (Model 1). I then tested the more restricted models. The first of these more restricted models tested only the hypothesized order of effect; that is, that T1 salient future leader self would predict leader identity at T2 but not vice-versa and that leader identity at T2 would predict affective motivation to lead at T3 but not vice-versa (Model 2). This was done by including all synchronous correlations and autoregression effects in the model. The next restricted model

represented the specified time-lagged effects in the reverse hypothesized order which included synchronous correlations and autoregression effects (Model 3). The next restricted model tested the cross-lagged effects of Model 1, but without the synchronous effects among variables (Model 4). The final restricted model tested only synchronous effects among variables at each of the three time points but did not have any cross-lagged effects (Model 5). The last model was a null model (Model 6). Table 4 summarizes the results for all models.

Table 4

Study 3 Nested Model Comparisons for the Three-Wave Cross-Lagged Model of Reciprocal Effects Among Salient Future Leader Self, Leader Identity, and Affective Motivation to Lead

Model	χ^2 (<i>N</i> = 265)	<i>df</i>	χ^2/df	$\Delta \chi^2$ ^a	Δdf	CFI	RMSEA	SRMR
Model 1	405.65 ***	169	2.40			0.971	0.073	0.051
Model 2	436.45***	172	2.54	30.80***	3	0.968	0.076	0.064
Model 3	416.59***	172	2.42	10.94*	3	0.970	0.073	0.052
Model 4	600.53***	171	3.51	194.88***	2	0.948	0.097	0.058
Model 5	453.99***	176	2.58	48.34***	7	0.966	0.077	0.070
Model 6	1600.25***	182	8.79	1194.60***	13	0.866	0.171	0.478

Note. Model 1 = fully cross-lagged model with all reciprocal effects and synchronous correlations included

(saturated model); Model 2 = only cross-lagged effects of the original hypothesized causal order (e.g., future leader self salience at Time 1 to leader identity at Time 2 and leader identity at Time 2 to affective motivation to lead at Time 3); Model 3 = only cross-lagged effects of the reverse hypothesized causal order (e.g., leader identity at Time 1 to salient future leader self at Time 2 and affective motivation to lead at Time 2 to Leader Identity at Time 3); Model 4 = only cross-lagged reciprocal effects (no synchronous correlations); Model 5 = only synchronous effects among each of the three variables at each time point (no cross-lagged effects); Model 6 = null model; CFI = comparative fit index; RMSEA = root-mean-square error of the approximation; SRMR = standardized root mean squared residual.

^a All alternative models are compared to the saturated model (Model 1).

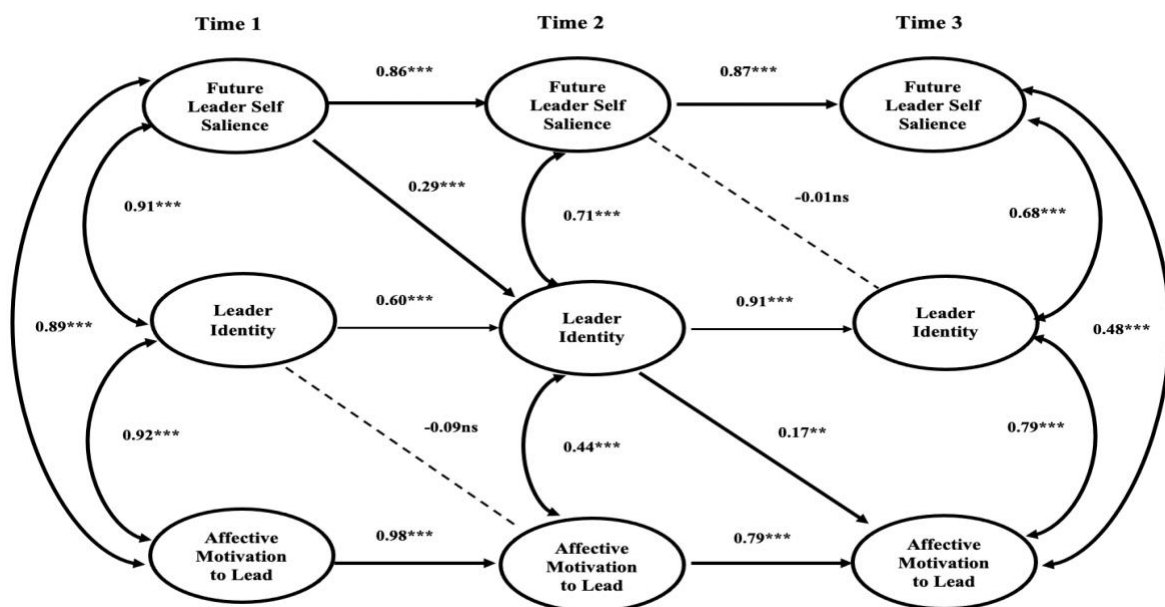
*** $p < 0.001$.

Table 4 indicates that the hypothesized model (Model 2) fits the data well, $\chi^2(172) = 436.45$, $p < 0.001$, CFI = 0.968, SRMR = 0.064, RMSEA = 0.076. The fit was comparable to

other models nested within the analysis. Although the hypothesized model had a significant chi-square difference, $\Delta\chi^2(3) = 30.80, p < 0.001$ from the saturated model (Model 1), confidence in the plausibility of the hypothesized model was strengthened by the fact that in the saturated model (Model 1) no support was provided for the effects specifying a reversed causal order. The only exception was one significant path from T2 leader identity to T3 future leader self salience ($\beta = 0.41, SE = 0.13, p < 0.01, 95\% CI [0.15, 0.66]$). Figure 3 presents the results of the hypothesized model (Model 2). As can be seen in Figure 3, future leader self salience at T1 predicted leader identity at T2 ($\beta = 0.29, SE = 0.08, p < 0.001, 95\% CI [0.134, 0.455]$), supporting Hypothesis 1. Hypothesis 2 was also supported with leader identity at T2 predicted affective motivation to lead at T3, ($\beta = 0.17, SE = 0.06, p < 0.01, 95\% CI [0.049, 0.282]$).

Figure 3

Model 2 Hypothesized Model of the Causal Direction of Variables for Study 3



Note. Non-significant paths have been graphically presented with a dotted line. For simplicity, the effects of control variables are not presented in the figure.

** $p < 0.01$. *** $p < 0.001$. ns = not statistically significant.

Time-Lagged Analysis

Due to the fact that the proactive leadership behaviour variable was only measured at T3, it was not possible to include it in the cross-lagged analysis. Thus, supplementary time-lagged analysis was used to test the full hypothesized serial-mediation model presented in Figure 1. In this analysis, the hypothesized model included future leader self salience at T1 predicting leader identity at T2 and leader identity at T2 predicting affective motivation to lead at T3, and affective motivation to lead at T3 predicting proactive leadership behaviour at T3 (Model 1).

Four nested models were tested and compared to this hypothesized model (Model 1). In the first nested model, the direct path from future leader self salience to proactive leader behaviour was left unconstrained (Model 2). The second nested model also had the direct path from leader identity to leader proactive behaviour left unconstrained (Model 3). A fourth model was tested that specified all of the possible direct effects to leader proactive behaviour and thus represented the saturated model (Model 4). The final nested model represented the null model (Model 5). Table 5 summarizes the results for all models.

Table 5 demonstrates that the hypothesized Model 1 had a good fit to the data, $\chi^2(159) = 341.39, p < 0.001$, CFI = 0.962, RMSEA = 0.066, SRMR = 0.051. It provided a comparable fit to other less restricted nested models (Model 2, Model 3, and Model 4). However, its significant chi-square difference from the partially mediated model (Model 2), indicates that it may not be the most parsimonious model. Maximum-likelihood path estimates for the hypothesized model (Model 1) are presented in Figure 4 which indicates that future leader self salience at T1 was positively related to leader identity at T2 ($\beta = 0.59, SE = 0.06, p < 0.001$, 95% CI [0.476, 0.707]) and that the relationship between leader identity at T2 and affective motivation to lead at T3 was positive and significant ($\beta = 0.76, SE = 0.05, p < 0.001$, 95% CI [0.659, 0.864]). In addition, the overall indirect effect of Model 1 was significant ($\beta = 0.20, SE$

= 0.03, $p < 0.001$, 95% CI [0.137, 0.266]). In the partially mediated Model 2, the indirect effect was still significant ($\beta = 0.16$, $SE = 0.03$, $p < 0.001$, 95% CI [0.105, 0.220]) but the overall total effect that included the direct effect was also significant ($\beta = 0.34$, $SE = 0.05$, $p < 0.001$, 95% CI [0.248, 0.436]). Overall, results from the time-lagged analysis provided support for Hypothesis 3 that proposed that the positive relationship between a salient future leader self and proactive leadership behaviour is sequentially mediated by leader identity and affective motivation to lead.

Table 5

Study 3 Nested Model Comparisons for the Supplementary Time-Lagged Analysis

Model	χ^2 ($N = 265$)	df	χ^2/df	$\Delta \chi^2$ ^a	Δdf	CFI	RMSEA	SRMR
Hypothesized model								
Model 1	341.39***	159	2.15			0.962	0.066	0.051
Alternative models								
Model 2	327.00***	158	2.01	14.39***	1	0.965	0.064	0.048
Model 3	324.84***	157	2.07	16.55***	2	0.965	0.064	0.048
Model 4	314.83***	156	2.02	26.56***	3	0.967	0.062	0.048
Model 5	1308.07***	173	7.56	966.68***	14	0.763	0.157	0.358

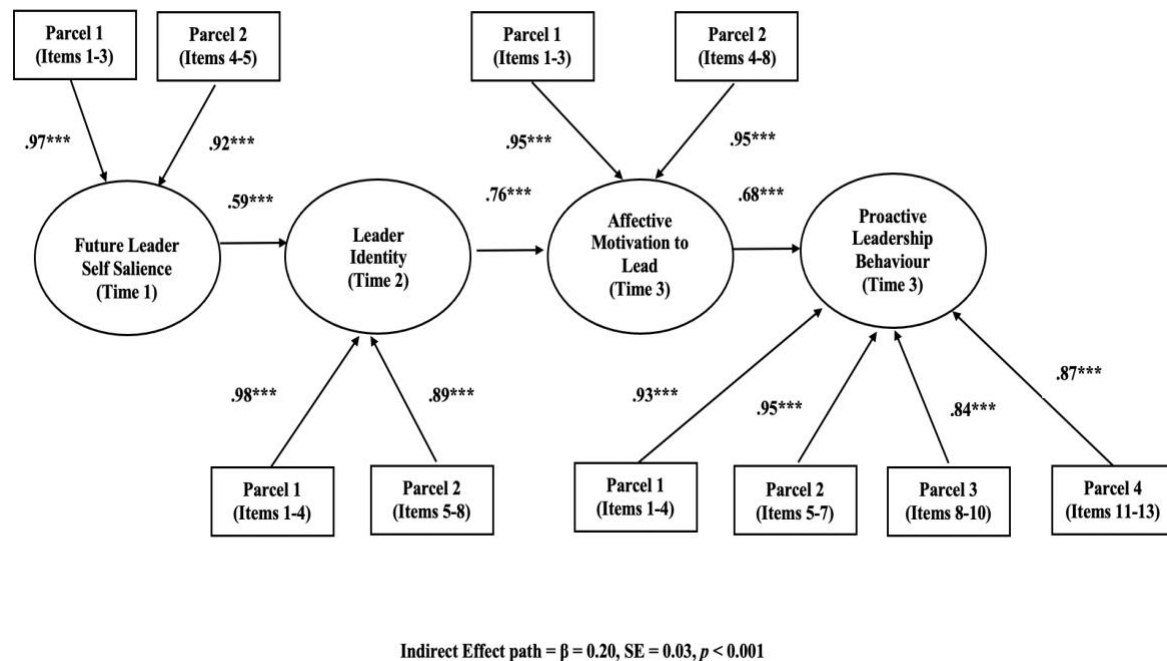
Note. Model 1 = hypothesized model (fully mediated model); Model 2 = partially mediated model; Model 3 = path from leader identity and leader proactive behaviour is left unconstrained; Model 4 = fully saturated model in which a further path, future leader self salience to affective motivation to lead is left unconstrained; Model 5 = null model; CFI = comparative fit index; SRMR = standardized root-mean-square residual; RMSEA = root-mean-square error of approximation.

^a All alternative models are compared to the hypothesized model (Model 1).

*** $p < 0.001$.

Figure 4

Maximum-Likelihood Parameter Estimates for the Hypothesized Serial Mediation Model for Study 3



Note. *** $p < 0.001$.

Discussion

Findings from the cross-lagged analysis in Study 3 provided support for the theoretically proposed causal direction of effects between future leader self salience and leader identity as well as between leader identity and affective motivation to lead. Furthermore, the time-lagged analysis that was conducted as a way of testing the full hypothesized model, supported a serial mediation from future leader self to proactive leadership behaviour via leader identity and motivation to lead.

General Discussion

My current paper examines how individuals can find answers to the *why* question of becoming a leader through envisioning their own self-determined future leader self (Markus & Nurius, 1986; Strauss et al., 2012). Findings from my two studies provide initial support for

each of the three hypothesized relationships and advance our knowledge of how the leadership self-regulatory process emerges over time. Most importantly, my findings from the cross-lagged analysis in both Study 2 and Study 3 indicate that future leader self salience strengthens leader identity, and that this relationship is not reciprocal. This suggests that the process for leadership self-regulation is likely to begin with future possible self cognition in relation to becoming a leader. Indeed, developing a deeper purpose for identifying as a leader *now*, as well as in the *future*, is likely important to ensuring that the individual remains willing to enact the leader identity consistently over time in spite of the projected daily costs that could be incurred from doing so (Lanaj et al., 2021). Findings from Study 3 also suggested that leader identity has a unidirectional causal relationship to affective motivation to lead. Thus, a self-determined identity as a leader is likely to be expressed by the individual through feelings of intrinsic motivated to lead (Guillén, et al., 2015; Kark & Van Dijk, 2007; Lord & Hall, 2005). Findings from the supplementary time-lagged analysis in Study 3 also showed that there was a positive relationship between affective motivation to lead and proactive leadership behaviour, likely because individuals felt encouraged to enact leader-identity congruent behaviours that moved them closer towards their desired future as a leader (Parker et al., 2010).

Theoretical Implications

Many impediments prevent individuals from stepping up to lead. Research suggests that individuals who face poverty and low socio-economic circumstances hold lower self-belief in the possibility of accessing higher-status roles such as professions and leadership positions (Barling & Weatherhead, 2016). Meanwhile, stereotype threats can confront many prospective female leaders in social settings (Elprana et al., 2015; Davies et al., 2005; Eagly & Karau, 1991; Morrison & Von Glinow, 1990). My conceptualization of a salient future leader self represents an attempt to provide a cognitive mechanism that can encourage individuals to explore the possibility of becoming a leader on their own terms, even if it is placed in the

future rather than as an immediately attainable goal in the present, and to begin to identify as a leader.

Second, my work has significant theoretical implications for research on motivation to lead. Chan and Drasgow's (2001) motivation to lead theory suggests that stable constructs such as personality traits (Erez & Judge, 2001; Sackett et al., 1998), and cognitive ability (Lord et al., 1986), as well as leadership self-efficacy can all significantly influence motivation to lead. My current paper found support for its theoretical claim that leader identity mediates the positive relationship between a salient future leader self that establishes a self-determined goal of becoming a leader in the future and affective motivation to lead. Hence, as the individual identifies more as a leader, they also become more likely to uphold the perceived standards of the self-definition that they have created (Kark & Van Dijk, 2007). This desire to lead is expressed through affective motivation to lead and is ultimately channelled through one's behaviour in social situations (Guillén et al., 2015; Deci & Ryan, 1985). As a consequence, results suggest that affective motivation to lead is far from a pre-determined outcome of stable self-attributes, but instead, is a response capable of being evoked through closer, more personal identification with becoming a leader.

Thirdly, by drawing upon self-regulation theory (Carver & Scheier, 1998), my current paper provides important insights into the time frame in which the leadership self-regulation process takes place through conducting two studies that each had different time frames and sample groups (Bono & McNamara, 2011; Grant & Berry, 2011). In both Study 2 (one year time lag) and Study 3 (monthly time lags), there was consistent support for the hypothesized positive relationship between future leader self salience and leader identity. The hypothesized relationship between leader identity and affective motivation to lead was supported in the shorter time frame of Study 3 but not in Study 2 in which there was a year apart from the two measurement time points. This could potentially mean that the motivational component of the

overall hypothesized model (affective motivation to lead) is more likely to vary based on more proximate feelings of identification with being a leader that change at a given moment in time and/or situation (Epitropaki et al., 2017). The downside of this is that affective motivation to lead could potentially fade over time unless one's leader identity is continually reaffirmed (Badura et al., 2020; Anseel et al., 2017; Waldman et al., 2012). The individual will need to feel that they are making sufficient progress in moving closer towards their future leader self at a satisfactory velocity rate (Johnson et al., 2006; Elicker et al., 2010; Lawrence et al., 2002). A natural extension of my research would be for future studies to investigate how affective motivation to lead can be sustained over a longer period of time (Fischer et al., 2017).

Finally, my current paper was able to draw upon the wisdom and knowledge of broader research on work goals and proactivity (Strauss et al., 2012) and apply this into the leadership domain. Supplementary analysis provided initial support for the proposition that individuals who become intrinsically motivated to lead will seek to enact proactive leadership behaviours that can involve actions taken in pursuit of a future-desired outcome in an attempt to reduce the perceived discrepancy they feel between their current leader self and the self-determined goal of a future leader self (Carver & Scheier, 1998; Deci & Ryan, 2000; Latham & Locke, 1991). This aligns closely with past research which also suggests that proactive behavioural responses are often the result of individuals pursuing a self-relevant goal for their future (Strauss et al., 2012; Parker et al., 2006; Parker et al., 2010). However, findings on this particular relationship were captured at the same point in time (T3 in Study 3) and so definitive causal claims cannot be made. Further empirical studies on the overall hypothesized model across four time points would provide closer investigation into whether the relationship between affective motivation to lead and proactive leadership behaviour becomes reciprocal.

Practical Implications

Findings from my current paper suggest that the present leadership shortages organizations face is far from a future inevitability. My research provides useful insights for both prospective leaders who are considering their future as leaders and for organizations that are looking to encourage more employees to begin to identify as leaders within their teams (McCauley & Palus, in press). For prospective leaders, self-evaluations about oneself as a leader are often based on implicit leadership theories of what traits and abilities the individual believes a leader ought to have which are then compared to one's own traits and abilities as a way of determining whether one is capable of leading others (Epitropaki & Martin, 2004). In addition, self-reflections about leading others can become distorted when the individual recalls negative prior leadership experiences and persistent limiting self-beliefs they have about their current suitability to match a perceived prototype of an effective leader (Day & Sin, 2011; DeShon & Gillespie, 2005). Unfortunately, for many individuals, thoughts about the self as a leader subsequently end here.

The future leader self takes an alternative approach to how we think about the self in relation to leadership; encouraging the individual to view becoming a leader as more of a long-term goal one can work towards for the future. In doing so, the individual begins to construe a gap in time between where they see themselves now as a leader and where they would likely to be as a leader in the future (Higgins, 1987; Strauss & Parker, 2018). Through interpreting one's identity as a leader as flexible across time, the individual gains a greater perceived degree of control over how they come to define themselves and can begin to strategize and plan for a future as a leader that they actually want to work towards (Johnson et al., 2006; Austin & Vancouver, 1996); this then motivates the individual to engage further in pursuit of leadership roles and opportunities (Strauss et al., 2012). A positive side effect of this is that the possibility of leadership is opened up to a more diverse range of individuals; beyond the

typical leader prototype (Ritter & Lord, 2007) and irrespective of the individual's current leadership position or past leadership experiences (Epitropaki, 2018).

However, in order for one's future leader self to become a reality, the individual must hold themselves accountable to its standards and take action (Strauss & Parker, 2018; Carver & Scheier, 1998). Individuals with a stronger perceived locus of control in shaping their position within social environments will assume greater responsibility for making progress towards their future leader self and remain committed over time in their pursuit (Johnson et al., 2015; Rotter, 1966). At the same time, maintaining leader proactivity and interest will also require organizations to provide employees with further opportunities at work to develop their skills as leaders, along with a supportive organizational work climate that encourages employees to explore the possibility of stepping forward to lead on their own terms (Parker et al., 2006).

Finally, it is hoped that my research encourages organizations to recognize employees' potential as leaders more expansively and with a longer-term outlook in which each individual is perceived to be capable of progressing over time as a leader in some capacity, developing inclusive and flexible norms and criteria for leadership in the context of the workplace (Eagly & Karau, 1991). Organizations can strive to develop workplaces that offer "identity-safe environments" with positive "situational cues" (Davies et al., 2005, p. 285) that make the perceived prototype for leaders more flexible and inclusive. This would encourage a wider variety of individuals to feel comfortable in enacting a provisional leader identity in the work environment (Ibarra, 1999; Deng et al., 2019). Accessible role models for future leaders (Lockwood & Kunda, 1997) and experiences at a level appropriate to the current capability of the future leader (DeRue & Wellman, 2009), would also help in ensuring individuals' focus remains firmly on strengthening their leader identity gradually over time (Day & Harrison, 2007; Leary & Tangney, 2003).

Limitations and Future Research

My current research made every possible effort to investigate its causal claims with the highest possible rigor, yet there are still some limitations that arose primarily as a result of the practical challenges of conducting longitudinal research. Firstly, whilst my research was able to gather data from employees in an organizational setting in Study 2, the final response rate in this study would have been much higher had more individuals matched their anonymous codes at each time point correctly.

Secondly, although self-regulation theory (Carver & Scheier, 1998; Parker et al., 2010) suggests that affective motivation to lead will predict proactive leadership behaviours, a fourth and final measurement time point in Study 3 would have enabled me to empirically test whether there are any reciprocal effects between affective motivation to lead and proactive leadership behaviour. It is likely that same-source method bias had some degree of influence on the relationship between affective motivation to lead and proactive leadership behaviour in my current study. Potentially, responses were partially based on previously recalled information in participants' short-term memory (Podsakoff et al., 2003; Johnson et al., 2011; Ostroff et al., 2002).

Another limitation was that proactive leadership behaviour was only measured at one time point. This meant that proactive leadership behaviour could not be included in analysis which required autoregressions. As a consequence, I cannot currently rule out the possibility of reciprocal effects between affective motivation to lead and proactive leadership behaviour. Further investigation into the nature of this relationship will be needed in future research. Although my current paper was interested in how individuals feel about their level of proactivity in leadership, future studies might also look at how proactive leadership behaviour could be measured from multiple sources in order to gain further insights into whether the

individual's self-observed leadership behaviour aligns with third-party perspectives (e.g., supervisor ratings) on that individual's proactive leadership behaviour (Strauss et al., 2012).

The future leader self represents a deliberate, self-constructed vision/long-term goal for oneself as a leader in the future that can be applied in future research on leader self-regulation (Strauss et al., 2012). It would be useful for future studies to investigate how individuals can ensure their future leader self remains a personal priority that supersedes other possible selves-regulatory goals that could become available to the individual in their given social environment (Parker et al., 2010; Lanaj et al., 2012; Johnson et al., 2006; Carver & Scheier, 1998). This might require future research to apply an experimental research design that tests whether social environments with opportunities to enact the future leader self versus non-stimulus environments impact on the level of salience of the individual's future leader self (McClean et al., 2019).

Another integral part of sustaining proactivity over time will be for the individual to feel that the proactive leadership behaviours they are enacting are effective in supporting their own progress towards their long-term self-regulatory goal; reducing the discrepancy between the current and future leader self (Carver & Scheier, 1998; Johnson et al., 2006; Parker et al., 2010; Ilies & Judge, 2005; Vroom, 1964). Having said this, time is subjective and is interpreted by each individual differently based on their expectations of how they should be progressing and the speed in which this progress is occurring (Shipp & Cole, 2015). Therefore, future research might involve the empirical measurement of perceived discrepancy reduction between current and future leader self and the velocity in which this discrepancy is being reduced (Johnson et al., 2013; Johnson et al., 2006; Carver & Scheier, 1998; Lord & Levy, 1984).

