How Meditation Supports Positive Leadership Development?

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Abstract

The aim of the study is to examine the role of meditation in facilitating grit and flow to develop positive leaders. A conceptual framework was tested through three interrelated research questions, using longitudinal semi-structured interviews on a purposeful and convenient sample and applying qualitative methodology. Questions common to five meditation techniques and derived from integrating five leadership styles along with questions from Grit-S, Experience Sampling form and Flow-Q were used as interview guide. Analysis of interviews with leaders working in large organisations from diverse industries and management levels and practicing meditation daily for twenty minutes over a minimum of eight weeks, yielded four key findings: (1) meditation develops positive leaders; (2) manifestation of grit and flow in combination, where flow is the building brick of grit; (3) a relationship between grit and meditation through flow; (4) combined manifestation of grit–flow in relation with meditation develops positive leaders leading to the emergent theory ‘When flow is experienced repeatedly and is facilitated by meditation, grit is manifested, leading to the development of positive leaders.’ – an original contribution of this research. Positive leadership leads to organisation effectiveness. The root enablers of organisation effectiveness are self-awareness and self-regulation manifested through meditation and facilitated by positive leadership. The findings contribute fresh knowledge to theoretical studies on grit, leadership and to the practical application of meditation.

Keywords: Meditation, Grit, Flow, Positive Psychology, Integrated Leadership Styles, Positive Leadership

INTRODUCTION

The aim of research is to assess the application of wellbeing practices in developing leaders. The research applies the studies on positive psychology specifically flow and grit with leadership styles to understand the role of meditation in developing leaders. The background of this study is the endeavours of World Health Organisation (WHO) to promote, protect and restore mental health issues which is currently a concern of individuals, communities, and societies throughout the world (WHO, 2017). In the backdrop of organisational behaviour and management, the study examines if through meditation practice, leaders’ leadership capabilities will develop positive attributes which will facilitate positivity to fulfil their role. With this scenario as the background, the framework of the study is based on grit, flow, positive leaders and meditation, and their relationships. The focus on individual’s wellbeing and behaviour within organisation is the context of the thesis (Fredrickson, 2001; Rego & Pina e Cunha, 2008; Tanner et al., 2009; Wright & Coprazano, 2004). The problem statement is the need to examine the relationship between
grit, flow, meditation in the quest to develop positive leaders. Positivity is measured through the presence of grit and flow. The study contributes to fresh knowledge in relationship between grit and flow. It contributes to a new theory which indicates that all wellbeing or mindfulness practices should facilitate manifestation of flow and development of grit leading to being positive leaders.

LITERATURE REVIEW

The literature reviews of all the components are consolidated to create the research framework and constructs derived from the review. The literature review discerned that the study of two components - positive leadership and practice of meditation, is made up of multiple theories. Positive leadership is made up of five styles - transformational leadership (TL) (Bass & Avolio, 1993), authentic leadership (AL) (Avolio & Gardner, 2005), ethical leadership (EL) (Brown & Trevino, 2006), servant leadership (SL) (Greenleaf, 1977) and spiritual leadership (SP) (Fry, 2003). Meditation practice is made up of five techniques of meditation – mindfulness meditation (Kabat-Zinn, 1990), Transcendental Meditation™ (Yogi, 1977), Zen meditation (Thich, 1998), focused breathing (Kabat-Zinn, 2013), and Vipassana (Goenka, 2000). Mindfulness meditation uses breathing techniques (Kabat-Zinn, 1990), Transcendental Meditation™ uses mantras (Yogi, 1977), Zen meditation uses suspended thinking (Thich, 1998), focused breathing also uses breathing techniques (Kabat-Zinn, 2013); and Vipassana uses walking and internal focusing techniques (Goenka, 2000).

Meditation – a mind-training tool

Yogi (1977) defined meditation as an effortless procedure for allowing the excitations of the mind to settle gradually until the least excited state of mind is reached. Meditation can be deep; intensive types of meditation are practised through ancient lineages of Theravada Buddhism (Thera, 1954) and by Tibetan and Hindu yogis, but meditation can also be adapted for cross-cultural application. It can also take a secular approach with no spiritual or religious affiliations, and there is also a version adapted for use through applications (Apps) for electronic devices (Goleman & Davidson, 2018).