Environments that have flexible work designs and jobs that provide autonomy and enrichment will be better equipped to facilitate this self-initiated process; as will those that

have supportive work climates and colleagues (Chen & Kanfer, 2006; Kanfer et al., 2001) and leader role models that provide exemplars of how to lead in the context (Dragoni et al., 2014; Lockwood & Kunda, 1997). A key part of this supportive work climate will also include providing leader development trainings that offer participants opportunities to develop their leader identity further and potentially learn new contextually relevant leadership skills that help the individual progress towards their own future leader self (Kwok et al., in press; Middleton et al., 2019; Miscenko et al., 2017). This will involve further investigation into how organizations can support individuals in enacting proactive leadership behaviours so that the leadership self-regulation process can be accelerated, and the individual can reach their long-term goal in leadership at a faster, more effective rate.

Conclusion

Organizations and communities today face a surplus of problems and a shortage of leaders who can help solve them. Identifying as a leader is a vital part of ensuring that more individuals feel motivated to lead into the future and one day help solve these problems. Individuals who can construct future-orientated projections for themselves as a leader are able to strengthen their identity as a leader and their affective motivation to lead others. In practice, my current paper's findings open up the possibility of leadership to a wider range of people and can help ensure that organizational investments in leadership offer sustainable returns to both the organization and the individual.

Chapter 5: Training Your Self: Examining the Impact of Multidomain Leader Identity

Development Training Over Time

Abstract

Leader development is a process guided by one's identity as a leader. Yet, despite the important role of leader identity on developmental outcomes, little longitudinal work has been done to understand whether organizational trainings can be used to positively influence leader identity and identity-congruent leadership behaviours (consideration and initiating structure). There is also a lack of empirical research about the extent to which past, present, and future-oriented leader developmental readiness factors influence an individual's ability to learn from such training sessions. Drawing upon multidomain leader identity development theory, my current study develops and tests the impact of a leader identity development training program on participants' leader identity strength and leader identity prioritization among other work identities in comparison to a control group. Training activities engage participants in leader identity work related to the four fundamental elements of the multidomain leader identity development theory: meaning, strength, levels of self-concept, and integration across contexts. My current study investigates the impact of the training by conducting a longitudinal quasi-experiment across five time points on employees in the UK ($N = 71$). Through ANCOVA and latent growth curve modelling, findings suggest that leader identity prioritization and initiating structure leadership behaviours are positively influenced by the training. The theoretical implications for leader identity development, leadership behaviour, developmental readiness, and the field's conceptualization of leader identity are discussed, as are the practical implications for prospective leaders and organizations seeking to develop leaders.

Keywords: leader identity development, consideration leadership behaviours, initiating-structure leadership behaviours, developmental readiness, latent growth curve modelling

Training Your Self: Examining the Impact of Multidomain Leader Identity Development Interventions Over Time

“Tell me and I forget, teach me and I may remember, involve me and I learn.”

-Benjamin Franklin

Introduction

Organizational expectations for developing leaders seldom match the reality of the longitudinal nature of the process (Athanasopoulou & Dopson, 2018; Lacerenza et al., 2017; Wakefield et al., 2016). For any prospective leader, development is unlikely to ever be a ‘success-only’ journey (Miscenko et al., 2017; Savani & Zou, 2019; Lanaj et al., 2021; Baltes, 1987; Baltes et al., 1980) because “it takes time to become a leader, to enact leadership, and to be perceived by others as a leader” (Castillo & Trinh, 2018, p. 165). In light of this, the leader development literature places significant emphasis on making gradual shifts in one’s self-perception towards becoming a leader over time (Miscenko et al., 2017; Day & Sin, 2011). This identity as a leader orientates the self towards accessing further leadership experiences that facilitate the acquisition of leadership skills (Lanaj et al., 2019; Day & Dragoni, 2015; DeRue et al., 2012; Day et al., 2009; Lord & Hall, 2005). Whilst the individual must ultimately answer the existential question “*am I leader?*” (Miscenko et al., 2017, p. 605), overlooked, is how organizations can help the individual to answer this question more critically and provide answers to the quandary of ‘*how can I become a leader?*’

For most individuals, managing the self in different social environments such as family, work, friends, and community groups make it a challenge to ever find the time to fully engage in any form of deeper introspection on questions surrounding the self and leadership (Brummelhuis & Greenhaus, 2018; DiRenzo et al., 2011; Greenhaus & Beutell, 1985). Instead of engaging in leader identity work, most individuals rely on their implicit leadership theories of what a good leader ought to be when making self-evaluations about whether they should

lead (Epitropaki & Martin, 2004; Lord & Maher, 1993; Lord et al., 1984). In this process, negative self-evaluations in the present time frequently thwart individuals from any future engagement about how to claim and maintain an identity as a leader (Ritter & Lord, 2007; DeRue & Ashford, 2010). Because of this, individuals often choose to enact alternative identities to leadership that they feel more familiar with, but which might not be deeply meaningful to them. Typically, leadership trainings do little to resolve this issue as they simply offer activities designed to enhance the leadership knowledge and skills of a select group of employees; forgetting that such training will remain inconsequential to those participants who do not currently identify as a leader (Lacerenza et al., 2017; Avolio et al., 2009; Day, 2000) and who do not prioritize leadership above alternative identities (Stryker, 2000; Ramarajan, 2014; Burke & Stets, 2009). In characterizing the problem in these terms, my current study gets to the heart of the matter; employees cannot become more effective as leaders unless they start to see themselves as leaders.

My current study argues that greater focus on leader identity work in leadership trainings provides a feasible solution to this problem. Identity work involves deeper, self-directed exploration of the meaning of leadership to the self, helping individuals to perceive themselves more as leaders now and into the future (Hammond et al., 2017; Dehaene et al., 1998). Doing so enables my current study to provide a much more nuanced approach to training that accounts for how each participants' identity as a leader will differ based on their current stage of development and future ambitions in leadership (Lord & Hall, 2005; Sveningsson & Alvesson, 2003). This also reminds us of how participants enter the training at completely different levels of developmental readiness (Kwok et al., in press), subsequently influencing how participants feel about engaging in leader identity work during the training (Avolio & Hannah, 2008; McAdams & McClean, 2013; Avolio, 2005).

The multidomain leader identity development theory (Clapp-Smith et al., 2019; Hammond et al., 2017) provides an overarching structure for how such a training program can be designed and implemented, with activities centred around four key elements of leader identity development: self-relevant meaning, strength, levels of construal, and integration across contexts. Drawing upon this theory, my current study delivers four significant contributions to the scholarly literature on leader identity development. First, my current study expands how leader identity is conceptualized and tested; investigating how training impacts on both participants' leader identity strength (Hiller, 2005, Lord & Hall, 2005; Rus et al., 2010) and leader identity prioritization in comparison to alternative identities (Ramarajan, 2014; O'Connell, 2014; Avolio, 2005; Welbourne & Paterson, 2017; Markus & Kunda, 1986). Previous empirical research has only focused on change relative to the strength of participants' leader identity (Miscenko et al., 2017; Kwok et al., in press; Middleton et al., 2019). Yet self-concept is "a multidimensional construct consisting of a multitude of different identities" (Rus et al., 2010, p. 525) and leader identity is but one of many "sub-components of one's identity" (Day & Harrison, 2007, p. 365), and so my current study argues that leader identity should be examined as one of several possible identities that can regulate behaviour (Lord et al., 1999; van Knippenberg et al., 2004).

Secondly, my current study's longitudinal quasi-experiment produces causal insights into the extent to which leader identity work in training (Clapp-Smith et al., 2019; Heckman, 2005) influences participants' leader identity strength (Hiller, 2005), leader identity prioritization in comparison to alternative identities (Stryker, 2000), and consideration leadership behaviours and initiating structure leadership behaviours (Halpin, 1957; Hemphill et al., 1951) over time in comparison to a control group of participants who did not receive any training at all (i.e., a non-treatment control group). The content of a leadership training matters as this has a significant influence on the training's causal effect (Martin et al., 2020). My

current study is the first to examine the effects of leadership training that was focused specifically on leader identity (Clapp-Smith et al., 2019; Hammond et al., 2017).

Thirdly, I offer insights into how leader identity development training influences consideration and initiating structure leadership behaviours over time (Fleishman & Hunt, 1973). Typically, as an identity becomes more self-relevant, behaviours that verify and uphold the standard of the given identity will emerge over time (Burke & Stets, 2009; Stryker & Burke, 2000; Burke & Reitzes, 1981; Day et al., 2009). By engaging in leader identity work during the training, it is expected that training participants will enact these behaviours more frequently (Halpin, 1957; Hemphill et al., 1951).

Finally, I investigate the extent to which leader developmental readiness factors influence the impact of leader identity development training over time on the hypothesized outcomes (Avolio & Hannah, 2008; Hannah & Lester, 2009). These factors include the effect of one's *past* connection with leadership such as experience (DeRue & Wellman, 2009) and age (Addis & Schacter, 2012), one's *current* association with leadership through a leadership role or position (Lord & Hall, 2005; DeRue & Ashford, 2010), and one's view of becoming a leader in the *future* (future leader self salience) (Strauss et al., 2012). This has significant implications for whom, and at what stage, leader identity work training can become useful for.

Conceptual Framework and Hypotheses Development

Currently, a gap exists in our understanding of how organizations can effectively support leader identity development within more individuals (Day & Sin, 2011). A proposed solution is to apply the multidomain leader identity development theory into how training programs are designed and implemented (Clapp-Smith et al., 2019; Hammond et al., 2017). The central premise of this argument is that engagement in identity work will help participants' develop a deeper sense of meaning (Alvesson & Willmott, 2002; Markus, 1977) about their current and future plans towards leading others (Clapp-Smith et al., 2019; Day et al., 2009;

Johnson et al., 2006). In light of these claims, my study provides its rationale for how each of the four elements of this theory play an influential role in leader identity development training.

The self-construction of an identity as a leader begins by deriving a more ‘self-relevant’ meaning of leadership that creates a deeper sense of purpose surrounding why one wants to lead others in the first place (Clapp-Smith et al., 2019; Martin & Epitropaki, 2001). This then makes the identity more likely to be used as the lens from which one’s position within social contexts are interpreted from (Day & Harrison, 2007; Weick, 1995); affecting decisions about how to behave and what image one wants to project to others (Shamir et al., 1993; Callero, 1985; Santee & Jackson, 1979). At the same time, this interpretation is also shaped by participants’ preconceived notions about the self (Lord & Hall, 2005; Day & Harrison, 2007; Martin & Epitropaki, 2001). Other possible identities can postulate alternative optics from which the self is construed. Such influences highlight how the meaning derived from identity work during training will inevitably vary amongst participants; signifying that heterogenous approaches to identity work training are unlikely to ever help participants deepen the personal meaning they have for leading others (DeRue et al., 2009; Gurdjian et al., 2014; Hammond et al., 2017). Yet, even if we fully appreciate the impact of these differences, deriving self-relevant meaning from leadership is still likely to remain the most challenging element of the theory to develop within all participants as many individuals share limiting beliefs about their own capability to lead (Clapp et al., 2019); building resistance to the possibility of developing a self-relevant meaning from leadership in the future (Epitropaki et al., 2013; Lord et al., 2001; Ashforth & Mael, 1989). Thus, it becomes clear that leader identity development training can best counteract this by placing greater emphasis on self-determined authoring activities that are done on the individual’s own terms (Hammond et al., 2017). This can make development as a leader appear more feasible to achieve, providing greater flexibility for the individual to account for their own unique situation and construe a meaning

of leadership that is authentic enough to sustain interest and prioritization of resources towards developing the leader identity outside of the training (Hammond et al., 2017; Lanaj et al., 2021; Brown, 2015; Weick et al., 2005; Louis & Sutton, 1991; Colquitt et al., 2000).

The second element of Clapp-Smith and colleagues' theory (2019) relates to how leader identity can be strengthened when the individual internalizes this self-definition of themselves as a leader (Miscenko et al., 2017; Hiller, 2005). In doing so, the individual becomes more likely to enact the identity in social contexts because the identity is both important to them personally (meaningful) and has become a self-actualized part of how they see themselves in social environments (Ashforth & Schinoff, 2016; DeRue & Ashford, 2010). Notably, this process is not dependent on the individual acquiring a formal supervisory or management role (DeRue et al., 2009; Day et al., 2009; Bedeian & Hunt, 2006). Instead, a leader identity can be strengthened when the individual increases their capacity to make a positive influence on prospective followers (DeRue & Ashford, 2010; Howell & Shamir, 2005; Stryker & Burke, 2000; Ashforth, 2001) as this allows the individual to successfully enact the identity in social settings and receive relational recognition and group endorsement from followers (DeRue & Ashford, 2010; Day & Harrison, 2007; DeRue et al., 2009). For this reason, the 'strength' element likely represents the most important element of Clapp-Smith and colleagues' (2019) theory in the long-term because the ability to gain the approval from followers has positive cascading effects on one's overall development as a leader; granting the individual opportunities to lead that can further strengthen their leader identity (Miscenko et al., 2017; DeRue & Ashford, 2010). This made it imperative for training activities to be designed in a way that can not only help participants' draw personal meaning from leadership, but which can also equip participants with effective behavioural strategies that allow the individual to successfully apply this personal identity work done earlier in the training in social contexts (Shamir et al., 1993; Johnson et al., 2012). If implemented correctly, the long-term

value of this can be that it ensures participants are at least prepared to learn from their future experiences in leadership and can potentially reaffirm this identity over time in social settings (Day et al., 2009).

The third element of the theory is much more dynamic in that it relates to how leader identity is interpreted from different levels of the self-concept (*individual, relational, collective*); each of which cause the individual to approach leader identity development in very different ways (Brewer & Gardner, 1996; Oyserman, 2001; DeRue & Ashford, 2010; Lord & Hall, 2005; Ibarra et al., 2010). At the *individual level*, leadership is interpreted from the perspective of one's own personal values and goals and what differentiates oneself from others as a leader (Cross et al., 2011; Sedikides & Brewer, 2001). In contrast, at the *relational level*, self-definitions are tied to the value of connections with followers (Sluss & Ashforth, 2007) whilst at the *collective level*, focus is on fulfilling one's obligations to the welfare of the group (Jackson et al., 2006). Ultimately, the level of construal from which information about one's identity is processed is important in shaping one's motivations, frame of reference, and approach to self-evaluation that shape how an individual self-regulates their behaviour over time (Brewer & Gardner, 1996; Lord & Brown, 2004; Johnson & Chang, 2006). A problem however is that many prospective leaders might not yet recognize how different social situations might be suited to different approaches to leadership (individual, relational, or collective) (Lord & Hall, 2005). In response, some might argue that no one level of identity construal is truly more effective than compared to another. Yet, prior empirical research suggests that a collective-based construal of one's leader identity is perceived as more effective in most social situations by followers (Johnson et al., 2012). This reality cannot be overlooked, especially when considering how novice-leaders need broader principles of leadership they can implement when starting off that will be positively received by followers (DeRue & Ashford, 2010). Thus, trainings must fully explore each of the levels and the

consequences of each approach to help participants lead effectively within the context that they operate in.

Finally, leader identity development also emerges from deeper integration into the self-concept so that the leader identity can be enacted across different contexts/domains of one's life (Ibarra et al., 2014). In applying one's identity as a leader across contexts, the individual is more likely to learn about how to lead at a more systematic level in which the structures and principles of leading others that run parallel across the contexts can be identified in order to further understand how to lead effectively and to see what opportunities to lead are emerging (Hammond et al., 2017; Loewenstein et al., 2003). Principle-level knowledge about oneself as a leader in a variety of social contexts is also helpful for developing extensive expertise as a leader (Lord & Hall, 2005; Glaser & Chi, 1988; Ericsson et al., 1993).

Leader Identity Development Training and Strengthening Leader Identity

Leader identity is crucial to development because it motivates further actions towards self-improvement as a leader (Day & Harrison, 2007). Participants who engaged in leader identity work activities explore the meaning of leadership to them personally and reflect on what context they would like to lead in as part of their long-term plans (Miscenko et al., 2017; Day et al., 2009; Erikson, 2007; Markus & Nurius, 1986). Participants also learnt strategies that can enable them to successfully enact leadership as a possible identity in a real social setting and at different levels of construal (individual, relational, collective) (Howell & Shamir, 2005). This should develop a more principle-levelled knowledge about the self as a leader in which the participant can consider leading others in a wider variety of social contexts than before (Hammond et al., 2017; Chrobot-Mason et al., 2016; Lord & Hall, 2005; Glaser & Chi, 1988). As such, engagement in leader identity work over the course of the training should enable participants to establish a much more self-relevant meaning about leadership that

strengthens their leader identity. This positive effect should be higher than compared to that of the control group. Therefore, my current study makes the following proposal:

Hypothesis 1: Participation in the leader identity development training intervention should result in the strength of leader identity increasing more for training participants over time than compared to the control group.

Leader Identity Development Training and Leader Identity Prioritization

Self-identity is also “dynamic, continually developing throughout the life span, and composed of an amalgamation of sub-identities” (Hammond et al., 2017, p. 483). Leader identity operates as one of several possible identities that could be enacted in social contexts that are organized by the individual within a salience hierarchy structure that prioritizes identities based on their perceived degree of self-relevance (Stryker & Burke, 2000; Markus & Wurf, 1987; Miller et al., 1960). From this perspective, identity dynamics operate as “the presence of multiple, shifting, competing identities, even as they may appear orderly and integrated in particular contexts” (Alvesson et al., 2008, p. 6), particularly as only one identity tends to be salient at a given point in time to direct behavioural responses in social contexts (Lord & Brown, 2004; Markus & Wurf, 1987; Day & Harrison, 2007; Stryker & Serpe, 1982). Whilst the extent to which this happens might vary depending on the context, this issue is hard to overlook given that prior research suggests that there are typically four to six identities regularly under consideration by the individual in a given social context like a workplace (Roccas & Brewer, 2002; Welbourne & Paterson, 2017). This allows us to appreciate how the decision the individual makes is often not a binary one of, ‘*to lead or not to lead*’, but is instead often more of a judgment of the perceived utility (cost-benefit analysis) of enacting a leader identity in context relative to enacting alternative identities instead that could also be self-relevant and familiar (Lanaj et al., 2021; Welbourne & Paterson, 2017; Thomas, 2015; Vroom, 1964). Characterizing this process as interchangeable places greater attention on how

leader identity needs to become more of a priority over alternatives for the individual's limited resources of time and energy in order for the identity to be developed further over time (Lanaj et al., 2021; Ashforth & Schinoff, 2016).

With all this in mind, there are potentially several competing alternative self-definitions to one's leader identity in the work context. First, one's professional identity emerges incrementally through meticulous skill development and can easily emerge as a common alternative focus over development as a leader (Pratt et al., 2006; Kahn, 1990; Cascón-Pereira & Hallier, 2012). Second, a leader identity is conceptually distinct from a more transactional-focused identity as a manager which can either synchronise or conflict with one's self-definition as a leader (Watson, 2009; Sveningsson & Alvesson, 2003). Furthermore, managerial identities can easily become more of a priority than one's leader identity because of the intense amount of time, energy, and commitment required to meet the formal requirements of the role (Clark et al., 2016). Lastly, individuals will also make more direct choices about whether to lead or to enact a more socially compliant team member/fellowship identity (Tajfel, 1982). Such a choice is often highly contextual as the individual likely has both follower and leader identities that they interchange between based on the given social situation and who else is in the social group (Epitropaki et al., 2017). However, through identity work, one can eventually become much more of a priority over the other (Ashforth & Schinoff, 2016; Epitropaki et al., 2017). With each of these possible identity choices in mind, my current study contends that leader identity development training can help make an identity as a leader a greater focus for future development. For these reasons, training should positively shift leader identity as a priority in comparison to other alternative identities in work contexts. This effect should be higher in the training group than to that of the control group. Hence, the hypothesis is as follows:

Hypothesis 2: Participation in the leader identity development training intervention should result in the prioritization of the leader identity in comparison to other possible identities increasing more for training participants over time than compared to the control group.

Leader Identity Development Training and Leadership Behaviours

Individuals who develop a greater sense of meaning from leading others are also likely to feel more motivated to uphold the perceived standards of this leader identity through enacting identity-congruent behaviours (Stryker & Burke, 2000; Stryker & Serpe, 1994; Burke & Stets, 2009; McCall & Simmons, 1978; Thatcher & Zhu, 2006; DeRue et al., 2009; Dutton et al., 2010; Day et al., 2009; Lord & Hall, 2005). There are also many different forms of behaviour that could be used to express one's identity as a leader (Johnson et al., 2012; Lord & Hall, 2005). However, because identity work in the training is focused specifically on helping participants find a deeper sense of meaning towards why they want to lead others, any behavioural changes seen across time are likely to be underpinned by some greater feeling of responsibility to more directly influence and support followers in a social context (Hammond et al., 2017; Middleton et al., 2019; Day et al., 2009; Markus & Wurf, 1987; Santee & Jackson, 1979). Such reasoning is also well aligned with classical theory on effective leadership behaviours that suggests that the desire to influence others as a leader commonly manifests itself in two forms of behaviour; consideration leadership behaviours related to actions that demonstrate compassion and support for the welfare of followers and initiating structure leadership behaviours that involve clarifying tasks, giving guidance, and establishing the expectations for other team members' behaviour (Halpin, 1957; Hemphill et al., 1951; Fleishman & Hunt, 1973; Judge et al., 2004). Such actions can be readily enacted by participants of all experience levels because both behaviours are primarily 'effort-based' actions that are not dependent on having well-developed skills in leadership (Judge et al.,

2004); suggesting that my current study's confidence that such specific behaviours will be expressed as a result of greater engagement in leader identity work training is both theoretically and practically reasonable. At the same time, with such an intense focus on the construct of leader identity itself, it is easy to forget that individuals who engage in identity work during training are likely to derive different meanings about what behaviours they want to enact. For some, meanings of leading others will be focused on providing relational-focused support to followers and will thus be more inclined to enacting consideration leadership behaviours whilst for those who are more collective orientated, focus orientates towards enacting initiating structure leadership behaviours (Hammond et al., 2017; Johnson et al., 2012). Despite this, when we reflect on how individuals actually intend to enact such behaviours over a longer period of time, it becomes clearer that both forms of behaviour will inevitably end up needing to be implemented by an individual at different stages in time (consideration to show relational support and initiating structure to provide collective-based organization) in order to successfully enact and maintain their leader identity (Fiske et al., 2002; Halpin, 1957; Hemphill et al., 1951; Piccolo et al., 2012; Fleishman & Hunt, 1973). Hence, the fundamental outcome that emerges from leader identity development training is more likely to be a general desire to lead and with this comes a greater focus towards enacting behaviours that are judged to be most appropriate for the social context at a given time as opposed to simply what specific behaviour one derives the most meaning from (Lord et al., 1984; Judge et al., 2004; Johnson et al., 2012; Gardner et al., 2005; De Cremer, 2003). For all of these reasons, participation in the training should increase both the consideration leadership behaviours and initiating structure leadership behaviours of its participants over time by a higher rate than compared to the control group. As such, my current study proposes the following:

Hypothesis 3: Participation in the leader identity development training intervention should result in consideration leadership behaviours and initiating structure leadership behaviours increasing more for training participants over time than compared to the control group.

Leader Developmental Readiness and Leader Identity Development Training

Hammond and colleagues (2017) also indicate that “identity work is active and reactive and draws on understanding of a leader identity in past, current and future” (p. 484). This infers that key temporal elements of a self-narrative about oneself as a leader are what shape one’s developmental readiness over time (Avolio, 2005; McAdams, 2001; Avolio, 2005; McAdams & McLean, 2013; also see Tomkin’s 1979 script theory). This notion of developmental readiness in leadership is believed to be what impacts on a participant’s capability to maximize the benefits from participating in leadership training activities (Hannah & Lester, 2009; Kwok et al., in press; Martin et al., 2017; Fecteau et al., 1995). My current study sees this as comprised of four key factors: the level of future leader self salience that reflects viewing leadership as a long-term goal (Strauss et al., 2012; Metcalf & Shimamura, 1994; Austin & Vancouver, 1996), current occupation of a leadership position, age, and prior leadership experience.

First, those who view leadership as a salient part of their future are far more likely to allow the self to be interpreted as capable of being changed over time, thus feeling that they can take behavioural actions to bring their current leader identity closer towards the desired future leader identity (Gardner et al., 2005; Latham & Locke, 1991; Lord & Levy, 1994; Avolio & Hannah, 2008; Metcalf & Shimamura, 1994). Taking this into account, I expect that participants with a salient future leader self are likely to become more engaged in leader identity work because training activities will likely be construed by the individual as helping further their progress towards their desired future as a leader.

Yet, participants' self-narrative surrounding leadership is also shaped by their current circumstances. Training participants who currently occupy leadership positions have a significant advantage over those who do not because they have greater opportunities to implement the training lessons outside of the sessions and develop their leader identity further (Zaar et al., 2020; Colquitt et al., 2000). Information about leadership becomes much more conscious and can thus be integrated with other symbolic representations of the self (such as future leader self) to create a more contextually meaningful interpretation of leadership and the principles being learnt during the training (Lanaj et al., 2021; DeRue & Ashford, 2010; Hammond et al., 2017; Zheng & Muir, 2015; Hong et al., 2011; Hogan et al., 1994). Such participants are also likely to find it easier to appreciate how the training relates to their own leader identity narrative involving their current leadership role (Lord et al., 2016).

Drawing meaning from training activities is also likely to be easier for those participants who have previous experiences in leadership because they can reflect back on the self in situations when leading followers and what was learnt and integrate this knowledge with training guidance (Fiedler & Garcia, 1987; DeRue & Ashford, 2010; Roberts, 2002; Lord et al., 2016; Addis & Schacter, 2012; Shipp & Jansen, 2011); gaining a deeper understanding of what leadership approach works most effectively for the given social context (Roberts, 2002; Lord et al., 2016; Addis & Schacter, 2012). For example, experiences can enable new leadership skills to emerge such as in communicating a collective vision that strengthens teamwork (Stam et al., 2014; Mumford et al., 2017).

Finally, the age of the participant will influence their self-narrative as a leader. Neurological research suggests that over the course of the aging process, episodic memory functioning (recalling specific and contextual information about events) that allows the individual to interpret the self in context steadily declines and greater reliance is placed on semantic memory (conceptual information about the self rather than event and behavioural-

based evidence) (Addis & Schacter, 2012). This reduces prefrontal and hippocampal functioning used for imagining the future and remembering the past and other episodic memories (Addis & Schacter, 2012; Eichenbaum, 2004). As a result, self-identities are more likely to be construed as stable as the individual ages because specific events are not as impactful and are less likely to create change in one's identity; making it harder to draw meaning from new experiences such as training (Persson & Nyberg, 2008). Thus, whilst age might correlate with having a greater amount of leadership experiences; more advanced age can affect one's capability to draw deeper meaning from the training (Allen et al., 2008).

Considering the issue of leader developmental readiness allows us to appreciate how the extent to which leadership training can be effective is not simply about the content of the training itself, but also about how the training is construed by the participant in relation to their ongoing self-narrative. Training might be found to be helpful to all participants in some way, but it is more likely that training will be much more helpful for those who are developmentally ready to learn. With each of these four factors in mind, leader development readiness is likely to impact participants' ability to draw meaning from the training. Thus, my current study hypothesizes as follows:

Hypothesis 4: Leader development readiness factors indicated at Time 1 (future leader self salience, currently occupying a leadership position, prior leadership experience, age) will predict the leader development outcome variables (leader identity strength, leader identity prioritization, consideration leadership behaviour, initiating structure leadership behaviour).

Method

The Leader Identity Development Training Intervention

Training activities were designed to provide experiences targeted at engaging participants in learning about each of the four elements of the multidomain leader identity

development theory (Clapp-Smith et al., 2019; Hammond et al., 2017). Activities were designed to help participants to draw greater meaning from leadership; reflecting upon what their own implicit leadership theories are and how these are distinct from similar constructs such as management (see Appendix 4A; Miscenko et al., 2017; Schyns et al., 2011).

Participants also engaged in deep exploratory introspection about what leading others could mean to them in the future (see Appendix 4A; Day et al., 2009; Lord & Hall, 2005; Alvesson & Willmott, 2002; Dunkel, 2000). Implicit in this approach is the proposition that individuals can shape their own future direction as leaders (Lanaj et al., 2012; Strauss et al., 2012; Johnson et al., 2006). Activities also focused on strengthening leader identity through learning about the general principles of how to successfully claim and maintain a leader identity in social contexts by providing insights into what behaviours activate group-centred identities and appeal to follower motivations (see Appendix 4B; Shamir et al., 1993; Pratt et al., 2006; Sveningsson & Alvesson, 2003). Third, training activities focused on helping participants examine what level of construal (*individual, relational, collective*) they operated at and how each level of construal could be more appropriately used in current and future contexts that they want to be leading in; engaging in individual and group activities that required consideration of how each approach will differ in relation to their short and long-term impact on followers (see Appendix 4C; Lord & Brown, 2004). Individuals also engaged in group activities on collective-focused construal of the self as a leader that involved developing a deeper level of understanding of how to motivate and develop a collective identity for group members (see Appendix 4C; Day & Harrison, 2007; Lord & Hall, 2005; Albert & Whetten, 1985; Mumford et al., 2000). Finally, training activities were designed to help participants determine what context they would lead in within their life and how these contexts may overlap (work, family, social, community) (Clapp-Smith et al., 2019). This included activities related to how participants expect the narrative of their leader identity development to be integrated across time from past

experiences through to the present and into the future (Ibarra & Barbulescu, 2010) (see Appendix 4D).

Participants and Procedure

A total of 96 employees from an engineering company and a plastic manufacturing company in the United Kingdom (UK) were initially recruited to participate in the current study.¹ The final sample included only those participants who completed at least two of the three training sessions (i.e., all participants included had a minimum of eight hours of training). There were 35 training participants and 36 participants acting as a control group ($N = 71$). The control group participants did not receive any training and so are considered a non-treatment control group. All surveys were administered manually through paper-and-pen format immediately after each session in order to ensure that participants' responses were captured at the same moment in time. Participants' responses were always kept anonymous; having their own code to match their surveys up over each measurement time point. Participants were assigned into either the training group or the control group that received no training. The assignment of participants into groups was done in collaboration with the human resource managers of each company so as to best ensure that each group had a close balance of employees of different management positions and levels of leadership experience. This meant that as much as was practically feasible, any potential confounding influences would be randomly distributed across the sample (Martin et al., 2020). Training group participants received a total of twelve-hours of training (including time for surveying), divided into three four-hour training sessions with an average of two weeks in between each session in order for participants to have time to process the information after each session and reflect further on what they had learnt and discussed during the session and to possibly apply the principles

¹ The partnership between my research and the organizations were non-financial and included no incentives or conflicts of interest. In order to avoid expectancy placebo effects, no participant was told about the nature of the experiment.

learnt in their current context. I provided all of the training sessions and conducted them at the company sites (see Appendix 5 for the full training program that I designed). This ensured that the training content was always focused on the four elements of the leader identity development theory as intended (Clapp-Smith et al., 2019), rather than on any job-specific behaviours or managerial skills relevant to the organizations (Martin et al., 2020; Collins & Holton, 2004; Chivers, 2019).² Attendance was mandatory unless the participant had a legitimate reason not to attend such as illness or maternity leave.

My current study conducted a pre-test (Time 1) over a month before the first training session (Time 2) (Martin et al., 2020; Shipp & Cole, 2015; Zaheer et al., 1999). At Time 2, the training participants were surveyed immediately after the first training session, at Time 3 surveying was then conducted immediately after the second training session, and at Time 4 surveying was conducted immediately after the third and final training session. Meso-level changes such as in leader identity often take longer to emerge than compared to attitudes and behaviours (Day & Sin, 2011; Miscenko et al., 2017; Solansky, 2010; Gentry & Martineau, 2010) and so post-training measures (Time 5) were obtained later on; three months after the final training was completed. There were 68.6% males and 31.4% females in the training group. In the control group there were 80.6% males and 19.4% females. The average age of the training group was 40 years ($SD = 9.5$) whereas the control group was 48.4 years ($SD = 10.14$). For the amount of total prior leadership experience, the control group had 10.5 years on average ($SD = 7.86$) compared to an average of 8.7 years for the training group ($SD = 9.46$). Work experience for the training group was 13.16 years on average ($SD = 9.9$) whilst for the control group it was 17 years ($SD = 10.35$). There were 68.6% participants of the training group in a formal leadership position compared to 83.3% for the control group. Employees of

² Catch-up training sessions were also given for any participants who could not attend due to work schedule conflicts on a particular day of the originally scheduled training session.

the plastics manufacturing company made up 66.2% of the sample compared to 33.8% from the engineering company. Employees from the plastics manufacturing company had an average age of 44.72 years ($SD = 11.60$), leadership experience of 9.10 years ($SD = 8.39$), work experience of 16.30 years ($SD = 11.25$), 80.9% male and 19.1% female. Employees from the engineering company had an average age of 43.78 years ($SD = 8.72$), leadership experience of 9.95 ($SD = 9.34$), work experience of 12.79 years ($SD = 7.57$), 62.5% male and 37.5% female.

Measures

All measures used were identical for each of the measurement time points that includes Time 1 (T1), Time 2 (T2), Time 3 (T3), Time 4 (T4), Time 5 (T5) and all responses were self-reported.

Leader Identity Strength

Leader identity was measured through a 6-item scale (T1, $\alpha = .90$, T5, $\alpha = .92$) that combined the four core items of Hiller's (2005) scale with two items from the leader self-definition scale (Rus et al., 2010). An exemplar item from this scale is "Being a leader is important to who I am." Each item was rated by participants on a 7-point Likert scale (1 = *Not at all descriptive*, 7 = *Extremely descriptive*).

Leader Identity Prioritization

To measure leader identity prioritization in comparison to other possible work identities, participants had to rank in a hierarchy their possible identities ('leader identity', 'professional identity', 'manager identity', 'team-member identity') in the work context from 1 (*Most descriptive*) to 4 (*Least descriptive*). This was the same approach used in seminal work that measure multiple identities with this hierarchical nature in mind (Stryker & Serpe 1982; Welbourne & Paterson, 2017). Reverse coding was then done to make the analysis and results easier to understand. Although other identities might also be relevant in comparison to leader

identity, I restricted the comparison to four identities in order to keep things as simple as possible for participants' who were being measured on the same items at five different time points (Burke & Stets, 2009; Shipp & Cole, 2015; George et al., 2014).

Leadership Behaviours (Initiating Structure and Consideration)

The Ohio State two-factor leader behaviours of initiating structure and consideration were measured on a 3-item scale for consideration leadership behaviours (T1, $\alpha = .84$, T5, $\alpha = .87$) and a 3-item scale for initiating structure leadership behaviours (T1, $\alpha = .69$, T5, $\alpha = .89$) (Fleishman & Hunt, 1973). These items were answered by participants under the same stem as used by Miscenko and colleagues (2017) that reads "Please rate how you think others would rate the level in which you demonstrate the following behaviours." An example of an item from the consideration leadership behaviour scale was "Acting supportive when talking with me." An example of an item from the initiating structure leadership behaviour scale was "Maintains definite performance standards for people." Participants rated each item on a 7-point Likert scale (1 = *None*, 7 = *A great amount*).

Leader Developmental Readiness

The four leader developmental readiness variables were measured accordingly. Future leader self salience was measured using a revised 5-item scale (T1, $\alpha = .90$, T5, $\alpha = .92$) of Strauss and colleagues' (2012) future work selves scale rated by participants on a 7-point Likert scale (1 = *Strongly disagree*, 7 = *Strongly agree*). Items asked participants about how easily they could see themselves as a future leader. An example of an item from the scale is "The mental picture of myself as a leader in the future is very clear." Currently occupying a leadership position was dummy coded (0 = no current leadership position, 1 = current leadership position). Leadership experience was measured in years and months, as was the age of participants.

Method of Analysis

Initial confirmatory factor analysis (CFA) was conducted to test the conceptual distinctiveness of my study's continuous outcome variables (leader identity, consideration leadership behaviours, initiating structure leadership behaviours). Next, analysis of covariance (ANCOVA) was used to test each of the hypotheses (Riggio, 2008; Shadish & Cook, 2009; Heckman, 2005), investigating the effects of the independent variable (training vs control group) after assessing the effect of leader developmental readiness indicators on the outcome variable in question (Athansopoulou & Dopson, 2018; De Haan & Duckworth, 2013; Frese et al., 2003; Miller & Chapman, 2001). The results of the training participant group were compared to the results of the control group. These comparisons were made at three different time points. First, there was a pre-test at (Time 1). Second, a post-test I comparison in which results of the training participants after completing the final training session (Time 4) were compared to the control groups final results measured at Time 5. Finally, a post-test II comparison was conducted which represented the results of the training participant group at Time 5 compared to the control group final results measured at Time 5. The use of a T4 (post-test I), and T5 (post-test II) enabled my study to assess whether the impact of the training starts to decline several months after the final session. However, one limitation was that the missing responses for Time 5 meant adjusted means at post-test II were based on a smaller sample size.

Following the comparative analysis, repeated measures analysis was conducted to gauge whether within-person change had occurred in the hypothesized variables and at what point in time (Pitariu & Ployhart, 2010). For those hypothesized outcomes in which within-person change is observed in the repeated measures analysis, latent growth curve modelling (LGM) was used to test the development trajectories of these outcome changes over time in training participants (Kwok et al., in press, Miscenko et al., 2017; Day & Sin, 2011). Latent growth curve modelling is a structural equation modelling technique that estimates both the

pattern of change over time within individuals and between-person variability in individual intercepts and slopes (Bollen & Curran, 2006; Shipp & Cole, 2015; Curran et al., 2010). This can model the outcome growth trajectory, including the intercept (initial level of variable) and the rate of growth (slope) that is occurring over time as well as to identify any possible variance parameters that suggest whether there is individual variation in the trajectories under investigation. This helps to determine whether training participants have varying rates of progress over the course of the training program based on how much learning they draw from participating (Heslin & Keating, 2017; Day, 2000). This could also be impacted by the varied expectations that different participants have for the rate to which they believe they should be progressing as a leader (Shipp & Cole, 2015). Model fits were assessed based on their chi-square value and fit indices such as comparative fit index (CFI) and root mean square error of approximation (RMSEA) (MacCallum et al., 1996; Kelloway, 2015; Hu & Bentler, 1998; Kline, 2016).

Results

Confirmatory Factor Analysis of Study Variables

The means, standard deviations, zero-order correlations, and reliabilities of the major study continuous variables are presented below in Table 1. Confirmatory factor analysis (CFA) was conducted to show how the study variables are conceptually distinct. To do this, CFA was done on Time 1 (pre-test) variables and at Time 5 (post-test) variables occasions as this allowed the full sample to be retained (both training group and control group taken together). Time 2, Time 3, and Time 4 represented measures of training participants at the end of a training session and so were not used in the CFA as they did not include responses from control group participants. The results of the CFA are presented in Table 2. The sample size for conducting the CFA was still relatively small ($N = 71$) and so the leader identity variable had to be parcelled in order to complete the CFA analysis correctly (Eby et al., 2015;

Table 1

Mean and Standard Deviations for Leader Development Variables as a Function of Condition and Measurement Time

Variables	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Leader Identity Time 1 (Pre-test)	4.77	1.16	(.90)					
2. Leader Identity Time 5 (Post-test)	4.74	1.21	.68***	(.92)				
3. Consideration leadership behaviours Time 1 (Pre-test)	6.00	.70	.15	.08	(.84)			
4. Consideration leadership behaviours Time 5 (Post-test)	6.07	.67	-.10	.04	.45***	(.87)		
5. Initiating structure leadership behaviours Time 1 (Pre-test)	5.67	.67	.23 *	.13	.03	.03	(.69)	
6. Initiating structure leadership behaviours Time 5 (Post-test)	5.82	.80	.29 *	.28 *	.01	.10	.56***	(.89)

Notes: ($N = 71$). Reliabilities are in parenthesis.

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

Mathieu & Farr, 1991). Results showed that the separate three factor models (leader identity, initiating structure leadership behaviour, and consideration leadership behaviour) at both pre-test and post-test were the best fit for the data. At the pre-test, the 3-factor model had the best fit for the data: $\chi^2(33) = 39.708$, $p < 0.001$, CFI = 0.975, RMSEA = 0.054. At Time 5, the 3-factor model fit was worse than it was at Time 1 but was still better than alternative 2-factor and 1-factor models.

Table 2

Results of Confirmatory Factor Analyses

Time	Model	$\chi^2(df)$	CFI	RMSEA
Time 1	3-factor model	39.708(33)	0.975	0.054
	2-factor model	114.126(26)	0.680	0.218
	1-factor model	215.733(36)	0.342	0.265
Time 5	3-factor model	59.748(24)	0.974	0.15
	2-factor model	219.779(26)	0.862	0.324
	1-factor model	315.970(27)	0.794	0.388

Note: ($N = 71$).

ANCOVA Analysis

As previously outlined by Yeow and Martin (2013), support for a hypothesis in ANCOVA analysis is based upon finding both a reliable difference between conditions (training group versus control group) at the given time point with the increase in the outcome variable being greater for the training group. Hypotheses were tested through comparisons between the results of the training group and the control group at both Post-test I and Post-test II. There was no interaction found between covariates and the treatment variable which suggests that covariates can be considered independent from the treatment effect (Lord, 1969). Overall, there was a significant increase from the pre-test for training participants for two of the four hypothesized outcome measures. The full comparisons of adjusted means between the

groups are presented in Table 3 and the between and within-person differences are outlined in Table 4.

Hypothesis 1 suggested that leader identity strength should increase over time for training participants. At the pre-test there was no significance between control and training group ($t = .59, p > 0.05$). At post-test I, there was no significant difference between groups for leader identity strength ($t = .49, p > 0.05$). There was still no significant difference by post-test II ($t = -0.07, p > 0.05$). Thus, Hypothesis 1 was not supported.

Hypothesis 2 suggested that leader identity prioritization should increase over time for training participants. At the pre-test there was no significant difference between the groups ($t = -1.05, p > 0.05$). However, by post-test I, there was a significant difference between groups for leader identity prioritization ($t = 2.47, p < 0.05$), with the training group ($M_{\text{post-test I}} = 2.96$), now having a higher rating than compared to the control group ($M_{\text{post-test I}} = 2.25$). This provided support for Hypothesis 2. Having said this, several months after the final training session at post-test II the effect had faded and the difference was no longer significant ($t = -.50, p > 0.05$).

Hypothesis 3 proposed that both consideration and initiating structure leadership behaviours would increase for training group participants. Consideration leadership behaviours for training participants did not have a statistically significant increase compared to the control group. There was no significant difference at the pre-test ($t = .69, p > 0.05$), at the post-test I ($t = 1.86, p > 0.05$), and at post-test II ($t = 1.19, p > 0.05$). However, there was positive change in initiating structure leadership behaviours for training participants compared to the control group. Initially, after the final training at the post-test I, the adjusted mean of the participant group for initiating structure leadership behaviour was ($M_{\text{post-test I}} = 5.89$) higher than the control group was ($M_{\text{post-test I}} = 5.62$) but there was not yet a statistically significant difference ($t = 1.437, p > 0.05$). However, by post-test II, the adjusted means of the participant group was ($M_{\text{post-test II}} = 6.2$) higher than the control group ($M_{\text{post-test II}} = 5.61$) and this was significantly

different ($t = 2.93, p < 0.05$). This provides partial support for Hypothesis 3 that the training would result in positive changes to participants' initiating structure leadership behaviour.

As projected in Hypothesis 4, leader developmental readiness variables impacted each of my current study's outcome variables except for consideration leadership behaviours for all participants. Future leader self salience was consistently a significant between-subject effect of leader identity strength at pre-test ($F_{1, 58} = 11.07, p < 0.05$), post-test I ($F_{1, 57} = 10.00, p < 0.05$), and post-test II ($F_{1, 51} = 7.56, p < 0.05$). Meanwhile, whether a participant was currently occupying a leadership position was a significant between-subject effect at Post I ($F_{1, 57} = 5.72, p < 0.05$), and Post II ($F_{1, 51} = 4.47, p < 0.05$), whilst prior leadership experience was also a significant between-subject effect at Post II ($F_{1, 57} = 5.72, p < 0.05$). For leader identity prioritization, leadership experience had significant between-subject effects over time at Post-test I, ($F_{1, 49} = 6.27, p < 0.05$), and Post-test II, ($F_{1, 48} = 6.79, p < 0.05$). In addition, age as a development readiness factor positively impacted on initiating structure leadership behaviours at post-test I ($F_{1, 49} = 13.12, p < 0.05$) and post-test II ($F_{1, 48} = 11.77, p < 0.05$). Thus, support was found for Hypothesis 4.

Overall, ANCOVA analysis did not provide support for Hypothesis 1. However, it did provide some initial support for Hypothesis 2 and Hypothesis 3. Results showed partial support for the impact of leader developmental readiness factors on outcome variables as proposed in Hypothesis 4.

Repeated Measures Analysis

Within-person variance was investigated in SPSS using repeated measures analysis (Greenhouse-Geisser within-subject effects). This contrasts the pre-test results to each of the four remaining time points for training participants. Any within-subject effect testing for control group participants simply contrasts pre-test results to the post-test results of Time 5. Mauchly's test of sphericity was used throughout to check that variances of differences

between conditions are not significantly different (Field, 2013). Overall, within-person changes were found in leader identity prioritization and initiating structure leadership behaviour over time in training participants.

First, when assessing leader identity strength for the training group, Mauchly's test of sphericity was violated when examining within-person variance for leader identity strength, $\chi^2(9) = 17.943, p < 0.05$. The main analysis indicated that there were no within-subject effects over time in leader identity strength ($F(3.111, 65.328) = .165, p > .05$). The within-subject contrasts also provided no meaningful differences across time regardless of the time point. For the control group, there was no significant difference over time ($F(1, 35) = .211, p > .05$). Thus, Hypothesis 1 was not supported.

For assessing leader identity prioritization in comparison to the three other identity dimensions (professional identity, manager identity, team member/follower identity), Mauchly's test of sphericity was not violated, $\chi^2(9) = 13.454, p > 0.05$. The main analysis indicates significant change between Time 1 and Time 4 (after the final training) for leader identity prioritization, ($F(1, 18) = 5.207, p < .05$). However, by Time 5, post-test II survey, this effect was no longer statistically significant, ($F(1, 18) = 1.203, p > .05$). In contrast, the control group did not see any change at all over time ($F(1, 25) = .05, p > .05$).

For consideration leadership behaviours, Mauchly's test of sphericity was violated, $\chi^2(9) = 24.47, p < 0.05$. The main analysis indicated that there was also no within-person subject change over time ($F(2.62, 56.96) = .444, p > .05$). The control group also did not see any change over time ($F(1, 35) = .04, p > .05$).

For initiating structure leadership behaviours, Mauchly's test of sphericity was not violated, $\chi^2(9) = 2.426, p > 0.05$ and there was also within-person subject change overall over time within training participants ($F(3.77, 79.09) = 3.176, p < .05$). More specifically, the significant difference is represented by the change from Time 1 to Time 5 ($F(1, 21) = 7.82, p$

< .05). In contrast, initiating structure leadership behaviour for the control group remained constant ($F(1, 35) = .14, p > .05$).

Table 3

Results of ANCOVA and Comparison Means Analysis for Leader Identity and Leadership Behaviours

Variable	Pre-Test				Post-test I				Post-test II			
	Training (N = 29)		Control (N = 35)		Training (N = 29)		Control (a) (N = 35)		Training (N = 22)		Control (a) (N = 35)	
	<i>Adj Mean</i>	<i>SD</i>	<i>Adj Mean</i>	<i>SD</i>	<i>Adj Mean</i>	<i>SD</i>	<i>Adj Mean</i>	<i>SD</i>	<i>Adj Mean</i>	<i>SD</i>	<i>Adj Mean</i>	<i>SD</i>
Leader identity strength	4.90	.18	4.74	.17	4.86	.20	4.73	.17	4.71	.23	4.73	.18
Leader identity prioritization ^b	2.33	.20	2.63	.19	2.96	.20	2.25	.19	2.58	.25	2.76	.21
Consideration leadership behaviour	6.06	.15	5.92	.130	6.28	.14	5.91	.13	6.20	.16	5.95	.12
Initiating structure leadership behaviour	5.57	.77	5.82	5.85	5.89	.14	5.62	.12	5.92	.79	5.78	.82

Notes. Fixed Factors: Training group vs Control group.

Post-test I = comparison between training group results after the final training session. Post-test II = comparison months after the final training session.

(a) Same control group participants result compared to the participants immediately after training and several months later.

Adj Mean = Adjusted mean accounting for developmental readiness covariates (leadership experience, leadership position, age, future-leader self salience).

^b = comparison made to the following alternative identities (manager, professional, team-member/follower).