The current study considers meditation practices that take the broader, secular approach with no spiritual or religious connections. Meditation is mind training, whereas mindfulness is practised consciously as a prolonged, regular focus on attention (Baccarani, Mascherpa & Minozzo, 2013; Hodgins & Adair, 2010; MacLean et al., 2010) and develops mental discipline by protracting that state of awareness (Kabat-Zinn, 2013) through concentration.

According to the classical Buddhist literature, meditators experience four stages when they train their minds to maintain singular concentration and avoid their minds wandering for some time (Desbordes et al., 2012). First, one experiences a great physical and mental pleasure that arises naturally as the mind suspends the construction of negative emotions; second, the rapture of this mental pleasure deepens as the mind is freed from conceptual thinking entirely and absorbs into singular concentration; third, the exuberance of this pleasure matures and mellows into a subtle but profound sense of happiness; while the last stage is when all pleasure is abandoned and an abiding mental equanimity is established (Desbordes et al., 2012). This shift in perspective is equanimity described as ‘an even-minded mental state or dispositional tendency toward all experiences or objects, regardless of their origin or their affective valence (pleasant, unpleasant, or neutral)’ (Desbordes et al., 2012, p. 356). Murphy (2016) defines
equanimity as ‘promoting the aspect of neutrality towards beings’ (p.306), which supersedes feelings of resentment or approval of others, and therefore nullifies subjective personal preferences or prejudice.

Meditation practice teaches three simple yet revolutionary skills: focus, awareness and living in the-moment (Cullen, 2011; Sethi, 2009). The outcomes of practising meditation are twofold: (1) mastery rather than elimination of fluctuations and attainment of stable concentration of attention (MacLean et al., 2010); and (2) non-attachment to sensory experiences (Bærentsen et al., 2010).

The manifested attention is one of the cardinal functions of consciousness; without consciousness, perception is impossible (Cullen, 2011; Weick & Putnam, 2006). It should be noted that there are many aspects to attention, and that different kinds of meditation train a variety of mental habits that influence mental skills in different ways (Goleman & Davidson, 2018). This aspect of attention is, however, not within the scope of the current study. Mindfulness disciplines the mind (Kabat-Zinn, 2013; Hodgins & Adair, 2010). While practising meditation, a flowing soft-focused moment of pure awareness is experienced, this is described as mindfulness (Kabat-Zinn, 2013; Hodgins & Adair, 2010). In the mechanics of meditation, focusing on one thing also means noticing when the mind wanders, and bringing it back (Goleman & Davidson, 2018) to attention. Concentration and mindfulness work together to control attention (MacLean et al., 2010). The most effective way to work on attentional processes is to develop virtue, concentration, and mindfulness concurrently, all of which requires a great deal of effort (Kabat-Zinn, 2013; Hodgins & Adair, 2010; Weick & Putnam, 2006). The ability to let go of one’s attachments, exhibited through a change of perspective in relation to one’s perceived experience, is said to be a key attitudinal orientation described as equanimity (Desbordes et al., 2012; Kabat-Zinn, 1990). The brain changes as a function of where an individual puts their attention (Arch & Craske, 2006; Sethi, 2009). The power is in the attention as it continually reshapes the patterns of the brain (Arch & Craske, 2006; Kabat-Zinn, 2013; Sethi, 2009; Van Gordon et al., 2014; Weick & Putnam, 2006). In essence, the brain learns to change its ‘wiring’ so that it might adapt to the desired patterns; the brain is capable of significant internal change in reaction to environmental changes (Creswell et al., 2014; Fox et al., 2014; Kasala et al., 2014; Rizzolatti, 2014). Goleman and Davidson (2018, p. 69) posit that meditation is not a single activity but a wide range of practices, all acting in their own ways in the mind and brain.

It is predicted that meditation, when applied in the organisational context, simultaneously strengthens the alignment between the organisation’s goals, the development of the individual and the needs of the environment (Druhl, Langstaff & Monson, 2001). Although meditation has been applied in religious and spiritual contexts, in this study meditation is applied as a mind-training tool with no specific form of meditation being used as the focus of the study. Various meditation techniques have their own specific outcomes and varied types of attention (Goleman & Davidson, 2018); however, in this study only the attention and concentration features of meditation are used in the research design.