Table 4

Results of ANCOVA and Comparison of Means Analysis for Leader Identity and Leadership Behaviours

	ANCOVA between condition effect of training (<i>F</i>)			Within condition effect	
Variable	Pre-test	Post-test I	Post-test II	Training	Control
Leader identity strength	.347	.237	.005	Pre-test, Post-training I, Pre-test, Post-training II	Pre-test, Post training II
Leader identity prioritization ^a	1.096	6.09*	.25	Pre-test < Post-training I, Pre-test, Post-training II	Pre-test, Post training II
Consideration leadership behaviours	.471	.345	1.424	Pre-test, Post-training I Pre-test, Post-training II	Pre-test, Post training II
Initiating structure leadership behaviours	.308	2.066	8.569**	Pre-test, Post-training I, Pre-test < Post-training II	Pre-test, Post training II

Notes: ^a = comparison made to the following alternative identities (manager, professional, team-member/follower).

(<) indicates a significant increase over time points.

* $p < .05$. ** $p < 0.01$.

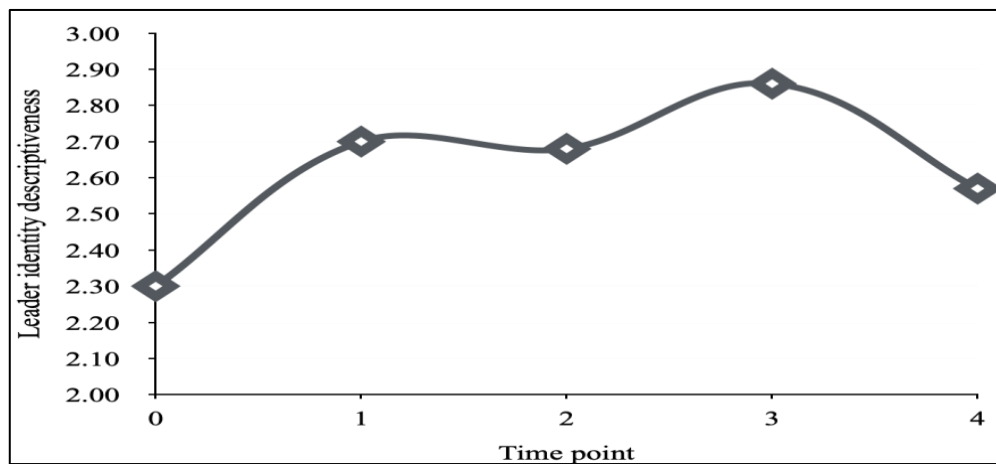
Latent Growth Curve Modelling

Latent growth modelling was conducted to examine the developmental trajectory of the variables that the repeated measures analysis suggested had significant within-person differences over time for training participants (leader identity prioritization in comparison to alternative identities and initiating structure leadership behaviours) (Day & Sin, 2011; Miscenko et al., 2017). All structural models were tested using Mplus 8.2 (Muthén & Muthén, 2018); following the modelling procedures outlined by Duncan and Duncan (2004) that included how to handle missing data in longitudinal studies. The predominant reason for missing data in my study was because of unpredictable variations in the participants' work schedules which meant the given participant could not attend a training session. This was an issue that could not be anticipated ahead of time. A Maximum-Likelihood Robust (MLR) was used to handle missing data in the same way at each time point and give reliable parameter estimates so that any non-normality would not distort the final results (West et al., 1995; Wirth & Edwards, 2007). This is particularly important when modelling ordinal latent variables (Muthén & Muthén, 2018; Edwards, 2010) and when using a small sample size (Grimm & Liu, 2016). Time was included in the model with intercept and slope loadings fixed at 0, 1, 2, 3, and 5 to depict the measurement points in the data. There was a much longer gap in time from the final training session (3) to the final survey (5) so an additional space in time was included. For each outcome variable, a series of hypothesized models were tested and compared to one another, starting with the simplest model (a null hypothesis model), and then branching out to test more complex models that included slope factors and variances as freed.

Leader Identity Prioritization Trajectory

The leader identity prioritization variable represented ordinal data in which participants ranked the order of identities from *most* to *least* descriptive (leader, manager, team member, professional). The leader identity prioritization variable's latent growth model needed to be

constructed in Mplus using slightly different commands than with a typical continuous variable growth curve so that the residual structures of the growth model are correctly parameterized (Grimm & Liu, 2016). As an ordinal variable, variance of error term cannot be estimated because the latent variable does not have an inherent scale which means the constraint in the model identification process of a parameterization ‘Probit link’ was used (Bollen & Curran, 2006). This provided a more robust estimate of within-person change function and can be tested more easily as the constant and fixed residual variance; this allowed my current study to test different forms of within-person change; both linear and quadratic (Grimm & Liu, 2016). It means that the mean of the latent variable intercept is fixed to zero in order to identify the model (Grimm & Liu, 2016). The first model was a null model that represented a fixed intercept model. The second model was an intercept variance, no slope model. The third model was a fixed intercept and fixed slope model in which linear change in the variable over time could be tested. The fourth model was a fixed-intercept and random slope model in which variation in change in the variable over time between participants could be tested. The fifth model was a non-linear quadratic change latent factor model in which there was partial quadratic change (see Figure 1). This had a comparable fit to the simpler Model 1 and was a better fit than other models: $\chi^2(1008) = 658.18, p < 0.05$, BIC = 393.92, AIC = 376.81 (See Table 5). In Model 5, the slope trajectory parameter was significant ($\beta = 0.480, p < 0.01$) and the quadratic slope trajectory parameter was significant ($\beta = -0.08, p < 0.01$) indicating that the average rate of change over time was significant. This also suggested that leader identity prioritization showed a non-linear trajectory over time. The variances in the intercept and slope and quadratic effect were not significant indicating that there were no significant differences between different training participants’ rate of change over time for intercept variance ($\beta = 1.33, p > 0.05$), slope variance amongst participants ($\beta = 0.09, p > 0.05$), and quadratic effect variance ($\beta = 0.001, p > 0.05$). Overall, results provided support for Hypothesis 2.

Figure 1*Leader Identity Prioritization Trajectory Among Training Participants (N=31)****Initiating Structure Leadership Behaviour Trajectory***

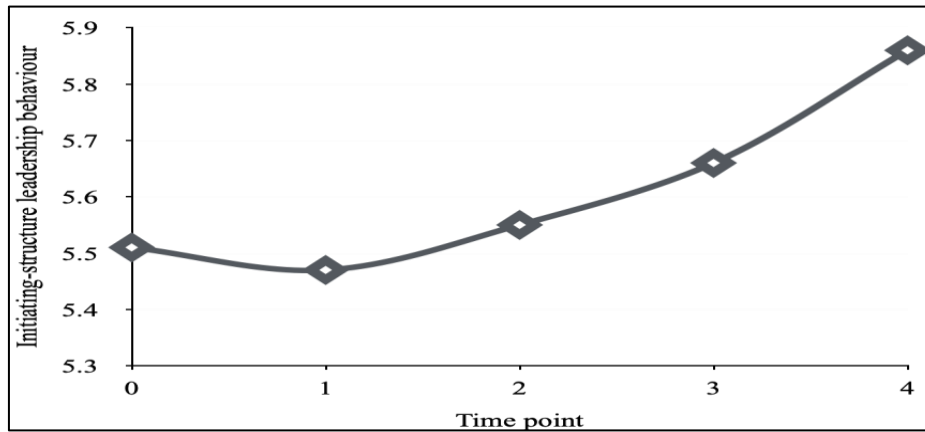
LGM analysis was also used to assess the growth trajectory of initiating structure leadership behaviour for training participants. The first model was a null-model that represented a fixed-intercept model (Model 1). The second model was a random-intercept model in which the intercept represented free model parameter testing variation in the variable between participants (Model 2). The next model (Model 3) was a random-intercept, fixed slope model to test linear change in the variable over time. The final model (Model 4) was a random-intercept, random slope model that enabled testing of the variation between participants in the change in the variable over time. This final model with random-intercept, random slope was the best fit to the data: $\chi^2(14) = 14.85, p < 0.05$, CFI = .97, TLI = .98, RMSEA = 0.04 (see Table 6). The trajectory parameters were significant for the intercept ($\beta = 5.43, p < 0.001$) and the linear slope ($\beta = 0.08, p < 0.05$), indicating that there was a significant and positive increase over time in initiating structure behaviours of training participants (see Figure 2). There were not significant intercept and slope variation differences amongst participants.

Table 5*Latent Growth Curve Modelling Leader Identity Prioritization*

	Model 1: Fixed Intercept variance	Model 2: Intercept variance, no slope	Model 3: Intercept variance, slope variance fixed	Model 4: Intercept variance, slope variance	Model 5: Fixed slope, intercept variance and quadratic effect
χ^2 (df)	625.70 (1011)	782.56 (1016)	690.50 (1014)	693.91 (1012)	658.18 (1008)
$\Delta \chi^2$ (df)	—	156.86(5) ***	92.06(2) ***	3.41(2) ***	35.73(4) ***
Loglikelihood	-197.09	-181.07	-180.28	-179.78	-177.41
BIC	404.854	377.29	370.56	384.43	393.92
AIC	400.188	371.07	378.33	373.54	376.81
Intercept slope variance	—	.92	.964	1.265	1.327
Slope mean	—	—	.091	.101	.480**
Slope variance	—	—	—	.038	.009
Quadratic effect	—	—	—	—	-.079***

Note: BIC = Bayesian information criterion; AIC = Akaike information criterion

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

Figure 2*Initiating Structure Leadership Behaviour Developmental Trajectory**Among Training Participants (N=31)***Table 6***Latent Growth Curve Modelling Initiative Structure Leadership Behaviour*

	Model 1: Intercept-only model (null)	Model 2: Random-intercept model	Model 3: Random intercept, fixed slope model	Model 4: Random intercept, random slope model
χ^2 (df)	65.74(18) ***	27.03(17) ***	17.54(16) ***	14.852(14) ***
$\Delta \chi^2$ (df)	—	38.71(1) ***	21.17(1) ***	2.688(2)
CFI	0.00	.65	.95	.97
TLI	0.085	.80	.97	.98
RMSEA	0.275	0.130	0.05	0.04
RMSEA: 90% CI	0.206–0.348	0.00–0.22	0.00–0.17	0.00–0.17
Residual variance	0.49	0.294	0.27	0.26
Intercepts mean	5.594***	5.598***	5.43***	5.43***
Intercept variance	—	0.187**	0.195**	0.129
Slopes mean	—	—	0.082**	0.083**
Slopes variance	—	—	—	0.02

Note. CFI = comparative fit index; TLI = Tucker-Lewis index; RMSEA = root-mean-square error of approximation.

* $p < 0.05$. ** $p < 0.01$. *** $p < 0.001$.

Discussion

Findings from my longitudinal study further our understanding of the extent to which leader identity work in trainings can positively impact on leader identity (Clapp-Smith et al., 2019) and leadership behaviours (Halpin, 1957; Hemphill et al., 1951) of training participants over time. Most importantly, findings from ANCOVA and LGM analysis suggest that development training positively supports leader identity prioritization in comparison to alternative identities. LGM results indicate that change occurred later on towards the end of the leader identity training, with leader identity becoming more of a priority in comparison to other identities over the course of training but then in a quadratic slope decreased in the months after the final training. This indicated that participants will likely need to engage further in leadership after training in order for this positive trend to be sustained. Findings also indicated that initiating structure leadership behaviours emerge gradually over time through greater engagement in leader identity work, likely as participants became more inclined towards enacting clear and direct claims to lead others in a social context after the training. When reflecting on my study as a whole, findings suggest that leader identity training can make leadership more meaningful to the self and thus more of a priority, but that the training is not able to strengthen one's current leader identity without being complimented with other positive influences such as leadership experiences. This was not entirely surprising considering that prior longitudinal studies have noted the challenges of trying to strengthen leader identity through training alone (Miscenko et al., 2017); emphasizing how strengthening one's identity often requires it to be successfully enacted in real social contexts that the individual wants to lead in (DeRue & Ashford, 2010). This was also indicated by my current study's other findings in the ANCOVA analysis that demonstrated how leader developmental readiness variables such as a future leader self was a stronger predictor of leader identity strength than training participation throughout the investigation. Thus, when the individual is able to craft a future

leader self, experiences in trainings are more likely to be interpreted more constructively as learning opportunities (Lord & Hall, 2005; Day & Halpin, 2004).

Theoretical Implications

Continuing to build a deeper understanding of how the leader identity development process unfolds over time is essential to managing the expectations of both the prospective leader and their organization; ensuring that there is sustained and collaborative commitment towards the individual's development as a leader. My current study shows that leader identity work training can be a useful part of this process. In order to measure leader identity development more accurately as a longitudinal process, our conceptualization of leader identity was expanded to include *both* the current strength of the identity as well as its priority to the individual in comparison to alternative identities. This placed greater focus on how individuals often make decisions about which identities they want to develop whilst considering their limited resources of time and energy (Lanaj et al., 2021; Welbourne & Paterson, 2017; Thomas, 2015; Vroom, 1964; Eccles et al., 1983). In doing this, I reframe the discussion towards a more comprehensive examination of how the different aspects of one's leader identity will likely need to be developed in quite distinctive ways (Hammond et al., 2017). Possibly, this process could occur in incremental stages that begin by establishing a deeper self-relevant meaning and then expand out into social processes of experience that strengthen the identity (DeRue & Ashford, 2010).

Second, by drawing upon the multidomain leader identity development theory (Clapp-Smith et al., 2019), my current study provides insights through its longitudinal and quasi-experimental investigation into the extent to which leader identity development training positively impacts on training participants' behaviour and identity and how this change emerges over time (McClean et al., 2019; Shipp & Cole, 2015). The impact of training is not necessarily reflected in strengthening the identity as a leader which remained stable over time

throughout the training (Roe, 2008; McClean et al., 2019), but instead by prioritizing this identity as a leader over alternative identities that could be developed (Stryker & Serpe, 1982). This suggests that the ‘meaning’ element of the multidomain leader identity development theory (Clapp-Smith et al., 2019) is well-suited for participants to develop in leader identity training, likely because such training offers participants opportunities to engage in deeper self-reflection about why one would want to become a leader in the first place (Hammond et al., 2017; Day et al., 2009); potentially helping participants to create a provisional leader identity that can be explored further before it is strengthened in the social context (Zheng & Muir, 2015; Ibarra, 1999; Hammond et al., 2017; Lord & Hall, 2005). Having said this, the duration of this increase in leader identity prioritization from training might not be long-lasting and might require the individual to begin to reaffirm their identity as a leader in practice after the training in order for their leader identity to remain a priority (Roe, 2008; McClean et al., 2019).

My current study findings were also different to the ‘J-shaped’ leader identity strength developmental trajectory curve found in the Miscenko and colleagues’ seven-week leader development program study (2017). A potential reason for this could be because of the differences between the training content of the two studies (Martin et al., 2020). Whilst my current study had training focused on self-reflection and self-awareness of one’s leader identity (see Appendix 4), Miscenko and colleagues’ (2017) leader development program focused on participants’ leadership knowledge and capabilities that allowed leader identity strength to increase over the course of the program as the participants reaffirmed their leadership capabilities. My current study results showed that leader identity strength remained relatively stable, and this was likely because participants felt the training helped them draw greater meaning from their leader identity (increased leader identity prioritization), but that training did not necessarily provide them with experiences that could strengthen their leader identity and make them feel like they could confidently define themselves as a leader (Day & Harrison,

2007; Zaar et al., 2020). Other factors that could explain such differences relate to leader developmental readiness factors (Avolio & Hannah, 2008). The average age of training participants in my current study was 40 years old compared to the Miscenko and colleagues' (2017) study which was comprised of postgraduates on a leadership course who had an average age of 23.4 years. For older participants, identities are likely to be viewed as more stable definitions of the self than compared to younger people who typically see their identities as malleable because they have their entire careers ahead of them and so are more inclined to project future changes in their leader identity (Addis & Schacter, 2012; Eichenbaum, 2004; Hall et al., 2021). As Hall and colleagues (2021) suggest, this is also because younger people tend to be more focused on self-improvement/performance goals that they want to work towards than compared to older adults who over time tend to refocus more on social goals such as those related to quality of life and family (Hall et al., 2021; Charles & Carstensen, 2010; Lang & Carstensen, 2002; Gebauer et al., 2013). Indeed, in my current study, future leader self salience was the key developmental readiness factor that impacted on leader identity strength over time (Strauss et al., 2012).

Third, the arguments made above clearly suggest that the learning drawn by participants from the current training are not able to fully influence all of the four theorized elements of the multidomain leader identity development framework (Clapp-Smith et al., 2019). In particular, strengthening one's leader identity is likely to emerge as a much more gradual progression over a longer period of time than was initially expected. Taking this into account, it is probable that the impact of self-reflective identity work that training participants engaged in could have been further enhanced if the "leadership claiming tactics" taught in the training were actually deployed by the participants in practice through experiential leadership experiences (Hammond et al., 2017, p. 484; Kayes, 2002; DeRue & Wellman, 2009).

Fourth, my current study's findings have significant implications for research on leadership behaviour. An increase in leadership behaviours suggests that there is a greater degree of commitment towards upholding the standards of the leader identity (Burke & Stets, 2009; McCall & Simmons, 1978; Ramarajan, 2014). The increase seemed to emerge gradually on a positive trajectory in which participants configured their leader identity and then slowly started to feel like enacting it in social contexts (McClean et al., 2019). Interestingly, initiating-structure leadership behaviours increased the longer the leader identity training went on for, whilst consideration leadership behaviours did not significantly increase. This could be because initiating structure leadership behaviours were seen by participants to represent more frequently used actions of leaders that are more expedient for enacting an identity as a leader in social contexts whereas consideration behaviours that are focused on support and compassion could be used in other roles outside of leadership. Over a longer period of time, if the individual wants to gain more advanced leadership roles, they will also need to expand what leadership behaviours they enact (Lambert et al., 2012; Fleishman, 1995) such as by incorporating more transformational leadership behaviours (Piccolo et al., 2012; Kark & Shamir, 2002; Bass & Avolio, 1993; Seltzer & Bass, 1990; Howell & Avolio, 1993; Conger & Kanungo, 1998). This can provide opportunities to develop more advanced leadership skills involving interpersonal relations and business strategy (Lord & Hall, 2005; Mumford et al., 2017; Marchiondo et al., 2015).

Finally, my current study provides further insight into the impact of leader developmental readiness factors on leader development outcomes. Consistent with self-narrative theory (Avolio & Hannah, 2008), my findings suggest that the variation in participants' leader developmental readiness (particularly future leader self salience and current occupation of a leadership role) predict the key hypothesized outcomes such as leader identity strength and leader identity prioritization over time. Whilst the training content was

designed to make participants' leader identity salient (see Appendix 4), it is likely that this training also made salient the challenges of developing a leader identity such as the need to enact a wide range of leadership behaviours at different points in time and the complexities involved in trying to acquire an identity that must be granted by others in their social context (Savani & Zhou, 2019; DeRue & Ashford, 2010). For participants who had a salient future leader self throughout the entire training program, their perspective on these challenges is likely to be framed positively from a growth mindset in which developing an identity as a leader is seen as a self-relevant goal that is possible to achieve through their own self-determined actions (Dweck, 2006). These participants are likely to be motivated to approach the training as a learning opportunity from which they can gain new knowledge about how to strengthen their identity as a leader (Dweck & Leggett, 1988; Deci & Ryan, 1980; Savani & Zhou, 2019). In contrast, for those participants that construe leadership from a fixed trait-based perspective in which development as a leader is only possible if they already possess such stable characteristics towards becoming a leader, the leader identity development training was less likely to positively impact on their leader identity and leadership behaviours (Burnette et al., 2010). Therefore, participants have different levels of leader developmental readiness, and this will affect their willingness to fully engage in leader identity development training (Dweck, 2006; Molden & Dweck, 2006; Savani & Zhou, 2019).

Practical Implications

From the perspective of the individual, finding a self-relevant meaning as to why one should lead rather than assume an easier alternative role in the given social context is often challenging given people's busy schedules (Brummelhuis & Greenhaus, 2018; DiRenzo et al., 2011) and negative prior self-evaluations of the self as a leader (DeRue & Ashford, 2010). Leader identity work training can help individuals to recognize more clearly how becoming a leader is actually much more of a gradual process of development over time rather than an

instantaneous change to the self (Day & Sin, 2011). Significantly, this can alter the individual's approach to how they answer the questions of "*am I a leader?*" (Miscenko et al., 2017, p. 605) and '*how can I be a leader?*'; framing expectations more positively towards a long-term developmental pursuit and encouraging the individual to think critically about what actions they would need to take to develop into the type of leader that they want to be (Clapp-Smith et al., 2019; Strauss & Parker, 2018; Day & Harrison, 2007; Lord & Hall, 2005).

Leader identity work training encourages the individual to view leadership on their own terms, considering possible selves as a leader in a variety of different social contexts that would best suit them (Ibarra et al., 2014; Alvesson & Willmott, 2002). Through gaining further knowledge about how an identity as a leader is developed over time, the individual also develops greater perspective on where they are in their own current stage of development and what they would need to do to improve (Day et al., 2009). Having said this, for the identity to be strengthened and confidently affirmed, individuals need to gain real experiences in leadership (DeRue & Wellman, 2009).

With this in mind, it is clear that organizations should not view leadership trainings as the only method of support that individuals need to develop into effective leaders. Instead, researchers and organizations need to work together to develop a more sophisticated system for leader development in which training is one core part of a much broader strategy (Salas et al., 2012; Wakefield et al., 2016; McCall, 2010; Hodgkinson & Rousseau, 2009).

Organizations can increase the likelihood of this becoming a success by ensuring their work environments are conducive for an employee to develop each of the four elements of leader identity within the multidomain leader identity development theory (Clapp-Smith et al., 2019; Avolio & Hannah, 2008; Avolio & Luthans, 2006; Arthur et al., 2003; Deng et al., 2019), and provide greater flexibility for employees to enact an identity as a leader that fits with their overall sense of self (Brown, 2015; Meyer et al., 2010). A part of creating this

involves first making an objective evaluation of whether the work environment is truly conducive for a wide variety of employees to gain experiences as a leader beyond just those with managerial titles (Ashforth & Schinoff, 2016; Arthur et al., 2003) and to identify what challenging experiences could help in each employees' development as a leader (McCall, 2010; McCauley et al., 1995; O'Connell, 2014; Uhl-Bien et al., 2007).

An organizational culture that encourages employees to continue to enact initiating structure leadership behaviours and that approaches leader development from a longer-term perspective in which effective leaders who continue to develop over time are rewarded is the best strategic approach that organizations can take. Indeed, the importance of leader developmental readiness factors suggests that development approaches involving training need to first evaluate which employees are most likely to benefit the most from attending such trainings in the first place (Waldman et al., 2013; Avolio & Hannah, 2008; Lacerenza et al., 2017).

Limitations and Future Research

My current study delivers a robust investigation into the impact of leader identity development training under longitudinal experimental conditions (Martin et al., 2017). However, there were also several limitations to my study that were due to the practical constraints of collecting longitudinal data from organizations. First, my study had a relatively small sample size that was reduced even further by 'drop-outs' caused by external circumstances. Many participants' work schedules were project-based which made it difficult to ensure attendance of everyone over a longer period of time. In the end, this meant that my study could not incorporate fixed and time-varying covariates into latent growth curve models.

Second, an advanced research design would have eventually provided the training program to all involved in a time-lagged manner with a waitlist control condition was not possible because of the organizations' busy schedules and limited time (e.g., Neck & Manz,

1996). Future studies might face the same difficulty but should try to include measurement of the control group at each time point to enable analysis to be conducted on the potential growth trajectory over time within control participants.

Third, my current study's measurement of behaviour was based on self-ratings. In an attempt to improve accuracy and reduce some of the potential social desirability biases, participants were asked to rate how they think *others* would rate the level in which they demonstrate the behaviours (Miscenko et al. 2017, Schat & Frone, 2011; Schoorman & Mayer, 2008). However, it is unlikely that this could eliminate all biases (Podsakoff et al., 2003).

Overall, these practical limitations might be best overcome by strategically selecting partnerships with organizations that already have a strong background in research. This might make it easier to justify some of the trickier and more time-consuming aspects of implementing longitudinal experimental research designs such as repeated measurement and random assignment. As will the overall involvement and endorsement of the project by senior decision-makers of the organization to participants. Such pragmatism will likely become even more important as research moves towards increasingly complex experimental designs, an example of which could be of studies that compares leader identity development training to unrelated training sessions (Chambless & Hollon, 1998; Boies et al., 2015).

Research into how we can enhance the impact of leader identity development training is also the logical next step for future research to confront. As a starting point, future studies could investigate the impact of leader identity development training programs when combined with appropriate leadership assignments for participants in their work setting (McCall, 2010; McCauley et al., 1995; O'Connell, 2014). Such a study would enable us to understand whether training has a greater impact when participants have opportunities to enact the identity in a social context and apply the principles learnt during the training (Day & Dragoni, 2015; Day et al., 2009; Heslin & Keating, 2017; Day, 2000; Ford et al., 1992). This could include after-

event reviews (Ellis et al., 2006) and rotation programs that allow participants to gain a range of experiences in leadership (Ashford & DeRue, 2012) that develop their leader identity across different domains (McCall, 2010; DeRue & Wellman, 2009; Lord & Hall, 2005; McCall, 2004).

Frequently, researchers are encouraged to try and apply complex financial calculations of the return on investment of their projects as a way of highlighting its overall value to the organization (Avolio et al., 2010; Richard et al., 2014; Cascio & Boudreau, 2011; Grohmann & Kauffeld, 2013; Bernstein, 1996; Cronbach & Glaser, 1965; Brogden & Taylor, 1950; Kirkpatrick & Kirkpatrick, 2006). Yet, these calculations can be confusing to all involved as they depend on subjective valuations of very abstract intangible variables (Donaldson & Grant-Vallone, 2002). Instead, researchers are best placed in focusing their attention towards incorporating the issues that the specific organization cares most about improving such as teamwork or organizational trust into the overall research (Grohmann & Kauffeld, 2013; Chen & Kanfer, 2006; Morgeson et al., 2010; Resick & DeChurch, 2011; DeRue et al., 2012).

Finally, future research will need to develop a more comprehensive measure of leader identity that allows researchers to accurately assess change in each of the four elements of the multidomain identity development over time (Clapp-Smith et al., 2019). This would enable more rigorous research to be conducted into whether each of the four elements emerge at different stages over time.

Conclusion

Organizations want answers to the question of how to develop effective leaders. Solutions to this problem take time but begin by helping individuals to establish an identity as a leader, most notably through developing training programs that help individuals to engage in leader identity work. Individuals who engage in such training are also more likely to enact leadership behaviours; crucial first steps along the journey towards leader development.

Challenging leadership experience are likely to be necessary to further augment the impact of training on leader identity development.

Chapter 6: General Discussion

“Action will delineate and define you.”

-President Thomas Jefferson

Overview of Chapters and Empirical Findings

Organizations currently face a shortage of individuals who identify as leaders and see becoming a leader as a possible part of their future (Epitropaki, 2018; Gentry et al., 2014; Deloitte, 2012). In response, my thesis puts forth evidence that a longitudinal approach is needed to meet this challenge that involves the collaboration and commitment of both the prospective leader and their organization (McCall, 2010). Drawing upon leader development theory by Day and colleagues (2011; 2009), my thesis investigates the importance of leader identity and leadership self-regulation in shaping affective and behavioural outcomes in leader development.

In Chapter 1, an overview of the problem of leadership shortages within organizations was provided; explaining how organizations’ demand for more effective leadership is currently unmet (Wakefield et al., 2016; Deloitte, 2012) and how this is partially a result of too few individuals identifying with becoming a leader and feeling motivated to lead. The chapter then puts forth my thesis’s proposed solution to this problem. This solution involves a focus on gaining a deeper understanding of the fundamental causes of why someone identifies and feels motivated to lead (Miscenko et al., 2017; Day & Harrison, 2007; Lord & Hall, 2005); investigating the longitudinal process of how leaders emerge through cognitive sense-making surrounding a future leader self and leader identity work that can positively support relevant affective and behavioural outcomes of leader development (Strauss et al., 2012; Markus & Nurius, 1986; Carver & Scheier, 1998). This chapter also provided an overview of my entire thesis and its four empirical studies.

In Chapter 2, an in-depth review of the, ‘The Deep Structural Processes of Leader Development’ was conducted. From which, several important principles were drawn about the nature of leader development and the future direction of the field. This analysis suggested that leader development must be approached as a predominantly self-determined process in which leadership self-regulation (Carver & Scheier, 1998) and leader identity (Lord & Hall, 2005; Day & Harrison, 2007) must change over time in order for developmental progress to emerge. My review also showed that leader development must be viewed longitudinally (Day & Sin, 2011) by both the prospective leader and their organization as otherwise the examination of leader development can become confused with assessments of an individual’s current effectiveness to lead (Day & Dragoni, 2015). Other important insights from this critical examination were that the self-concept level (individual, relational, collective) by which one’s leader identity is construed has important consequences for the individual’s ability to develop as a leader at an effective rate and is perhaps an area of the field that has been overlooked quite significantly (Johnson et al., 2012). With all this in mind, the empirical studies within my thesis focused on formulating solutions to how leadership self-regulation and leader identity development can be improved upon.

In Study 1 (Chapter 3), and Study 2 and Study 3 (Chapter 4), close attention is paid to the approach the individual takes towards how they think about their own development as a leader; conceptualizing a new cognitive approach to leadership (future leader self) that facilitates leader identity development (Strauss et al., 2012; Markus & Nurius, 1986). In Study 1 (Chapter 3), a moderated-mediation model was tested that showed the positive impact of a salient future leader self on affective motivation to lead via leader identity, and the moderating factor of collective self-concept on the relationship between a salient future leader self and leader identity. In Study 2 and Study 3 (Chapter 4), my thesis formulated and tested a longitudinal serial-mediation model of leadership self-regulation that moves the individual

from future possible selves cognition which positively impacts on leader identity, which then positively supports affective motivation to lead, and which then increases proactive leadership behaviour (Johnson et al., 2006; Strauss & Parker, 2018). Then, in Study 4 (Chapter 5), the focus moved to the role of a specific type of leadership training that was centred around engaging participants in leader identity work. My thesis developed and tested a leader identity-development training program whose content was based on the multidomain leader identity development theory (Clapp-Smith et al., 2019; Hammond et al., 2017) that was aimed at facilitating leader identity development and leadership behaviours in training participants. Overall, my thesis comprehensively addresses how both the individual and their organization can best facilitate the leader development process over time.

Study 1

In the first empirical study of my thesis (Chapter 3), possible selves theory (Markus & Nurius, 1986; Strauss et al., 2012) was drawn upon to conceptualize a new form of cognitive sense-making in leadership as a ‘future leader self’. The between-person research design of the study enabled testing of the impact of different cognitive sense-making approaches to reflecting on the self in relation to leadership. Each participant in the study ($N = 393$) was randomly assigned to complete one of four cognitive sense-making activities (‘future leader self’, ‘future career self potentially linked to being a leader’, ‘self-to-leader exemplar comparison’, ‘self-to-leader prototype comparison’). Study 1 provided preliminary analysis that suggested that future possible selves cognition (Strauss et al., 2012) generally had a more positive impact on leader identity and affective motivation to lead than did self-to-leader comparative sense-making (Guillén et al., 2015). This demonstrated the importance of the temporal perspective that an individual takes when evaluating the self in relation to leadership, in terms of present-based comparisons to other leaders versus future-based cognition about who one could become in the future (Trope & Liberman, 2003; Higgins, 1987; Anseel et al.,

2017). Study 1 then tested a moderated-mediation model of how affective motivation to lead emerges using structural equation modelling; demonstrating that when participants have a salient future leader self their future perspective for pursuing leaders is affirmed through affective motivation to lead others via leader identity. Study 1 also demonstrated the role that collective self-concept can play in moderating the relationship between a salient future leader self and leader identity (Jackson et al., 2006; Ashforth & Johnson, 2001; Kashima & Hardie, 2000).

Study 2 and Study 3

In Study 2 and Study 3 (Chapter 4), the focus was shifted towards applying self-regulation theory (Carver & Scheier, 1998) to longitudinal leader development research (Day & Sin, 2011; Miscenko et al., 2017). In order to achieve this, my thesis extended the theorized mediation model that was examined in my first empirical study (Study 1 in Chapter 3) by including proactive leadership behaviour as the final outcome variable in the model. In doing so, an integrated longitudinal serial-mediation model was developed and tested of how the leadership self-regulation process of leader development can emerge from future leader self salience which strengthens leader identity which then increases affective motivation to lead and that finally extends to increasing proactive leadership behaviours such as seizing opportunities to develop one's leadership skills, planning for one's future development as a leader, and garnering new knowledge of how to lead more effectively in a given context (Strauss et al., 2012; Parker et al., 2010). Central to the effectiveness of the overall model was the positive relationship in which future leader self cognition strengthened leader identity. Cross-lagged analysis was conducted in two studies (Study 2 and Study 3) in Chapter 4. Study 2 ($N = 186$) was conducted in a manufacturing context across two time points over a year apart and Study 3 ($N = 265$) was comprised of a diverse sample of employees from a range of different industries conducted across three time points each a month apart. Findings from both

studies demonstrated how, as hypothesized, future leader self salience strengthens leader identity, and that this relationship is not reciprocal; suggesting that future leader self salience is the initial beginning of the broader self-regulation process in leadership over time. Findings from the study that had a shorter time frame (Study 3) also showed that leader identity positively impacts affective motivation to lead and that this relationship is not reciprocal. This relationship was not proven in Study 2 which had a longer time frame than in Study 3, suggesting that affective motivation to lead could fade unless one's leader identity is continually reaffirmed (Badura et al., 2020; Anseel et al., 2017; Waldman et al., 2012). Findings from the supplementary time-lagged analysis in Study 3 suggested that there was a positive relationship between affective motivation to lead and proactive leadership behaviour, likely as a result of individuals feeling encouraged to enact identity-congruent actions that bring the individual closer towards actualizing their future leader self (Strauss & Parker, 2018; Parker et al., 2010).

Study 4

In Study 4 (Chapter 5) ($N = 71$), my thesis explored the role of leader identity development training; applying the multidomain leader identity development theory (Clapp-Smith et al., 2019) to design and test the impact of a leader identity development training program under longitudinal quasi-experimental conditions on leader identity (Clapp-Smith et al., 2019; Hammond et al., 2017) and leadership behaviours (Halpin, 1957; Hemphill et al., 1951). The content and activities of the training (3 sessions, 4 hours long each) were grounded upon the four key elements of the multidomain leader identity development theory: meaning, strength, levels of self, integration across context (Clapp-Smith et al., 2019; Hammond et al., 2017). Leader identity was investigated in relation to changes in leader identity strength (Hiller, 2005) as well as changes in leader identity as a priority relative to other alternative work identities that could be enacted (Stryker & Burke, 2000; Markus & Wurf, 1987). The

effectiveness of the training was measured by comparing the within-person changes of the training participants ($N = 35$) to that of a control group ($N = 36$). ANCOVA and latent growth curve modelling indicated how the leader identity development training positively impacts on the importance of leader identity prioritization in comparison to other possible work identities that could be enacted by the individual; suggesting that participation in the training subsequently caused participants to prioritize their leader identity more in the social context. Change over time was quadratic, in that leader identity became an increasing priority over the course of the training program, but this effect then started to fade several months after the training. Findings also showed that participation in the training program positively impacts training participants' initiating structure leadership behaviour over time. However, findings also showed that the leader identity development training did not strengthen the participants' current leader identity over time, suggesting that training will likely need to be combined with other positive support factors such as opportunities to gain further leadership experiences that strengthen leader identity (Hammond et al., 2017; Kayes, 2002; DeRue & Wellman, 2009). Interestingly, leader developmental readiness factors were significantly influential in determining the impact of the training on the study's outcome variables, likely because they directed the level of interest and relevance of the training to the self-narrative that the individual has about themselves (McAdams, 2001; Avolio & Hannah, 2008). For example, future leader self salience was a strong predictor of leader identity strength at each time point.

A detailed review of the theoretical contributions of my thesis and what these contributions mean in practice for prospective leaders and their organizations are discussed below.

Theoretical Contributions

The focus now moves to reviewing the most important theoretical contributions of my thesis that advances our understanding of the cognitive, identity, motivation, and behavioural indicators of leader development.

1. Contributions for Self Cognition Theory

My thesis shined the spotlight on the impact of future leader self cognition on leader identity; focusing on ensuring that cognitive sense-making processes are used to help the individual draw greater self-relevant meaning from leadership roles and to feel intrinsically motivated to access leadership experiences (Waytz et al., 2015; Heintzelman & King, 2014). This is significant, as in order to become a sustainable process over time, leader development requires the individual to develop a more self-determined interest towards leading others (Kark & Van Dijk, 2007; Avolio & Hannah, 2008). To do this, my thesis used possible selves theory (Markus & Nurius, 1986; Strauss et al., 2012), to conceptualize of future leader self cognition. Cross-lagged analysis (Chapter 4) then provided support for the hypothesized relationship between a salient future leader self and the strengthening of one's leader identity (Kwok et al., in press; Middleton et al., 2019; Komives et al., 2006) and the hypothesized relationship between leader identity and affective motivation to lead (Guillén, et al., 2015; Van Iddekinge et al., 2009; Chen & Kanfer, 2006; Lord & Hall, 2005). Overall, the support for the hypothesized relationship between future leader self salience and leader identity showed that when salient, a future leader self allows the individual (regardless of their past leadership experience), to see their leader identity as able to change over time through modifying their own behaviour (Belding et al., 2015; Fujita et al., 2006; Schutz, 1964). Support was also found for the positive relationship between leader identity and affective motivation to lead following after the positive relationship between salient future leader self and leader identity.

The second issue confronted in my thesis was the significant gap in the scholarly literature about how cognition about the self as a leader impacts on leader development over time. Time-lagged analysis in Study 3 (Chapter 4) indicated how proactive leadership behaviours can emerge with the future leader self cognition becoming salient (Badura et al., 2020; DeRue & Ashford, 2010; Parker et al., 2019; Baltes, 1997). This aligns with the fundamental principles of self-determination theory which emphasize how decisions to engage in any form of proactive behaviour are largely determined by the self-relevance of the consequences of these behaviours to one's long-term goals (Parker et al., 2006; Deci & Ryan, 1985; Waytz et al., 2015). Indeed, the future leader self can be used to encourage the individual to think more critically about how they can develop as a leader (Strauss et al., 2012); configuring how they can make further progress towards reducing this discrepancy between current and future leader self on their own terms (Markus & Nurius, 1986; Higgins, 1987; Hoyle & Sherril, 2006). This also suggests that future leader self cognition could encourage individuals to view leadership as a long-term development goal and to prioritize leader identity over other possible identities that could be enacted in the same social context (Ramarajan et al., 2014; Markus & Wurf, 1987). With this in mind, an important area of future research will be to gain further understanding of how organizations can best support the individual's progress towards their leadership goals. This progress over time is likely to be the key factor in determining whether the individual continues to self-regulate behaviour based on their future leader self goal (Carver & Scheier, 1998; Johnson et al., 2006; Parker et al., 2010). This is likely to depend on developing social environments that provide individuals with the opportunity to enact an identity as a leader and to gain leadership experiences that are appropriate for the individual's current stage of development as a leader (Chen & Kanfer, 2006; Kanfer et al., 2001). Trainings on leadership skills also present another way in which individuals can be encouraged to make progress towards their desired future leader self; so

long as the content of such trainings can provide individuals with a principle-based understanding of how they can enact appropriate leadership behaviours that will increase their chances to gain leadership roles and experiences in the future (Mumford et al., 2017; Shamir et al., 1993).

Third, preliminary analysis in Chapter 3 suggested that future possible selves cognitive sense-making is a more positive influence on leader identity and affective motivation to lead than comparative-based cognitive sense-making focused on self-to-leader exemplars or self-to-leader prototype comparisons (Guillén et al., 2015; Ritter & Lord, 2007). It is likely that self-to-leader comparative sense-making is harder for individuals to draw a deeper personal meaning for becoming a leader at a substantive enough level that would be perceived to justify the additional risks and costs that will be incurred over time from leading and identifying as a leader (Lanaj et al., 2021; Eccles et al., 1983). In fact, self-to-leader comparative sense-making likely operates more as a way of assessing one's current leadership effectiveness rather than as a way of drawing greater meaning for becoming a leader (Ritter & Lord, 2007).

2. Contributions for Leader Identity Theory

Leader identity represents the keystone element of leader development because it influences affective and behavioural responses towards leading others as well as the roles and experiences that the individual feels motivated to engage in (Miscenko et al., 2017; Day & Harrison, 2007; Lord & Hall, 2005; DeRue & Ashford, 2010; Kwok et al., 2018; DeRue et al., 2012; Day & Sin, 2011; DeRue & Wellman, 2009). My thesis provided greater clarity on the reasons behind why someone seeks out such leadership experiences in the first place and the extent to which continuing to strengthen the leader identity largely depends on the level of prioritization and commitment that the individual has for this particular identity (Burke, 2006; Burke & Reitzes, 1991; Burke & Stets, 1999; Stryker & Serpe, 1982).

Future Leader Self Cognition and its Influence on Leader Identity

First, my thesis establishes what the individual must do in order to strengthen their leader identity (Miscenko et al., 2017; Baumeister, 1986); focusing on how individuals can shape their own perception as a leader through future possible selves cognition (Waytz et al., 2015; Markus & Wurf, 1987; Lord & Brown, 2004). Through its empirical research, my thesis demonstrated how the individual can begin to identify as future *possible* leaders before they can go on to claim an identity as a leader in the social setting (Anseel et al., 2017; Ibarra, 1999). This is useful in leader development as future leader self cognition allows the individual to identify as a leader on their own terms and to develop as a leader on a time frame that works best for them because it is driven by a desire to make progress towards a self-determined goal related to strengthening one's leader identity (Strauss & Parker, 2018; Higgins, 1987; Anseel et al., 2017; Hoyle & Sherril, 2006; Cross & Markus, 1994; Inglehart et al., 1988).

Leader Identity and Leadership Self-Regulation Over Time

Second, my thesis accounts for the powerful influence of time in the leader identity development process by examining the impact of leader identity on the leadership self-regulation process (Carver & Scheier, 1998; Kark & Van Dijk, 2007). In Study 1 (Chapter 3), and Study 2 and Study 3 (Chapter 4), my thesis demonstrates how leader identity acts as a mediator between future leader self cognition and affective motivation to lead. This suggests that affective motivation to lead represents an emotional response to affirm the leader identity and uphold the standards of the desired future leader self through leadership behaviours that can reduce the discrepancy between the current and future leader self (Burke, 2006; Carver & Scheier, 1998; Deci & Ryan, 2000; Latham & Locke, 1991). This is significant because without an impactful shift in the individual's self-regulation, prior identities that have been consistently enacted by the individual are likely to continue to direct their behaviour in social contexts going forwards (DeRue et al., 2009; Day & Sin, 2011; DeShon & Gillespie, 2005).

An issue identified in my second paper (Chapter 4) was the challenge of ensuring that the impact of leader identity on affective motivation to lead does not fade over time (Fischer et al., 2017). Notably, Study 2 (Chapter 4) was conducted over the course of a year and showed that leader identity did not predict affective motivation to lead. It is likely that the individual will need to feel like they are making a sufficient level of progress in their development as a leader over time in order to continually affirm this identity as a leader (Parker et al., 2006; DeShon & Gillespie, 2005; Locke & Latham, 2002; Crant, 2000). This might involve elaborating further on one's future leader self (Strauss et al., 2012), but it is more likely that progress will need to involve steps being taken towards actualizing the future leader self in social contexts (DeRue & Ashford, 2010) at a satisfactory speed of progress (Johnson et al., 2006; Johnson et al., 2013).

Leader Identity Strength and Leader Identity Prioritization

Third, in Study 4, my thesis addresses the issue of identity prioritization (Ramarajan, 2014; Burke & Stets, 2009). My thesis recognized how an identity as a leader is just one of many possible identities that an individual could attempt to enact in the given social context (Alvesson et al., 2008; Stryker & Burke, 2000), with their decisions often based upon cost-benefit analysis of the utility of enacting the leader identity in comparison to other possible social identities (Lanaj et al., 2021; Welbourne & Patterson, 2017; Vroom, 1964). Drawing upon identity theory and hierarchy of salience theory (Stryker & Burke, 2000; Markus & Wurf, 1987), my thesis argues that one's leader identity strength (Hiller, 2005) is conceptually distinct to one's leader identity prioritization in comparison to alternative identities (Stryker & Serpe, 1994; Burke & Stets, 2009; Stryker & Burke, 2000). Thus, the impact of the leader identity development training program was investigated in terms of changes over time in both participants' leader identity strength and leader identity priority so as to be able to gain a more

holistic understanding of how the specific training content impacted on participants' leader identity (Chapter 5).

Study 4 provided critical support for the hypothesized claim that leader identity development training facilitates one's leader identity becoming prioritized above other alternative identities that could be enacted in the same social context (Stryker, 2000; Ramarajan, 2014; Burke & Stets, 2009) and positively impacts on participants' initiating structure leadership behaviours (Halpin, 1957; Hemphill et al., 1951). It is likely that the training session's focus on self-reflection and future planning was effective in helping participants to develop a deeper 'meaning' for identifying as a leader (the first element of the multidomain leader identity development theory; Clapp-Smith et al., 2019) but not the other three elements of the multidomain leader identity development theory because these specific elements of one's leader identity will likely need to be developed through enacting the identity in real social settings (Hammond et al., 2017; Kayes, 2002; DeRue & Wellman, 2009). In particular, results indicated that the leader identity development training did not directly strengthen leader identity in and of itself (Hiller, 2005). Potentially, this could mean that leader identity development actually should be approached as a process that emerges in gradual stages over time whereby the individual first develops a self-relevant meaning as a leader and prioritizes their leader identity more, and then later on begins to strengthen their leader identity further through leadership experiences (Hammond et al., 2017; Clapp-Smith et al., 2019; DeRue & Ashford, 2010).

Leader Identity Development Training

Based on my analysis of the overall findings, my thesis indicates that leader identity development training programs will likely need to be combined with other support mechanisms if they are to fully support all four elements that comprise an individual's identity as a leader according to Clapp-Smith and colleagues' (2019) theory (meaning, strength, levels

of construal, integration across contexts). For example, strengthening one's leader identity would actually be helped more by participants being able to engage in challenging work assignments and experiences that provide opportunities to learn more about how to lead in practice (McCall, 2010; McCauley et al., 1995; O'Connell, 2014). Closer attention is also needed for the third element of the multi-domain leader identity development theory (Clapp-Smith et al., 2019; Hammond et al., 2017) involving the extent to which the level of self-construal (individual, relational, collective) from which the leader identity is being enacted at because prior research suggests that this will likely influence whether the individual can successfully claim the leader identity in the given moment in time and social context (Johnson et al., 2012; Brewer & Schneider, 1990).

Overall, findings indicate that participants need to be developmentally ready and motivated to fully engage in leader identity development training and to maximize the benefits from such trainings (Avolio & Hannah, 2008). Developing an identity as a leader is clearly a distinct process from the development of many other social identities because of the extensive time that it can take to develop a leader identity as well as the fact that the individual is not in full control of developing the identity further as it requires the approval of others in the social context (Savani & Zhou, 2019; DeRue & Ashford, 2010). Training that is centred upon strengthening one's identity as a leader makes these challenges in developing the identity more salient which means that the individual will need to approach leadership roles and experiences with a growth mindset in which developing an identity as a leader is seen as more of a long-term goal that is both possible and self-relevant (Dweck, 2006; Molden & Dweck, 2006; Savani & Zhou, 2019). The results suggest that when participants have a salient future leader self their leader identity is strengthened over time as they go through the leader identity development training.

Collective Self-Concept and Leader Identity

Building upon this, it is also worth remembering that Chapter 3 highlighted how collective self-concept can be a moderator to the positive relationship between future leader self salience and leader identity. Therefore, it is reasonable to assume that the prospective leader is likely to identify more closely with the role of leadership and feel more motivated to influence the group when they actually care about the group that they are seeking to lead (e.g., have high collective self-concept) (Jackson et al., 2006; Ashforth & Johnson, 2001; Kashima & Hardie, 2000; Lord et al., 1999; Miscenko & Day, 2016). This also means that the individual will need to master more complex collective-based leadership skills over time so that followers see the individual as a collective leader rather than simply as a collective team-member (Stam et al., 2014; Mumford et al., 2017). Another highlighted area for future research will be the development of a scale that can comprehensively measure each of the four elements of the multidomain leader identity development theory more accurately (Clapp-Smith et al., 2019). This could be tested through an equivalence analysis conducted across multiple participant samples (Hall et al., 2021).

Developmental Readiness and Leader Identity Development

Finally, in alignment with self-narrative theory (Avolio & Hannah, 2008), Study 4 showed that leader developmental readiness factors such as future leader self salience were also shown to be key predictors of leader identity strengthening over time. This suggests that organizations will need to ensure that individuals who are selected to participate in leadership trainings are prepared to maximize the training's teachings and insights and will have opportunities after the training to implement the lessons learnt.