**Forms of meditation**

Meditation is used, practised, and followed in various forms (Van Gordon et al., 2014), including all the five types that is being considered in this study. These various techniques help the practitioner to master stability of attention in achieving mindfulness (Thich, 1998; Goenka, 2000; Kabat-Zinn, 1990; Yogi, 1977). It is assumed that eventually, through prolonged practice, the practitioner achieves transcendence (Kabat-Zinn, 1990, Yogi, 1977). However, there are very few studies comparing these techniques. The basic outcomes of practising any of the various types of meditation are attention and prolonged focus created from the attention ripples through to mindfulness (Thich, 1998; Goenka, 2000; Kabat-Zinn, 1990;
Yogi, 1977). Since the basic outcome is the same, in this study no distinction is made between the forms of meditation practiced. The key consideration is whether meditation is being practised daily. In the context of this study, research questions arise on the role of meditation in the organisational context. The outcome of the review was the understanding that all techniques of meditation had three common factors: attention, focus and concentration which are at the core of the neurological and physiological changes manifested through self-awareness and self-regulation.

How does meditation support managers?
Meditation has been found to have profound effects on numerous physiological systems, affecting different physiological pathways such as neurotransmission and immune and neuroendocrine systems that are affected by stress and are relevant to disease development and progression (Kasala et al., 2014). A literature review indicates beneficial outcomes for leader well-being through meditation/mindfulness interventions (Donaldson-Feilder, Lewis & Yarker, 2019). Decreased pain (Kasala et al., 2014), improved visual processing, attention and perception (Austin, 1999; Joseph, 2001; Goenka, 2000), increased attention span (Kabat-Zinn, 2005), self-control, focused problem-solving and adaptive behavioural responses under changing conditions (Allman et al., 2001) are achieved through meditation. It positively impacts neuroplasticity of meditators indicating links between meditation, psychological and neurological transformations that counter the adverse effects manifested through the default characteristics of managers’ role in the work environment (Waldman, Balthazard & Peterson, 2011).

The parieto-frontal mechanism facilitates the grasping of others’ motor goals and intentions, and allows understanding of others’ actions from the inside, signifying the scientific basis to role-modelling (Rizzolatti, 2014). This role-modelling is the basis of team members’ emulation of their leaders and, by extension, performing their tasks directly proportionate to their leaders’ performance (Sethi, 2009). Leaders continuously face challenges, being tested on their decisions and performance (Huy, 2001; Mintzberg, 2013; Waldman, Balthazard & Peterson, 2011). Meditation manifests pain tolerance (Kasala et al., 2014), self-control (Allman et al., 2001; Duckworth & Steinberg, 2015) and self-regulation (Bush, Luu & Posner, 2000; Posner et al., 2007); focused problem-solving and adaptive behavioural responses under changing conditions among other positive psychological attributes (Allman et al., 2001, Analayo, 2003; Austin, 1999; Goenka, 2000) give them the ability to rise above testing situations productively and beneficially, not only for themselves but also for others. Campos et al. (2016) found that meditation is related to positive emotions, positive reappraisal, life satisfaction, psychological health and wellbeing, and self-compassion leading to mindfulness, happiness, and wellbeing. Davidson (2013) found that emotion works with cognition in an integrated and seamless way enabling navigation through the world of relationships, work, and spiritual growth.

How can meditation assist decision-making?
Meditation applied in the organisational context will simultaneously strengthen the alignment between the organisation’s goals, the development of the individual and the needs of the environment; improve the quality of collective consciousness (Druhl, Langstaff & Monson, 2001); and benefit all aspects of the individual’s life, inside and outside of the organisation (Arch & Craske, 2006). With individuals working long and irregular hours, wellbeing has become an important health challenge (Rego & Pina e Cunha, 2008; Wright, 2014; Wright & Coprazano, 2004). Manifesting positive psychology
in the workplace through meditation facilitates mindfulness and can be safely used for to improve the wellbeing of individuals (Fredrickson, 2001; Tanner et al 2009; Wright & Coprazano 2004). Practice of meditation develops traits similar to those evidenced in positive leaders, which have been demonstrated for positively enhancing organisational productivity and performance (Avolio & Bass, 1995; Avolio & Gardner, 2005; Jurkiewicz & Giacalone, 2004; Orme-Johnson & Dillbeck, 2014; Yogi, 1977).