3. Contributions for Motivation to Lead Theory

Due to the centrality of leader identity in leader development theory, it can be easy to forget the long-term significance of affective motivation to lead on the process (Badura et al.,

2020; Chan & Drasgow, 2001). As the goal is to develop more individuals who are both interested to step up and lead in current situations and to develop as leaders over time through continually improving their leadership skills (Lord & Hall, 2005), my thesis specifically argued that greater focus on affective motivation to lead (Chan & Drasgow, 2001) is needed in leader development research because this particular dimension of motivation to lead represents an intrinsic desire to lead that is most conducive for sustaining an individual's interest and commitment towards leader development processes over the long-term than compared to reflexive (non-calculative) and duty-bound (social-normative) reasonings (Badura et al., 2020; Parker et al., 2010; Deci & Ryan, 2000; Amabile et al., 1994; Kanfer et al., 2017; Kanfer & Ackerman, 1989; Campbell & Pritchard, 1976). This is particularly relevant when we consider how previous empirical research by Miscenko and colleagues (2017) suggests that leader identity might initially drop before it eventually rises, particularly for those individuals who initially go into leadership trainings with limited leadership experience and who as a result of the training they participate in then gain a clearer perspective of the challenges of becoming a leader. In addition, Baltes (1987) argues that from a longitudinal perspective, development processes tend to occur with both progress and setbacks over time. In the face of such potential setbacks and unexpected challenges, affective motivation to lead is a response from an individual to leadership opportunities that is useful for helping the individual to sustain interest and effort towards making progress in gaining and maintaining leadership roles (Anseel et al., 2017; Eccles & Wigfield, 2002).

First, the empirical work in Study 1 (Chapter 3), and then in Study 2 and Study 3 (Chapter 4) within my thesis provided supporting evidence of how this important affective response to opportunities to lead in social contexts is derived from a self-constructed leader identity. Prior research has often focused on the more stable antecedents of motivation to lead such as cognitive ability (Lord et al., 1986) and personality (Erez & Judge, 2001); treating

motivation to lead almost as a pre-determined outcome (Chan & Drasgow, 2001). Whilst such stable antecedents can partially influence motivation to lead, my thesis showed that a focus on flexible antecedents of affective motivation to lead like leader identity which are self-determined by the individual through cognition can encourage more individuals to develop as leaders across all levels or organizations and that also ensures that the individual sustains effort and energy to continue their progress (Kark & Van Dijk, 2007).

Second, my thesis demonstrates how affective motivation to lead has a positive association with the individual enacting proactive leadership behaviours which are seen to emerge from the individual feeling intrinsically motivated to lead and to enact such behaviours in pursuit of their future leader self long-term goal (Strauss et al., 2012; Parker et al., 2006; Parker et al., 2010). This relationship is important because it provides further insight into the process by which an individual can take the initiative in leading others themselves and begin to enact an identity as a leader in social contexts. The implications for leadership behaviour are discussed below.

4. Contributions for Leadership Behaviours Theory

Proactive leadership behaviours represent actions that every *possible* and *current* leader takes in order to enact their leader identity in social contexts to gain further experiences in leadership (Badura et al., 2020; Sonnentag, 2003). My thesis contributes to addressing the issue of how such leadership behaviours emerge.

First, my thesis provides a longitudinal serial-mediation model of how proactive leadership behaviours can emerge within a range of different individuals through an integration of cognitive, identity, and affective responses over time. Findings from Study 3 (Chapter 4) support how proactive leadership behaviours emerge from viewing one's leader identity from a salient future possible self perspective which allows the individual to frame becoming a leader as a long-term goal that they can work towards (Carver & Scheier, 1998; Johnson et al., 2006;

Parker et al., 2010; Ilies & Judge, 2005; Vroom, 1964). This makes the role of leadership appear as a more meaningful part of the self that is relevant enough to regulate behaviour towards reducing the discrepancy between current and future selves (Alvesson & Willmott, 2002; Stryker & Burke, 2000). As one's leader identity is strengthened, the individual begins to interpret their role in the social context differently and thus, to express this through enacting behaviours that verify the identity to themselves and to others within the social context (Lord & Hall, 2005; Burke, 1991). Not only does the theoretical model provide an explanation of how proactive behaviours emerge, but the approach that it takes is also one in which the individual makes self-determined choices about their future and thus meets my thesis's broader objective of finding out how more individuals can incorporate leadership into how they behave on a day-to-day basis (Lanaj et al., 2021).

Second, my thesis argues that in order for the leader development process to become sustainable and enduring over time, it must be self-initiated by the individual proactively seizing opportunities to lead that are self-relevant (Carver & Scheier, 1998; Markus & Nurius, 1986). Increased proactivity in leadership represents an acknowledgement by an individual that becoming a leader is both a self-relevant priority and that it is their responsibility to take actions in striving towards actualizing this objective such as finding an appropriate leadership role to engage with at one's current stage of development as a leader (Lord & Hall, 2005; Heslin & Keating, 2017; Avolio et al., 2009). This has long-term implications because individuals that take such proactive actions are more likely to go on to find leadership experiences that enhance their skills as a leader and thus have greater influence on the group's direction and performance (DeRue & Ashford, 2010; McCall, 2010; Lord & Hall, 2005). This is even more important for those individuals who do not currently have readily available opportunities to lead such as those individuals who are not currently in a formal leadership

position who will have to take action themselves in order to further their own development as leaders.

One concern is that some individuals who do become proactive in seeking opportunities to lead might repeatedly enact leadership behaviours that do not actually appeal to followers in the given social context. This could be a particular problem for individuals who have not had previous experience in leadership and who do not have an accurate understanding as to what specific leadership behaviours are effective for the given context and time in a social setting in which they could attempt to enact an identity as a leader (Lord & Hall, 2005). Over time, this might cause the individual to lose interest in their own development as a leader as a result of repeated failures in having their claims to leadership roles accepted (DeRue et al., 2009). As Day and colleagues (2009) elucidate, leader development processes are cyclical in that they tend to build momentum in either a positive (upward progress) or negative (regression of one's identification and capabilities to lead) direction. Hence, future research will need to look at not only self-reflective identity work, but also at leader identity work related to leadership claiming strategies taught in the leadership training so that participants can gain a strategic understanding of the interactive process of proactive claiming behaviours that need to then be granted from others within that social context that the individual is attempting to lead in (DeRue & Ashford, 2010; Shamir et al., 1993). This is important because the specific proactive leadership behaviours that the individual chooses to enact need to be appropriate for the given social context so as to increase the likelihood of their proactivity being rewarded with further opportunities to lead from others (Lord et al., 2001; Shamir et al., 1993). As a starting point, my thesis in Study 4 (Chapter 5) focused on initiating structure leadership behaviours and consideration leadership behaviours which represent prototypical behaviours that increase the likelihood of the individual being perceived as a leader by others (Marchiondo et al., 2015; DeRue & Ashford, 2010; Judge & Piccolo, 2004) and positively

influence leader performance and effectiveness (DeRue et al., 2011; Judge et al., 2004). Further research will need to investigate how individuals can augment these behaviours over time by enacting more *transformational* leadership behaviours that support and develop followers and improve employees' job satisfaction (Judge & Piccolo, 2004; Bass, 1999; Avolio, 1999). This is because such behaviours continue to represent effective actions that engage and motivate followers and can help an individual to successfully claim opportunities to continue to lead within a social group (DeRue & Ashford et al., 2010; Shamir et al., 1993; Bass, 1985).

5. Contributions for Leader Development Theory

My thesis investigates the antecedents and outcomes of leader identity development (Day et al., 2009). First, my thesis developed a leadership self-regulation model (Carver & Scheier, 1998) that originates from developing a deeper purpose surrounding becoming a leader by engaging in self-determined future self cognition that encourages the individual to identify as a leader both presently, as well as going forwards into the future. This is most likely to help sustain affective motivation to lead and proactive leadership behaviour over time (Strauss et al., 2012; Johnson et al., 2006; Austin & Vancouver, 1996). At the same time, many individuals will still have difficulty with stepping up to lead due to circumstances outside of their control that have negative effects on their leadership self-efficacy and their ability to envision identifying as a leader (Epitropaki, 2018; Barling & Weatherhead, 2016; Elprana et al., 2015). Although, these variations do not discredit the validity of the overall leadership self-regulation model tested in Chapter 4, they suggest that the model is likely to be more effective when the self-regulating individual is in an "identity safe environment" (Davies et al., 2005, p. 285) that provides appropriate support; including role models (Lockwood & Kunda, 1997) and appropriate developmental opportunities for the individual's current stage of development as a leader (Ashforth & Schinoff, 2016; McCall, 2010; DeRue & Wellman, 2009).

Second, my thesis demonstrates the importance of affective motivation to lead in leader development (Chan & Drasgow, 2001; Badura et al., 2020). This form of motivation is intrinsic in nature and impacts on the desire of the individual to enact proactive leadership behaviour and to allocate greater focus and efforts towards the advancement of the particular identity in question (Lanaj et al., 2021). At the same time, in highlighting the importance of affective motivation to lead, my thesis also identifies a potential area of future research related to the individual's perceived speed of progress in their development as a leader (Shipp & Cole, 2015; Johnson et al., 2013). It is likely that when the individual does not perceive that they are making progress at a satisfactory pace towards their desired future leader self (Johnson et al., 2013; Johnson et al., 2006; Carver & Scheier, 1998; Lord & Levy, 1984), the individual can eventually become demotivated and possibly even face negative emotions such as dissatisfaction and loss of confidence that then can cause the individual to avoid or even drop the stated objective altogether and lower their commitment towards developing as a leader (Day & Sin, 2011; Day & Dragoni, 2015). Thus, the perception of one's overall progress in developing as a leader is likely to be a key part of ensuring that the individual continues to feel intrinsically motivated to lead.

Third, my thesis makes theoretical contributions in relation to how leader development emerges over time. As stated earlier, in Chapter 4, my thesis tests a conceptual model of leadership self-regulation (Carver & Scheier, 1998) in two empirical studies; with one being over a year in length (Study 2) and the other occurring over several months (Study 3) (Bono & McNamara, 2011; Grant & Berry, 2011). In finding that only in the shorter time frame (Study 3), the hypothesized relationship between leader identity and affective motivation to lead was supported, this gave an initial indication that the affective component of the hypothesized model (affective motivation to lead) is most likely to vary based on the proximate feelings of leader identification at a particular moment in time and that the response could dissipate unless

the individual's leader identity is continually reaffirmed (Epitropaki et al., 2017); likely requiring positive progress to be made towards the individual's specific leader development goal (Strauss & Parker, 2018). Study 3 provided evidence to support the theoretical model, suggesting that proactive leadership behaviour can emerge relatively quickly and possibly be sustained over time when the individual keeps a future leader self salient.

Fourth, through applying the multidomain leader identity development theory (Clapp-Smith et al., 2019; Hammond et al., 2017) and using a longitudinal quasi-experiment research design, my thesis provides a systematic analysis of the impact of a leader identity development training program over time; showing how such training can make leader identity become more of a priority for training participants over alternative identities that could be enacted in the same social context. This is important as the goal is to ensure that individuals continue to make favourable decisions about developing further as a leader despite having limited resources of time and energy (Lanaj et al., 2021; Welbourne & Paterson, 2017; Thomas, 2015; Vroom, 1964; Eccles et al., 1983). However, the training did not directly strengthen the participants' leader identity which suggests that the process of leader identity development cannot be completed through participating in training programs alone. Other aspects of one's leader identity (strength, levels of self-construal, and integration across contexts) outside of developing a more self-relevant meaning of one's leader identity were not developed through the training program and will likely need to be advanced in different ways such as through a combination of trainings and appropriate leadership assignments for participants in their real work settings (Clapp-Smith et al., 2019; Hammond et al., 2017).

Overall, the empirical work in Study 1 (Chapter 3), and Study 2 and Study 3 (Chapter 4) demonstrates how individuals can take self-initiated action towards developing as a leader. Most importantly, Study 3 assessed a longitudinal model of leadership self-regulation moving from the future leader self cognition through to leader identity, affective motivation to lead,

and then proactive leadership behaviour. Study 4 (Chapter 5) then provided insight into the extent to which training contributes to leader identity development. The impact of a salient future leader self as a developmental readiness variable in Study 4 reinforced earlier findings in Study 1, Study 2, and Study 3 on the variables significant impact on leader identity.

Practical Implications

Broadening the range of individuals who would be open to the possibility of leading has always been a challenging objective (Epitropaki, 2018; DeRue et al., 2009; Guillén et al., 2015; Deloitte, 2012). Yet, when we step back and reflect on what a prospective leader actually would need in order to be able to identify and feel motivated to proactively engage in becoming a leader, there are new solutions that were previously not thought of. In doing this, I developed a novel form of cognition (future leader self) that can be seen to represent an effective alternative approach to how most individuals typically think about the self in relation to leadership (self-evaluations are often based on implicit leadership theories; Epitropaki & Martin, 2004 or on negative prior leadership experiences; DeShon & Gillespie, 2005), that offers several advantages that most prospective leaders are likely to benefit from applying; even clarifying and speeding up the process of their self-development as a leader.

Implications for Prospective Leaders and Managers

First, future leader self cognition can help the individual find what their motivation to lead is. This in turn makes the likelihood of sustained interest and pursuit in developing as a leader more probable because it allows the individual to view becoming a leader as more of a long-term goal that they can work towards through construing a gap in time between where they are currently and where they want to be in the future as a leader (Higgins, 1987; Strauss & Parker, 2018). By interpreting self-identity as flexible, the individual then gains a greater level of perceived control over how they come to define themselves and the future-oriented perspectives also encourages further planning and strategy about how this discrepancy between

the current and future self will be reduced (Johnson et al., 2006; Carver & Scheier, 1998). At the same time, the future leader self has to be kept salient in the individual's working self-concept in order for future planning and strategies to be enacted (Johnson et al., 2006; Austin & Vancouver, 1996; Markus & Wurf, 1987). Second, regardless of prior leadership experiences, future-based cognition can provide a basis for more individuals to consider leadership on their own terms and to access leadership roles that suit them best, whether that be in formal management roles or in informal leadership positions.

Second, my thesis shows that present leadership shortages can be solved within organizations through policies that focus on ensuring the sustained development of more individuals as a leader. By enabling individuals to construe their leader identity as capable of being changed across time, the individual can configure a future that they want that is motivational and that encourages them to self-regulate their own actions on a consistent basis towards moving closer its actualization over time through proactive leadership behaviour (Strauss & Parker, 2018; Carver & Scheier, 1998). Admittedly there are range of factors that can impact on the extent to which this is effective and sustainable. For example, in practice, the level of access to opportunities to lead affects whether the cognition will be kept salient and can be acted upon so that the individual can make further progress in their own self-development, as will whether these opportunities are suitable for the individual at their current stage of development and within the current context of their life (Day & Harrison, 2007; Leary & Tangney, 2003). Yet, these factors are also issues that the organization can significantly affect (Day & Dragoni, 2015; Parker et al., 2006). This is why my thesis argues that effective leader development strategies involve both individual self-regulatory processes and organizational support such as trainings, the provision of opportunities for prospective leaders to step forward to lead on their own terms (Parker et al., 2006), and accessible leader role models (Lockwood & Kunda, 1997; Brown & Treviño, 2014; Gibson, 2004).

Implications for Organizations

Third, my thesis puts expectations for leader development in perspective for the individual and their organizations. In Study 2 and Study 3 (Chapter 4), a process model of how a wide range of individuals can take self-initiated action towards becoming a leader is presented and tested that demonstrates how organizations should begin to place greater emphasis than they currently do on first understanding how the individual becomes self-motivated to lead. This is essential to ensure the organizational investment into leader development is appropriated wisely towards supporting the specific individuals who continue to progress further as leaders over time (Athanasopoulou & Dopson, 2018; Wakefield et al., 2016). This is because intrinsically motivated individuals are most likely to be proactive in shaping and managing the direction of their future as a leader (Strauss et al., 2012) and to subsequently go on to gain leadership experiences that further develop their leadership skills (Lord & Hall, 2005; Day & Harrison, 2007, Miscenko & Day, 2016). Ensuring that individuals remain self-motivated and proactive will likely be the best way to ensure that organizations reciprocate and remain committed to making further investments into supporting leader development.

My thesis also showed how well-researched leader identity development trainings can become a useful tool in supporting the development of employees in organizations as leaders (Lacerenza et al., 2017; Heckman, 2005). My thesis provides a clearer perspective on the impact of leadership training whose content was specifically focused on leader identity development (Clapp-Smith et al., 2019; Hammond et al., 2017). Practically, the implications are that this leader identity development training is only useful to the extent that it can make individuals prioritize their leader identity over other possible identities and begin initiating structure leadership behaviour (Stryker & Burke, 2000; Burke & Stets, 2009; Lanaj et al., 2021). Of note, leader identity development training can also be a useful way to help

participants gain a deeper understanding of the nature of how successful leader development processes unfold as more of a gradual process of incremental progress that takes considerable time; helping individuals to frame becoming a leader as more of a long-term development pursuit rather than as an instantaneous decision in a given moment in time (Clapp-Smith et al., 2019; Strauss & Parker, 2018; Day & Sin, 2011).

Finally, my thesis provides empirical research on leader development that should encourage organizations to take a more expansive outlook at how they approach leader development (Badura et al., 2019; Shen & Canella, 2003); taking a broader scope for developing flexible norms and criteria for leadership that allow individuals to lead at different moments in time; both in formal leadership roles and in informal leadership roles. The key to this, will be for organizations to craft a work environment in which a wide variety of employees feel comfortable enough to enact an identity as a leader in their social context and to express this through proactive leadership behaviours (Ibarra, 1999; Davies et al., 2005). This can begin wider leadership development processes in which there are leader role models (Brown & Treviño, 2014; Lockwood & Kunda, 1997) and other positive cascading effects from a work climate that encourages further leader development (Howell & Shamir, 2005; Bass et al., 1987; Lord & Hall, 2005). Overall, this reflects the need for organizations to develop a more sophisticated system for how they develop leaders that combines different support elements into their strategy (Salas et al., 2012; Wakefield et al., 2016; McCall, 2010). This centres around work environments that are conducive for all four elements of the multidomain leader identity development theory to be developed within individuals (Clapp-Smith et al., 2019; Hammond et al., 2017), which means opening up leadership experiences and opportunities to a wider range of people (Epitropaki, 2018). If this can be communicated in a way that shows how leadership is relevant across all levels within an organization, it will also provide a way to highlight how the return on investment in leadership for organizations

can extend beyond just improvements to the effectiveness of the senior management teams (Riggio, 2008).

Limitations

My thesis made every possible effort to ensure its empirical research was conducted with the highest possible methodological rigour. Yet, there were still several broad limitations from the empirical research within my thesis that are worthy of further discussion. These limitations primarily related to the practical challenges of collecting longitudinal data within organizations. The three most important limitations of my thesis are: declining response rates, the need for more measurement time points, and self-reporting biases. Importantly, my thesis emphasizes how these limitations can be reduced further in future research through more pragmatic strategies for how data is collected. The thrust of my argument is that researchers need to continue to strengthen partnerships with organizations and communicate the clear benefits for the organization of partnering with researchers on longitudinal research projects.

Declining Response Rates

A consistent issue throughout the empirical studies within my thesis was that response rates frequently declined over each measurement time point, making it challenging to collect a sample that has been consistently measured across all of the hypothesized time points.

Declining response rates can become a concern because they mean that there is too little power to identify effects later on during the analysis stages of a study (Podsakoff et al., 2012). In both Study 2 and Study 3 (Chapter 4), participation rates declined over each measurement time point. In Study 2, response rates declined as a result of failed matching of anonymous codes over time, something that could have been overcome through devising a more stringent coding system. In Study 3, responses were collected as an online panel study and response rates declined at each given measurement wave. This is something that represents the limits of data

collection from online panel service companies and is why participant samples from organizations tends to be much more preferable.

Similar issues with sample size arose in Study 4 (Chapter 5) in which an experimental-longitudinal leader identity development training study was conducted. Data was collected from two organizations who could only offer a limited number of employees to participate in the study. Whilst an initial 96 participants were recruited, ‘drop-outs’ occurred because of external circumstances, resulting in the study having a final sample of 71 participants. Such declining response rates are to be expected in the increasingly dynamic and project-based style of work that many organizational employees are now operating in. This makes scheduling trainings and suitable data collection times for researchers all the more challenging. Moreover, there can also be different costs and benefits from different research designs. For example, in order to ensure experimental rigour, Study 4 split its total sample into a training group ($N = 35$) and a control group ($N = 36$) who received none of the experimental condition. Whilst the longitudinal and quasi-experimental design helped to increase the experimental rigour of Study 4, it also meant that the sample size of those who went through the leader identity development training course was relatively modest. This meant that only simple forms of latent growth curve modelling could be tested on the training participants’ trajectories of leader identity and leadership behaviour over time (Lonati et al., 2018). It is likely that the best way to overcome the negative effect of declining response rate is through increasing the initial participant recruitment size altogether at the start of the study. Gaining access to a bigger participant size might also be helped by conveying the value of expanding the given project to senior-decision makers of the organization.

Measurement Time Points

Leadership processes can become reciprocal over time and a key strength of my thesis was that key hypothesized relationships were tested in Study 2 and Study 3 (Chapter 4) for

reciprocal effects (Day et al., 2009; Fischer et al., 2017; Shamir, 2011; Podsakoff et al., 2012). Yet, the ability to apply methods such as cross-lagged and time-lagged analysis that can accurately test for reciprocal effects is always dependent on being able to measure constructs at the adequate and appropriate number of time points (McClellan et al., 2019; Ancona et al., 2001). This can be tricky to perfect as measuring at the requisite number of time points also requires considering the length of the time gap has to be adequate for a possible reciprocal relationship to emerge (Mitchell & James, 2001; Castillo & Trinh, 2018; Podsakoff et al., 2003; Johnson et al., 2011). For example, many processes might take months to unfold which extends further the difficulty in measuring at enough time points (Fischer et al., 2017; Shipp & Cole, 2015). This issue was seen in the empirical studies within my thesis. In particular, the three-wave online panel study within Study 3 (Chapter 4), would have benefitted from having an additional time point as this would have enabled testing of the reciprocal effects between affective motivation to lead and proactive leadership behaviour to determine the direction of the relationship between the two variables (Fischer et al., 2017). The consequences of not having this additional time point meant that same-source method biases likely had some influence on this particular relationship (Podsakoff et al., 2003; Spector et al., 2019; Johnson et al., 2011; Ostroff et al., 2002).

In my leader identity development training study (Study 4), there were an adequate number of time points because there was a pre-test survey, surveying after each training session and a post-test survey several months after the final training session. However, if future studies are to expand and test within-person change as a result of both leader identity development training and day-to-day challenging leadership assignments (McCall, 2010; McCauley et al., 1995; O'Connell, 2014), there will likely need to be a higher number of measurement time points to assess more approximate shifts as a result of new stimuli (McClellan et al., 2019; Roe, 2008). Again, in terms, of how such measurement issues are

resolved, I circle back to the point I made earlier and in Study 4 (Chapter 5) about the importance of strengthening the partnerships between research teams and organizations so that scholars are able to effectively put the advances being made in management research methodology into practice and deliver on calls for more longitudinal and experimental empirical work in leader development research (Day et al., 2009; Day, 2013). A key reason of how my thesis was able to collect longitudinal data from organizations was by demonstrating to the senior-decision makers within the organization early on the value of collecting at multiple time points so as to be able to track change and progress over time.

Self-Reported Ratings

A final limitation of my thesis that should be discussed relates to the self-reported ratings of constructs within my thesis (Podsakoff et al., 2012; Spector et al., 2019). As the focus of my thesis was on leader development, self-reported ratings were effective in measuring the perspective of the prospective leader and many of the same-source biases issues could be overcome through the longitudinal research design (Mitchell & James, 2001; Castillo & Trinh, 2018; Podsakoff et al., 2003; Johnson et al., 2011). The individual leader is present for each of the times that the leadership behaviour is enacted and so concerns about the self-reporting bias (Podsakoff et al., 2003) are supposedly reduced as my focus is on leader development and how the individual evaluates their own progress in emerging as a leader (McClean et al., 2019; Courtright et al., 2016). Yet, responses were self-reported and ideally, it would be useful to also have an objective assessment of behavioural change over time by an independent third-party (Podsakoff et al., 2012). In addition, for future research that seeks to examine leader identity development at the interpersonal level such as the claiming and granting process of leader identities (DeRue & Ashford, 2010), the perspective of the follower will also be required.

Future Research

Future Leader Self and Sustaining Proactive Leadership Behaviour Over Time

My thesis shows how individuals can begin to identify and feel motivated to lead through making a future leader self salient (Strauss et al., 2012; Markus & Nurius, 1986). In order for leadership self-regulation processes to be sustained over time, the future leader self will need to be kept as a personal priority for the individual so that the individual continues to have a salient reason for remaining willing to devote their energy and attention towards pursuing and regulating their behaviour towards becoming a leader over other pursuits (Carver & Scheier, 1998; Parker et al., 2010; Lanaj et al., 2021; Vroom, 1964). Thus, a key area for future research will be to investigate the perceived progress the individual feels that they are making towards moving towards their future leader self because this will influence whether the process of leadership self-regulation continues. This will involve investigating what the impact is of the individual making progress towards reducing the discrepancy between current and desired future leader self on their leader identity and affective motivation to lead over time (Carver & Scheier, 1998; Parker et al., 2010; Vroom, 1964).

As stated in Chapter 4, future research can conduct experimental research that looks at the influence that a supportive external environment that provides opportunities to pursue one's future leader self has on the individual feeling more comfortable to enact an identity as a leader and to make efforts towards reducing the discrepancy between their current and future leader self (McClellan et al., 2019). There are many different factors of the prospective leader's environment that could be conducive for moving closer towards the future leader self and so research that can examine the influence of external environmental forces such as the support available in the work climate (Chen & Kanfer, 2006; Kanfer et al., 2001) and the role models available (Lockwood & Kunda, 1997) on an individual's pursuit of a future leader self would also be helpful in understanding how context influences the process. This could help explain

why some work environments facilitate leader development in a wider range of people than do others.

Future Leader Self and Self-to-Leader Comparative Sense-Making

However, future research might show that at the appropriate time, self-to-leader comparative work could be used by the individual as a source of feedback that they could draw upon to further understand how they can improve as a leader and reduce the discrepancy between their own current and future leader self. The potential combination of these two forms of cognitive sense-making (future possible selves and present-based comparisons of the self to exemplary or prototypical leaders) can be seen when reflecting on the conceptual differences between leader developmental readiness and leader developmental need (Kwok et al., in press). Leader developmental readiness is typically seen as related to a desire to improve and change (Avolio & Hannah, 2009; Kwok et al., in press) and is thus likely to centre around the construction and elaboration of the future leader self because this provides the individual with a long-term goal for who one wants to become as a leader that provides a source of motivation to learn and find new opportunities to lead (Strauss et al., 2012; Markus & Nurius, 1986). However, present-oriented self-to-leader comparisons (Guillén et al., 2015) could be a form of cognitive sense-making that could be used as a way to help the individual further understand what their leader developmental needs are by using an exemplary or prototypical leader as a source of learning. These exemplars or prototypes of leaders could be used by the individual to recognize skills and behaviours they need to develop further in order to reduce the size of the gap between one's current and future self (Kragt & Guenter, 2018; Kwok et al., in press).

Leader Identity Development Training and Challenging Leadership Assignments

The fourth empirical study (Chapter 5) of my thesis was the first to test the impact of a training program whose content was focused specifically on the multi-domain leader identity development activities (Clapp-Smith et al., 2019). This study was also conducted under a

quasi-experimental longitudinal research design in order to provide greater confidence in the conclusions being made about the training's effects (Martin et al., 2020). Yet, as Study 4 suggest, leader identity has different components (meaning, strength, levels, integration) and each will likely need to be developed in different ways (Clapp-Smith et al., 2019). For example, findings from Study 4 suggest that training might be helpful for enabling a wide range of individuals at different developmental readiness stages to develop greater meaning of leadership to their sense of self because activities were self-directed and focused on personal meaning rather than on any specific skills evaluation. Yet, my study's training program in its current form could not directly strengthen leader identity. Focus must now be on recognizing how leader identity development might have within-person variation impacted by leader developmental readiness factors (Avolio & Hannah, 2008; Kwok et al., in press) such as age (Charles & Carstensen, 2010; Hall et al., 2021) and that each individual will have different developmental needs based on their current stage of development (Cunliffe & Linstead, 2009; Carroll & Levy, 2010; Lord & Hall, 2005). Future research can examine the effects of this leader identity development training program if combined with leadership assignments for participants in their work settings that are appropriate for the individual's current stage of development as a leader (DeRue & Wellman, 2009; Lord & Hall, 2005; McCall, 2004). Such empirical research would enable us to understand whether leader identity development training has a more significant impact on leader identity and leadership behaviours when participants actually have appropriate opportunities to enact their leader identity in a social context (Day & Dragoni, 2015; Day et al., 2009; Heslin & Keating, 2017).

Strengthening Leader Identity

As stated above, strengthening one's leader identity is a process that is likely to require different forms of leader identity work; including at the interpersonal level in which leader identity work would be based more on learning from leadership experiences in practice

(DeRue & Wellman, 2009). There is another practical reason why leader identity development training combined with leadership experiences is important for longitudinal research on leader development. My thesis demonstrates how proactive leadership behaviours emerge from a long-term goal of a salient future leader self that acts as long-term self-regulatory goal that directs actions towards reducing the discrepancy between current and future self (Carver & Scheier, 1998; Johnson et al., 2006; Parker et al., 2010; Ilies & Judge, 2005; Vroom, 1964). Yet, as stated earlier, in order for this process to be sustained over time, further progress has to be made, and this progress usually comes from accessing leadership roles and opportunities (Carver & Scheier, 1998; Johnson et al., 2006; Parker et al., 2010; Ilies & Judge, 2005; Vroom, 1964). Thus, a reality that cannot be ignored is that these proactive leadership behaviours will need to be well-received by others within the group so as to allow the individual to access such important opportunities in leadership roles (Uhl-Bien et al., 2014; DeRue & Ashford, 2010). Whilst motivated individuals might persist regardless of setbacks to their own development as a leader, over time, repeated failed claims at gaining a leadership role are likely to cause any individual to move focus away from leadership to another pursuit that they see as more achievable (Ashforth & Schinoff, 2016; DeRue et al., 2009) and worthy of allocating their time and energy towards (Lanaj et al., 2019; Griffin et al., 2007). Therefore, developing and gaining access to leadership roles and experiences will require not only a level of proactivity and persistence from the individual, but also continual strategic learning from their experiences in leadership roles as well as determination in the face of setbacks and even rejection from the team and its members (Shamir et al., 1993; Newstead et al., in press; Mumford et al., 2012). This could potentially result in a prospective leader having to modify the terms of their claim to lead in order to eventually be granted the approval of the social group to assume leadership positions (DeRue & Ashford, 2010; Ferster & Skinner, 1957). Thus, future research might be even more focused on providing experiences that allow the individual to enact the “leadership

claiming tactics” that are taught in the leader identity development training (Hammond et al., 2017, p. 484; Shamir et al., 1993; Gagnon & Collinson. 2014; Pratt et al., 2006; Mumford et al., 2012).

Measurement of Multidomain Leader Identity Development Elements

Leader identity development theory suggested that leader identity development is a four-dimensional process involving an expansion of the meaning, strength, level of self-construal of the identity (individual, relational, collective), and the integration of the identity across different social contexts (Clapp-Smith et al., 2019). Yet, in Study 4 (Chapter 5), analysis of change over time in leader identity as a consequence of the leader identity development training was limited to measuring change using the Hiller (2005) leader identity scale and the ordinal data from leader identity prioritization relative to alternative work identities. The Hiller (2005) scale provides a robust measure of the strength of one’s leader identity but it does not measure the other three aspects related to Clapp-Smith and colleagues’ (2019) theory of leader identity development (meaning, levels of self-construal, and integration across contexts). Just as there needs to be combined support factors that facilitate the development of the different components of leader identity (meaning, strength, levels of construal, and integration), there is also a need for research to develop an accurate leader identity measurement scale of each dimension of leader identity. This would enable empirical testing of whether each of the four elements emerge at different points in time (Clapp-Smith et al., 2019; Hammond et al., 2017).

Accounting for the Perceived Velocity of Leader Development

Another significant factor that could influence the leadership self-regulatory process is the velocity/speed at which the individual perceives that they are making progress towards their desired future leader self and in developing their leader identity (Shipp & Cole, 2015). As individuals work towards developing as leaders, they will not only be assessing the amount of

progress they are making in reducing the discrepancy between their current and future leader self, they will also be assessing the speed in which this progress is being made in developing the identity as a leader (Johnson et al., 2013; Locke & Latham, 2002). For longitudinal research that can measure leader development over time from trainings and challenging assignments, future research could investigate how the perceived speed in which the individual feels they are reducing the discrepancy between current and future leader self is emerging over and how this influences the individual's proactive leadership behaviour (Johnson et al., 2013; Chang et al., 2010; Elicker et al., 2010). Making good progress in reducing this gap is likely to be vital to sustaining motivation to lead and fast velocities might even mitigate for the potentially demotivational effect of perceiving a large discrepancy between current leader self and future leader self (see Johnson et al., 2013).

Final Conclusions

My thesis formulates a self-determined approach to leader development centred around leader identity work. In the first three empirical studies, a comprehensive model of leader development that centred around future self-based cognition, self-constructed identity as a leader, affective motivation to lead, and proactive leadership behaviour was developed and tested to show how individuals can self-regulate their actions over time in a way that would further their own development as a leader. At the same time, this process should be supported by the organization. Such support will vary depending on the individual and what their current stages of development as a leader is. Indeed, in Study 4, the role of leader identity development training was examined over time, providing insights and perspective into the supplementary role of such activities to the self-determined processes of leader development. Overall, my thesis provides evidence that leader development is in fact a self-determined process (Finkelstein et al., 2018; Church & Rotolo, 2013; McCall, 2010) that is guided by one's leader identity (Lord & Hall, 2005; Day & Harrison, 2007). The role of the organization

is to help facilitate this process by providing further support and opportunities for individuals to gain leadership experiences that can further their development (Ashford & DeRue, 2012).

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Appendices

Appendix 1: Scale Measures

Leader Identity (Hiller, 2005; Study 1; Study 2)

“How descriptive is each statement of you?”

(1 = *Not at all descriptive*, 7 = *Extremely descriptive*)

1. I am a leader.
2. I see myself as a leader.
3. If I had to describe myself to others, I would include the word "leader".
4. I prefer being seen by others as a leader.

“How certain are you about the rating you gave for each statement above?”

(1 = *Not at all certain*, 7 = *Extremely certain*)

5. I am a leader.
6. I see myself as a leader.
7. If I had to describe myself to others, I would include the word "leader".
8. I prefer being seen by others as a leader.

“How important to you is this view of yourself?”

(1 = *Not at all important*, 7 = *Extremely important*)

9. I am a leader.
10. I see myself as a leader.
11. If I had to describe myself to others, I would include the word "leader".
12. I prefer being seen by others as a leader.

6-Item Leader Identity Scale (Hiller, 2005 & Rus et al., 2010; Study 3; Study 4)

“Please read the following sentences and rate how each of them describes you.”

(1 = *Not at all descriptive*, 7 = *Extremely descriptive*)

1. I am a leader.
2. I see myself as a leader.
3. If I had to describe myself to others, I would include the word "leader".
4. I prefer being seen by others as a leader.
5. Being a leader is important to who I am.
6. Being a leader is a central part of who I am.

Leader Identity Prioritization (Morgan thesis, 2021; Study 4)

“Please rank the following words in the boxes below in numeric order of the ‘most descriptive’ (1) to the ‘least descriptive’ (4) of how you see yourself.”

Leader

Team Member

Manager/Supervisor

Professional

Future Leader Self Salience (Strauss et al., 2012; Morgan thesis, 2021; Study 1, Study 2, Study 3, Study 4)

“Please indicate how characteristic each of the following statements are about your perspective on a future as a leader using a 7-point scale ranging from 1 (*Strongly disagree*) to 7 (*Strongly agree*).”

1. I can easily imagine my future self as a leader.
2. The mental picture of this future as a leader is very clear.

3. This future as a leader is very easy for me to imagine.
4. I am very clear about who and what I want to become as a leader in my future work.
5. What type of future I want in relation to being a leader is very clear in my mind.

Motivation to Lead (Chan & Drasgow, 2001; Study 1, Study 2, Study 3, Study 4)

“Please indicate to what extent you agree with each of the following sentences.”

(1 = *Strongly disagree*, 7 = *Strongly agree*)

Affective Motivation to Lead

1. Most of the time, I prefer being a leader rather than a follower when working in a group.
2. I am the type of person who is not interested to lead others (R).
3. I am definitely not a leader by nature (R).
4. I am the type of person who likes to be in charge of others.
5. I believe I can contribute more to a group if I am a follower rather than a leader (R).
6. I usually want to be the leader in the groups that I work in.
7. I am the type who would actively support a leader but prefers not to be appointed as leader (R).
8. I have a tendency to take charge in most groups or teams that I work in.
9. I am seldom reluctant to be the leader of a group.

Non-Calculative Motivation to Lead

10. I am only interested to lead a group if there are clear advantages for me (R).
11. I will never agree to lead if I cannot see any benefits from accepting that role (R).
12. I would only agree to be a group leader if I know I can benefit from that role (R).
13. I would agree to lead others even if there are no special rewards or benefits with that role.

14. I would want to know "what's in it for me" if I am going to agree to lead a group (R).
15. I never expect to get more privileges if I agree to lead a group.
16. If I agree to lead a group, I would never expect any advantages or special benefits.
17. I have more of my own problems to worry about than to be concerned about the rest of the group (R).
18. Leading others is really more of a dirty job rather than an honourable one (R).

Social-Normative Motivation to Lead

19. I feel that I have a duty to lead others if I am asked.
20. I agree to lead whenever I am asked or nominated by the other members.
21. I was taught to believe in the value of leading others.
22. It is appropriate for people to accept leadership roles or positions when they are asked.
23. I have been taught that I should always volunteer to lead others if I can.
24. It is not right to decline leadership roles.
25. It is an honour and a privilege to be asked to lead.
26. People should volunteer to lead rather than wait for others to ask or vote for them.
27. I would never agree to lead just because others voted for me to be a leader (R).

Note: (R) = reverse coding needed.

Proactive Leadership Behaviour (Strauss et al., 2012; Study 3)

“Please indicate to what extent you agree with each of the following sentences using a 5-point scale from 1 (*Strongly disagree*) to 5 (*Strongly agree*).”

1. I am planning what I want to achieve as a leader in the next few years.
2. I am thinking ahead to the next few years and planning what I need to do to develop further as a leader.

3. I engage in planning for my future development as a leader.
4. I have recently begun to think more about what I would like to accomplish as a leader during the next year or two.
5. I develop leadership skills which may not be needed so much now, but in future leadership positions.
6. I gain leadership experience in a variety of areas to increase my knowledge and skills as a leader.
7. I develop leadership knowledge and skill in tasks critical to my future as a leader.
8. I seek advice from my supervisor(s) or colleagues about additional training or experience I need in order to improve myself as a leader.
9. I initiate talks with my supervisor about training or work assignments I need to develop skills that will help my future development as a leader.
10. I make my supervisor aware of my aspirations and goals to lead.
11. I am building a network of contacts or friendships with colleagues to obtain information about how to lead and/or to determine what is expected of me.
12. I am building a network of contacts or friendships to provide me with help and/or advice that will further my chances to develop as a leader.
13. I am building a network of colleagues I can call on for support as I develop as a leader.

Consideration Leadership Behaviour (Fleishman & Hunt, 1973; Study 4)

“Please rate how you think others would rate the level in which you demonstrate the following behaviours using a 7-point scale from 1(*None*) to 7 (*A great amount*).”

1. Acting concerned for people’s welfare.
2. Acting friendly and approachable.

3. Acting supportive when talking with people.

Initiating Structure Leadership Behaviour (Fleishman & Hunt, 1973; Study 4)

“Please rate how you think others would rate the level in which you demonstrate the following behaviours using a 7-point scale from 1(*None*) to 7 (*A great amount*).”

1. Letting people know what is expected of them.
2. Encourages people to follow the correct procedures.
3. Maintains definite performance standards for people.

Levels of Self-Concept Scale (Selenta & Lord, 2005; Study 1)

“To what extent do the following statements describe you?”

(1 = *Strongly disagree*, 7 = *Strongly agree*)

Individual Self-Concept

1. I often succeed by showing that my abilities are better than coworkers.
2. I have a strong need to know how I stand in comparison to my coworkers.
3. I often compete with my friends and acquaintances.
4. I feel best about myself when I perform better than others.
5. I often think about the ways that I am better or worse off than people around me.
6. I place a high value on my personal successes.
7. It is important to me that I succeed at work based on my own merit.
8. I get upset when I fail to reach my personal goals.
9. I am often completely absorbed in work tasks.
10. I can accomplish more when I work on my own.
11. I prefer to work alone.
12. I dislike having to share my primary workspace.

13. I am most comfortable in situations where I work independently from others.

Relational Self-Concept

14. I value friends who are caring and empathetic.

15. It is important to me to keep commitments to significant people in my life.

16. I would help a friend having personal problems even if it meant sacrificing my time or money.

17. Caring deeply about a close friend or relative is very important to me.

18. I feel worthwhile when a close other values the role that I play in their life.

19. My close relationships help define what kind of person I am.

20. Overall, my relationships influence how I feel about myself.

21. My close relationships reflect who I am.

22. My work roles are often the basis of my social relationships with coworkers.

Collective Self-Concept

23. It is important to me to make a lasting contribution to my work organization.

24. When I become involved in a group project, I do my best to ensure its success.

25. I feel great pride when my team does well, even if I'm not the main reason for its success.

26. I would be honoured to be chosen to represent my organisation at a meeting.

28. When I'm part of a team, I am focused on the whole group rather than myself.

29. I am quite sensitive to what people think of the group to which I belong.

30. I have many of the same characteristics as my team or group.

31. I judge myself by the standards of the group that I belong to.

32. When I think of myself, I often think of the group of which I am a member.

33. I respond intensely to what people say about my favourite groups.

Note: The above Selenta and Lord (2005) 'Levels of Self-Concept' scale represented the most current measure of self-concept at the time in which Study 1 of my thesis was conducted.

Revised Levels of Self-Concept Scale (Hall et al., 2021; Study 2; Study 3)

“To what extent do the following statements describe you and your priorities in life. Rate items on a scale ranging from 1 (*Not at all descriptive*) to 7 (*Extremely descriptive*).”

Individual Self-Concept

1. I value opportunities to show that my abilities are better than coworkers.
2. I have a strong need to know how I stand in comparison to people around me.
3. I often compete with my friends and acquaintances.
4. I feel best about myself when I perform better than others.
5. I often think about the ways that I am better or worse off than people around me.
6. I place a high value on my personal successes.
7. It is important to me that I succeed at work on the basis of my own merit.
8. Failing to reach my personal goals makes me question my identity.
9. I set my personal goals based on what is most important to me.
10. I can accomplish more when I work on my own.
11. I prefer tasks where I receive recognition for my individual contribution.
12. It is critical to me to run my own schedule and activities.
13. I am comfortable working alone for extended periods of time.

Relational Self-Concept

14. At work and in my personal life, I value relationships with people who are caring and empathetic.
15. It is important to me to keep commitments to significant people in my life.
16. I would help a friend or coworker having a personal problem even if it meant using my own time or money.
17. My relationships with people around me are very important to me.
18. I feel validated when a close other values the role that I play in their life.

19. My close relationships help define what kind of person I am.
20. Overall, my relationships influence how I feel about myself.
21. Who I am is shaped by my relationships with others who are important to me.
22. My current work or social roles affect the way I think about myself.
23. At work I am very conscious of my own role and the roles of others around me.

Collective Self-Concept

24. I am quite sensitive to what people think of the groups to which I belong.
25. I have many of the characteristics shared by my team or group.
26. I judge myself by the standards of the groups to which I belong.
27. When I think of myself, I often think of the groups of which I am a member.
28. I respond intensely to what people say about groups to which I belong.
29. It is important to help make a lasting contribution to organizations to which I belong.
30. When I become involved in a group project, I do my best to ensure its success.
31. I feel great pride when my team or work group does well, even if I'm not the main reason for its success.
32. I would be honoured to be chosen to represent my organization.
33. When I'm part of a team, I am focused on the whole group rather than myself.

Note: The above version of the 'Revised Levels of Self-Concept' by Hall and colleagues (2021) represented the most current measure of self-concept at the time in which Study 2 and Study 3 in my thesis were conducted. For consistency purposes, this version of the scale was used for both Study 2 and Study 3.

Control Variables**Consideration of Future Consequences Scale (Strathman et al., 1994; Study 1)**

“Please read each sentence and indicate to what extent this is characteristic of you.”

(1 = *Extremely uncharacteristic*, 7 = *Extremely characteristic*)

1. I consider how things might be in the future, and try to influence those things with my day-to-day behavior.
2. Often I engage in a particular behavior in order to achieve outcomes that may not result for many years.
3. I only act to satisfy immediate concerns, figuring the future will take care of itself.
4. My behavior is only influenced by the immediate (i.e., a matter of days or weeks) outcomes of my actions.
5. My convenience is a big factor in the decisions I make or the actions I take.
6. I am willing to sacrifice my immediate happiness or well-being in order to achieve future outcomes.
7. I think it is important to take warnings about negative outcomes seriously even if the negative outcome will not occur for many years.
8. I think it is more important to perform a behavior with important distant consequences than a behavior with less important immediate consequences.
9. I generally ignore warnings about possible future problems because I think the problems will be resolved before they reach crisis level.
10. I think that sacrificing now is usually unnecessary since future outcomes can be dealt with at a later time.
11. I only act to satisfy immediate concerns, figuring that I will take care of future problems that may occur at a later date.

12. Since my day-to-day work has specific outcomes, it is more important to me than behavior that has distant outcomes.

Reduced 6 Item Consideration of Future Consequences Scale (Strathman et al., 1994; Study 3)

“Please read each sentence and indicate to what extent this is characteristic of you, answering on a scale from 1 (*Extremely uncharacteristic*) to 7 (*Extremely characteristic*).”

1. I consider how things might be in the future and try to influence those things with my day-to-day behavior.
2. Often, I engage in a particular behavior in order to achieve outcomes that may not result for many years.
3. I only act to satisfy immediate concerns, figuring the future will take care of itself.
4. My behavior is only influenced by the immediate (i.e. a matter of day or weeks) outcomes of my actions.
5. I think that sacrificing now is usually unnecessary since future outcomes can be dealt with at a later time.
6. I only act to satisfy immediate concerns, figuring that I will take care of future problems that may occur at a later date.

Leader Self-Efficacy (Hardy et al., 2010; Study 1)

“Compared to the most confident leader you know, how would you rate your confidence in your ability to:” (1= *Very low*, 7 = *Very high*)

1. Meet the challenges of leadership.
2. Perform the tasks necessary to be a successful leader.
3. Perform under pressure.

4. Concentrate well enough to be successful.
5. Think and respond successfully in leadership situations.
6. Bounce back from a major leadership setback and succeed.
7. Adapt to different leadership situations and be successful.
8. Be consistently successful as a leader week after week.
9. Be successful even when the odds are against you.

Reduced 5-item version of Leader Self-Efficacy Scale (Hardy et al., 2010; Study 2, Study 3)

“Compared to the most confident leader you know, how would you rate your confidence in your ability to:” (1= *Strongly disagree*, 7 = *Strongly agree*)

1. Perform the tasks necessary to be a successful leader.
2. Concentrate well enough to be successful.
3. Think and respond successfully in leadership situations.
4. Bounce back from a major leadership setback and succeed.
5. Adapt to different leadership situations and be successful.

Leader Role Modelling (reworded from the ethical role-modelling scale by Ogunfowora, 2013; Study 3)

“Please rate the extent to which each of the following statements describe you on a scale ranging from 1(*Strongly disagree*) to 7(*Strongly agree*).”

1. When faced with a dilemma at work, I usually follow the examples of what my supervisor did in the past.
2. In general, I use my supervisor's behaviour as a guide for what to do when making decisions at work.

3. When I try to make a correct decision at work, I always ask myself, "What would my supervisor do?"

Proactive Personality (Bateman & Crant, 1993; Study 3)

"Please rate the extent to which each of the following statements describe you."

(1 = *Strongly disagree*, 7 = *Strongly agree*)

1. I excel at identifying opportunities.
2. Nothing is more exciting than seeing my ideas turn into reality.
3. I can spot a good opportunity long before others can.
4. I am always looking for better ways to do things.
5. If I believe in an idea, no obstacle will prevent me from making it happen.

Appendix 2: Between-Subject Conditions

Condition 1: ‘Future Leader Self’

Research suggests that the future is not determined by current options available, instead it is something created by a person. First, it is created in their mind, then it is created through taking action and behaviour directed towards this created future.

A future self as a leader represents a person’s ideal view of himself or herself in the future as a leader including their wishes and desires in relation to being a leader.

This activity asks you to consider your future self connected to being a leader or expanding your leadership role if you already consider yourself in a leadership role.

You can imagine yourself in a leadership role at any time in the future and the leadership role does not have to be with your current organisation or in your current job/role.

(1) Please imagine your future self as a leader. Now link this to your own five most important values you have which you think could be used as a leader in the future.

For example, “I value hard work being rewarded and so I want to make sure our team’s hard work and effort is properly acknowledged” driving you to see yourself in the future representing your co-workers and ensuring their concerns and issues are addressed by more senior management.

(1) First, please write your five most important values which you think you could use as a leader in the future in the boxes below.

Value 1:

Value 2:

Value 3:

Value 4:

Value 5:

(2) Please provide further details of what your desired future as a leader would look like specifically for you. Please include some further information about the five most important values you stated in the previous question that you think you could use as a leader in the future. Also include some reflection on the context that your future work self as a leader would operate in, how you would lead and what you would like to achieve as a leader. Please write between 200-400 words.

Condition 2: 'Future Career Self Potentially Involving Leadership'

Research suggests that the future is not determined by current options available, instead it is something created by a person. First, it is created in their mind, then it is created through taking action and behaviour directed towards this created future.

A future ideal career represents a person's ideal view of himself or herself in their future career including their wishes and desires in relation to their career.

This activity asks you to consider your ideal career in the future.

You can imagine yourself in this ideal career at any time in the future and it does not have to be with your current organisation or in your current job/role.

(1) Please imagine your ideal future career. Now link this to your five most important career ambitions that you currently have. For example, the ambition to gain a higher level of income or greater status in society. First, please write your five most important career ambitions for the future in the boxes below.

Career Ambition 1:

Career Ambition 2:

Career Ambition 3:

Career Ambition 4:

Career Ambition 5:

(2) Please provide further details of what your ideal future career would look like specifically for you. Please include some influence your future career self through some reflection on the context that your future work self as a leader would operate in, how you would lead and what you would like to achieve as a leader.

Please write between 200-400 words.

Condition 3: ‘Self-to-leader Exemplar’

Research suggests that a self-to-exemplar leader comparison represents a consideration of the similarities and/or differences between you and a specific leader who you have interacted with or still interact with on a frequent basis. This activity asks you to conduct a self-to-exemplar leader comparison by directly comparing yourself to a specific, typical leader that you know, or knew in the past who is significant to you. It will ask you to consider whether you think you have any similarities to this typical leader.

We would like you to consider the typical leadership traits/characteristics that you think this specific leader that you have interacted with in the past or present that is significant to you has shown.

(1) First, please visualize in your mind the specific leader you are thinking of including how they acted and behaved as a leader. Next, please write the initials of the leader you are thinking of in the text box below. Please write a minimum of 50 words.

(2) Now that you have visualised this specific leader, keep this in mind and please generate a list of ten descriptive statements on what leadership traits/characteristics you believe they have that make them a typical leader. Following this, please rate the extent to which you believe that you also share these same leadership traits/characteristics?

To what extent do you believe that you also have these leadership traits/characteristics that the specific leader has?							
	Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							

Condition 4: ‘Self-to-Leader Prototype’

Research suggests that a self-to-prototype leader comparison represents a consideration of the similarities and/or differences between you and your general view of what a typical leader is.

This activity asks you to conduct a self-to-prototype comparison by directly comparing yourself to your own general view of a typical leader. It will ask you to consider whether you think you have any similarities to typical leaders.

(1) First, please write a brief description of what leadership means to you? Please write a minimum of 50 words.

(2) Next, please consider the important leadership traits/characteristics that you associate with typical leaders. Please generate a list of ten statements on what leadership traits/characteristics that you think describe typical leaders. Following this, please rate the extent to which you believe that you also have these leadership traits/characteristics?

To what extent do you believe that you also have these leadership traits/characteristics that the typical leader has?						
Strongly disagree (1)	Disagree (2)	Somewhat disagree (3)	Neither agree nor disagree (4)	Somewhat agree (5)	Agree (6)	Strongly agree (7)
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						

Appendix 3: Study 1 Confirmatory Factor Analyses

Appendix 3A: Future Leader Self Salience (Strauss et al., 2012; Morgan thesis, 2021)

	Item	Standardized Estimates
1.	I can easily imagine being a leader in the future.	0.87
2.	The mental picture of myself as a leader in the future is very clear.	0.92
3.	This future as a leader is very easy for me to imagine.	0.93
4.	I am very clear about who and what I want to become as a leader in my future work.	0.89
5.	What type of future I want in relation to leadership is very clear in my mind.	0.89

Appendix 3B: Leader Identity Scale (Hiller, 2005)

		Descriptive leader identity	Certainty of leader identity	Importance of leader identity
1.	(Describe) I am a leader.	0.94		
2.	(Describe) I see myself as a leader.	0.94		
3.	(Describe) If I had to describe myself to others, I would include the word “leader”.	0.91		
4.	(Describe) I prefer being seen by others as a leader.	0.89		
5.	(Certainty) I am a leader.		0.95	
6.	(Certainty) I see myself as a leader.		0.95	
7.	(Certainty) If I had to describe myself to others, I would include the word “leader”.		0.88	
8.	(Certainty) I prefer being seen by others as a leader.		0.88	
9.	(Importance) I am a leader.			0.97
10.	(Importance) I see myself as a leader.			0.98
11.	(Importance) If I had to describe myself to others, I would include the word “leader”.			0.89
12.	(Importance) I prefer being seen by others as a leader.			0.88

Appendix 3C: Motivation to Lead (Chan & Drasgow, 2001)

	Item	Affective Motivation to Lead	Non- Calculative Motivation to Lead	Social- Normative Motivation to Lead
1.	Most of the time I prefer being a leader rather than a follower when working in a group.	0.88		
2.	I am the type of person who is not interested to lead others. (R)	0.80		
3.	I am definitely not a leader by nature. (R)	0.77		
4.	I am the type of person who likes to be in charge of others.	0.85		
5.	I believe I can contribute more to a group if I am a follower rather than a leader. (R)	0.70		
6.	I usually want to be the leader in the group that I work in.	0.90		
7.	I am the type of person who would actively support a leader but prefers not to be appointed as leader. (R)	0.62		
8.	I have a tendency to take charge in most groups or teams that I work in.	0.90		
9.	I am seldom reluctant to be the leader of a group.	0.40		
10.	I am only interested to lead a group if there are clear advantages for me. (R)		0.85	
11.	I will never agree to lead if I cannot see any benefits from accepting that role. (R)		0.83	

	Item	Affective Motivation to Lead	Non- Calculative Motivation to Lead	Social- Normative Motivation to Lead
12.	I would only agree to be a group leader if I know I can benefit from that role. (R)		0.891	
13.	I would agree to lead others even if there are no special rewards or benefits with that role.		0.49	
14.	I would want to know “what’s in it for me” if I am going to agree to lead a group.		0.83	
15.	I never expect to get more privileges if I agree to lead a group.		0.38	
16.	If I agree to lead a group, I would never expect any advantages or special benefits.		0.45	
17.	I have more of my own problems to worry about than to be concerned about the rest of the group. (R)		0.58	
18.	Leading others is more of a dirty job rather than an honourable one. (R)		0.45	
19.	I feel that I have a duty to lead others if I am asked.			0.83
20.	I agreed to lead whenever I am asked or nominated by the other members.			0.79
21.	I was taught to believe in the value of leading others.			0.77
22.	It is appropriate for people to accept leadership roles or positions when they are asked.			0.67

	Item	Affective Motivation to Lead	Non- Calculative Motivation to Lead	Social- Normative Motivation to Lead
23.	I have been taught that I should always volunteer to lead others if I can.			0.75
24.	It is not right to decline leadership roles.			0.41
25.	It is an honor and privilege to be asked to lead.			0.67
26.	People should volunteer to lead rather than wait for others to ask or vote for them.			0.57
27.	I would never agree to lead just because others voted for me. (R)			-0.37

Note: R = reverse coding required.

Appendix 4: Leader Identity Development Training Activities

Appendix 4A: Meaning of Leader Identity

Exploring a Future as a Leader Activity

Developing a deeper meaning about why one should become a leader can be derived from reflecting on the personal significance of leadership to the self. To do this, participants completed a self-reflective written activity about what they would want their future as a leader to be and how this could be linked to their five most important values and five most important goals that they would want to accomplish as a leader in their career (Strauss et al., 2012). Participants wrote in detail about their desired future as a leader and what it would look like to them and the context that they would be operating in and what they would like to achieve. This was aimed at helping participants to develop their own self-relevant meaning of becoming a leader (DeRue & Workman, 2012; Parker et al., 2010; Wegner et al., 1986). Participants explored issues such as how much control they believe they have in their own development, what opportunities they would be interested in taking to develop as a leader in the future and what motivates them to develop as a leader.

Leader Prototypicality Assessments and Evaluation Activity

The second training exercise focused on helping participants to distinguish between a manager identity and a leader identity based on reflecting on what the different behavioural and team-level impacts of enacting each identity in a social setting (Carroll & Levy, 2008; Waldman et al., 2012). Participants were organized into small groups and given several exemplar images of individuals who could either be considered to be a leader or a manager. Participants then worked together in their groups to determine which of the exemplars they considered to be leaders and which were managers; comparing and contrasting what distinctive characteristics make them either a leader or a manager, jotting down all of their answers on

flipcharts. From this activity, individuals can begin to uncover what their implicit theories about leadership (Epitropaki et al., 2013; Ashforth & Mael, 1989; Turner, 1985) are and begin to explore any differences between exemplar leaders and themselves (McCauley et al., 2006; Carroll & Levy, 2008; Waldman et al., 2013).

Cognitive Sense-Making Around the Meaning of Leadership Activity

Each participants was asked to bring to the training session an image or photograph of what they see as a typical leader and an image or photograph of what they see as a typical manager (Schyns et al., 2011). Participants continued their work in their groups using flipchart paper to write their answers down as to why they think each image is a leader and a manager. Participants also worked on distinguishing their exemplars of leaders and managers based on the Valcea and colleagues' (2011) framework of sense-making. In Valcea and colleagues' theory (2011) work on sense-making, an exemplar of a manager or leader can be divided into three levels of increasingly more sophisticated approaches to sense-making named a; dependent-order, independent-order, and inter-independent order (Valcea et al., 2011; McCauley et al., 2006). There are four key cognitive sense-making factors that can help distinguish the quality of a leader and categorize an individual into one of the above categories. These factors are as follows; how the individual in question solves problems (*cognitive approach*), the type of relationships the individual has with others on their team (*interpersonal orientation*), what the individual views as their main priorities are on a day-to-day basis (*conscious preoccupation*) and the ethical decision-making approach of the individual (*ethical approach*) (Valcea et al., 2011; Fisher & Torbert, 1991; McCauley et al., 2006). Participants were asked to work on explaining how the photographs and images of exemplar leaders and managers that they brought in differed relative to these four factors of sense-making (1. How the exemplar solve problems, 2. The quality of the exemplars relationships with others, 3. What the exemplar chooses to focus on a day-to-day basis, 4. Exemplar's ethical decision-

making approach). For example, if a participant thinks that an image of a more bureaucratic and transactional manager might be best categorized into the *dependent-order* level, they might explain this by the transactional manager having a simple view of leader-follower dynamics and operate under a single-cause effect for interpreting situations and outcomes (*cognitive approach*), they take a more authoritarian and control style (*interpersonal orientation*), they prioritize gaining social approval above all other issues (*conscious preoccupation*), and they define ethics based on social norms or group expectations (*ethical judgment*). In contrast, participants might categorize exemplars they perceived as more advanced leaders into the *inter-independent* order because the particular exemplar is able to have many different possible selves and view themselves as a work in progress (McCauley et al., 2006). The more advanced exemplar would analyse problems considering a range of different factors like context (*cognitive approach*), allow followers to express themselves more freely (*interpersonal orientation*), and make effective interactions within the system a priority (*conscious preoccupation*), whilst appreciating individual differences within a social context and recognizing how they need to understand the causes of moral standards and actual actions and look at how this can be resolved (*ethical judgment*).

Overall, this activity gets participants to think about the quality of leadership in practice and how this can vary widely amongst leaders and managers and what type of leader they would like to become. This activity gets participants to think from the team perspective of how to claim leadership rather than merely being viewed as a manager.

Appendix 4B: Strengthening Leader Identity

Leader Identity Meter Activity

In the first activity that was related to the strengthening component of the multi-domain leader identity development theory (Clapp-Smith et al., 2019), participants evaluated the strength of their current leader identity, shading in the extent to which they define themselves as a leader on a, 'leader meter', representing how much they see themselves as a leader currently (Clapp-Smith et al., 2019). Those participants who strongly identify as a leader would shade in the meter fully and those who still did not identify as a leader shading in less of the meter. Participants then completed a self-reflective written activity on their judgment on the 'leader meter' and what behavioural changes would cause their rating to change to strengthen their leader identity, also considering what behaviours would be useful for being identified as a leader and what typical behaviours others could use when they signal to someone they can lead.

The Claiming and Granting Process Activity

As strengthening one's identity as a leader can be done from having the identity granted by others within the team (DeRue & Ashford, 2010), the second activity involved the application of Shamir and colleagues' (1993) work on effective leadership behaviours for motivating followers. Participants worked in small groups on devising an action-oriented leadership strategy for a scenario involving a project at work in which the senior manager that usually takes the lead is busy working on another project, leaving other potential leaders to emerge in control of the task. Participants had to devise a plan for how they want to show team members that they can claim the leadership role as a motivational and engaging leader. Individuals were asked to think of how they assess themselves as leaders and what specific leader identity-congruent behaviours they could use to appeal to followers' motivations and what behaviours are needed for the future to further motivate followers.

Before participants engaged in the activity they learnt about Shamir and colleagues' (1993) theory on the four core follower's motivations and understanding the specific leader identity-congruent behaviours they could enact. These motivations of followers' include: the desire for *self-expression* (able to have their views heard to affirm our own self-identities; Strauss, 1969), the need for *self-preservation* (desire to feel like they have a sense of competence, power, achievement, and control over their own lives and environment in order to protect and enhance their confidence and worth in themselves; Shamir, 1991 Bandura, 1986), the desire for *self-consistency* (maintain the current self-concept and get meaning from past to future; Turner, 1968; Gecas, 1982), and *expectancy motivation* (followers are motivated by hope for a better future).

Participants were then taught about leadership behaviours that can positively influence followers' collective self-concept activate such motivations and are useful for enacting a leader identity in social settings (Bass, 1985; Shamir et al., 1993). These represent powerful claiming tools for leadership behaviours in organizing and bringing people together for a common cause in the social setting (Bass, 1985). Shamir and colleagues' (1993) framework includes five key behaviours which included the following: first, to appeal to followers' motivation for self-expression, leaders can act their identity by demonstrating to others through a narrative about why it is valuable and meaningful to be part of the group and how individual's effort towards the group are linked to important values and the collective identity (Carroll & Levy, 2010; Shamir et al., 1993). Second, leaders can raise the *effort-accomplishment expectancies* of the group as a way to appeal to followers' self-preservation motivation of self-esteems and self-worth, demonstrating that they have belief in the team and its members to meet goals through expressing how the effort is linked to the values by communicating, trust, and responsibilities given and freedom to express views and drive aspects of projects forwards; giving high standards and high confidence in followers' capability to complete tasks (Yukl, 1989). Third,

involves the leader communicating a vision to team members that connects past, present, and future meanings over time, through values and collective identities becoming more (Shamir et al., 1993) in order to develop a feeling of progress/evolution that the group is working towards which appeals to followers' self-consistency motives to draw greater meaning from their work (Shamir et al., 1993; Bass, 1985). This was extended by participants considering how they could communicate a collective-level vision for the project using Stam and colleagues' (2014) framework that stipulates a vision must be: future-based, perceived to be feasible, seen as desirable, detailed, and central to the values and identities of the followers (Stam et al., 2014). The fourth behaviour is to provide hope and faith outlook for the future, expressing confidence in the group and its future again appealing to the expectancy motives (Shamir et al., 1993). Fifth, involved emphasizing the worth of each individual on the team which furthers the self-preservation motives of maintaining self-esteem and self-worth. A summary of this teaching was available for participants to refer back to as the participants completed the activity on developing their plan for stepping up to lead.

Prototypical Leadership Venn-Diagram Activity

The final activity related to the 'strengthening' aspect of the multidomain leader identity development theory (Clapp-Smith et al., 2019) was the Van Quaquebeke and colleagues' (2011) pictorial Venn-Diagram that had a seven-point Likert scale was used to measure the extent to which participants viewed themselves as an ideal leader prototype (Venn, 1880). This was a straightforward way in which participants could judge where they currently see themselves as leaders in relation to a leader prototype. Participants were then asked to reflect on how they made this judgment of current leader identity strength and whether this matches up with the extent to which they find leadership meaningful.

Appendix 4C: Levels of Leader Identity

‘I am’ Statements Activity on the Levels of Self-Concept Activity

A key training activity to help participants understand more about this involved participants’ reflecting on their own leader identity levels through the ‘I am’ activity. This activity gets the participants to write down a range of characteristics they associate themselves with and then to determine whether they are defined at either the individual, relational, or collective level of their self-concept (Kuhn & McPartland, 1954; Clapp-Smith et al., 2019). Participants were then asked to reflect on what level of self was most frequently used to characterize themselves and to discuss how their answers relate to their meaning of leadership and the strength of their leader identity.

Case-Study Analysis on Individual, Relational, and Collective Leadership Styles Activity

Individuals were presented with different cases studies to analyse that provided examples of three distinct approaches to leadership styles that are based on different levels of the self (individual, relational, and collective) (Brewer & Gardner, 1996; Hall et al., 2021). The individual-level leadership styles described a leader focused on expressing their own values and goals to the team (Cross et al., 2011), the relational-level leadership style was a leader focused on building positive relationships of respect and support with followers (Sluss & Ashforth, 2007), and the collective-level leadership style was a leader focused on demonstrating care for the group’s welfare and its future as a priority (Jackson et al., 2006; Bass, 1990). Participants were asked to think about which one approach they felt most connected to, and which approaches would be effective for leader development in their own situation. Group discussions then centered around understanding what the likely responses will be from followers in the short and long-term for each approach to leadership (individual, relational, and collective). Participants were also asked which approach will be most likely to bring people together and which one was most likely to bring people apart from one another

over time. Final discussions on this topic centered around whether the different approaches could be used at different points in time and at different contexts in order to develop further as a leader in the future.

Collective Level of Leader Identity Group Work Activity

As there was consensus from both the academic literature (Johnson et al., 2012) and participants that focus should predominantly be on the benefits of collective level leadership over other levels, an activity on enacting a leader identity at the collective level of construal was completed. Participants worked in small groups and planned how they would approach leadership from a collective level of their self-concept; developing a plan for the group's future and how it will be communicated to the team members (Judge & Piccolo, 2004). This centered around participants' thinking of how to enact their leader identity collectively and incorporating Stam and colleagues' (2014) five elements of communicating a collective vision for a group which included; ideal self in which it is focused on current and future self-discrepancy, desirability so that the vision motivates follower's by the possibility of a brighter future, feasibility to set clear goals, tasks and strategies along with a proactive plan and clear rewards for progression towards the vision, centrality that connects the vision to the follower's core values and identities, and complexity involving a well-thought out plan with clear milestones and objectives for how the vision will be achieved.

Appendix 4D: Integration of Leader Identity Across Contexts

Integration of Leader Identity Activity

Participants were asked to think about each of the different domains of their life (e.g., work, family, social, community) and then consider the extent to which they have a leadership role within them. Participants then used a Venn diagram to illustrate these life domains and their relationship with leadership in each of them, sketching circles representing each domain of their life, with the size of each circle varying based on the domain's perceived relevance to their leader identity (Clapp-Smith et al., 2019; Venn, 1880). The primary shaded circle represents the participant's leader identity, within this, they were asked to draw circles for each domain of their life and map them on the larger shaded leader identity circle. The extent to which there is overlap indicates how much integration across domains there is for the participant. Participants explored which contexts they would want to lead in going forwards in the future; considering whether there could be integration or conflict across each of the domains. In doing so, participants could consider expanding the range of contexts and situations in which they can be a leader in going forwards (Hooijberg et al., 1997; Hammond et al., 2017).

Leader Development Narrative Activity

Participants were asked to map the key experiences and events that had influenced their leader identity so far on the timeline that incorporates their past, present, and future leader identity (Ibarra & Barbulescu, 2010; Hammond et al., 2017). The leader-self narrative is intended to help participants gain clarity of the trajectory of their development and provide a way for the individual to map out their progression going forwards in the future as a leader. This enabled participants to synthesize their past and present experiences and future expectations in leadership in a timeline (Clapp-Smith et al., 2019). This was in order to build a leader identity development narrative going forwards. This also helps position the individual as

a highly influential driver of their own development and connection with leadership (Deci & Ryan, 1985).

Appendix 5: Training Assessment Analysis (Lacerenza et al., 2017)

Training Needs Analysis

A training needs analysis was considered prior to the training to help identify any particular needs of the individuals and organizations engaged with the training (Lacerenza et al., 2017; Hunt & Weintraub, 2007; Arthur et al., 2003). An identified need was to ensure that participants were provided with a comfortable environment for them to engage in the leader identity development activities and to have several breaks during each of the three four hour training sessions. This is important for maintaining participants' interest and motivation to learn and transfer from the training (Lacerenza et al., 2017; Salas et al., 2012).

Trainee Attendance Policy

Attendance was mandatory for all training participants and was monitored by the human resource teams at each of the organizations. The scheduling was done to ensure as best possible it did not interfere with participants' work schedules. Attendance is usually based on participants' perceived value of the training program which means it was crucial that the purpose and benefits of the training were established early on (Blume et al., 2010).

Spacing Effect

The three training sessions were done two weeks apart from one another in four-hour blocks including time for breaks. Prior research suggests this approach is easier for participants to learn and process the information efficiently as opposed to one day-long session that can cause fatigue (Donovan & Radosevich, 1999; Lacerenza et al., 2017). This preserved the learning efficiency of participants and prevented participants suffering from cognitive overload of information which that would reduce their processing and learning abilities (Paas et al., 2004; Lacerenza et al., 2017). The cognitive overload risk was reduced further because the content of our training was focused on self-directed learning and

exploration of the self as opposed to bombarding participants with theories and information about leadership.

Accounting for Participants' Current Leadership Experience

The content of the training was self-focused and so was suitable for individuals of a wide range of experience levels of leadership (Lacerenza et al., 2017). Emerging leaders could benefit from exploring a future in leadership whilst more experienced leaders could configure how they could further develop as leaders going forwards.

Training Instructor

I was the training instructor for all of the sessions at both organizations and facilitated discussions during the sessions and guided participants through the training activities. However, I did not direct the individual as the training was based upon a self-directed learning philosophy about one's identity as a leader (Lacerenza et al., 2017).

Delivery Method

The methods of delivering and teaching can affect the results. The three core teaching and delivery approaches: information-based, demonstration, practice-based were applied over the course of the program (Lacerenza et al., 2017; Weaver et al., 2010). Each approach was used when it was appropriate rather than having learning restricted to one form of delivery method (Salas et al., 2012). However, the primary method focused on conveying relevant information from the field and then overseeing activities that were practical-based methods to encourage trainees to apply what they are learning outside of the training through experience (Lacerenza et al., 2017; Weaver et al., 2010).

Feedback

360-degree feedback from several sources were collected at the end of the training program to learn about what participants felt about the overall training and what they believe

could be improved in the future (Goldsmith et al., 2000; Wexley & Latham, 2002; Lacerenza et al., 2017).

Training Location

Training sessions were always conducted on-site at the organization the employees worked at (Lacerenza et al., 2017; Baldwin & Ford, 1988).

Training Duration

It will likely take a long time for permanent cognitive changes needed to develop as a leader (Lord & Brown, 2004; Wofford et al., 1998). As this was a relatively long training program (12-hours total in three 4-hour sessions done every two weeks), it was anticipated that this could be more impactful than a shorter training program (Lacerenza et al., 2017).