Effective decision-making is vital in an organisation. It is a skill that is sought-after by managers, relied upon by leaders and deliberated upon by executives and leaders. It is therefore assumed that with the practice of meditation the decision-making process will be facilitated at the very root, thereby guiding an organisation towards an epitome of productivity, efficiency, sustainability, and mutually beneficial performance.

**How can meditation support leaders?**

Leaders are in a unique position to exercise power, control resources and assume responsibility for important decisions about employees (Brown, Trevino & Harrison, 2005). The emotions and attributes apparent in happy workplaces that incorporate wellbeing practices are visible and have been assessed as traits in leaders professing leadership behaviours (Avolio & Gardner, 2005; Bass & Avolio, 1993; Fry, 2003; Fry, 2005; Greenleaf, 1977). Meditation facilitates role-modelling, which is the basis of team members replicating their leaders and by extension performing their tasks directly proportionate to their leaders’ performance (Winerman, 2015, Sethi, 2009). In their role as influencers (Avolio & Gardner, 2005; Brown & Trevino, 2006) and social connectors (Avolio & Bass, 1995; Fry, 2003; Greenleaf, 1977; Sethi, 2009), leaders are an integral part of the social process in organisations. Meditation manifests societal capacities (Yogi, 1977), thereby acting as an enabler for leaders to accomplish their leadership role in organisations. This aspect of practising meditation makes it a distinctive choice for studies on leadership. Meditation supports leadership by enhancing and sustaining feelings of happiness and wellbeing, improving their stature as guides and mentors and influencing subordinates to better productivity and strengthening team building (Cheng, 2016). This is noted through the neurological and physiological changes that manifest in meditators (Kasala et al., 2014; Tang et al. 2009; Young & Taylor, 2001) which is exhibited through positive psychological attributes (Allman et al. 2001; Analayo, 2003; Austin, 1999; and the mirroring processes in the pre-frontal brain regions which enable replication (Rizzolatti, 2014). Goleman and Davidson (2018) found that meditation practices of all kinds share one goal: to let go of being in the constant grasp of one’s thoughts, emotions and impulses, as state of being that generally guides people’s days and lives. When the meditator realises that thoughts, feelings, and impulses are insubstantial events, their belief in them is eliminated and, instead of following them, they are discarded. At the higher reaches of meditation practice, mind-training lessens the activity of ‘self’; the self-hypnotic power of ‘me’ and ‘mine’ are lost, rendering issues and problems less burdensome casting off the emotional baggage attached to such negative situations, leading to ‘self-lessness’ (Goleman & Davidson, 2018).

From the literature review on the practice of meditation it was found that attention, focus, and concentration are the common features of the various techniques of practice. Meditation practice is one of the constructs of the research. The literature review demonstrates that meditation facilitates development of societal and emotional capacities, manifesting leadership attributes that are positive and productive, and through mediation, leadership skills can be learned (Avolio & Bass, 1995; Sethi, 2009). There is one study
by Kelloway et al. (2012) which indicates that positive leadership affects employee wellbeing positively. The current study includes all leaders who could be designated as managers, irrespective of their management level and decision-making roles. It is assumed that since meditation is said to facilitate these positive attributes, all leaders practising meditation should benefit from it, and the propensity to develop more positive leaders through meditation would thereby increase. To recognise this aspect of the study, the literature on leadership and its nuances is reviewed.

**Leadership and its positive role in organisations**

There is evidence that organisational leadership plays a critical role in creating and sustaining a healthy workplace (Shain & Kramer, 2004). Leadership development cultivating positive leadership behaviours benefits employee well-being and collaborations between increasingly diverse teams (Adams, Meyers & Sekaja, 2019). Due to their position in an organisation, leaders, can influence employees and subordinates in a variety of ways, including social processes (Sparks, Faragher & Cooper, 2001). Eriksson et al. (2008) found that effective leadership styles were positively related to workplace wellbeing. Leaders at all levels in an organisation can help to build and sustain a culture with strong values for learning, innovation, experimentation, flexibility, and continuous improvement (Yukl, 2012). This observation is appropriate for this study as one of the factors of this concept is developing potential leaders.

In a recent study it was found that ethical leadership is positively linked to compassion which is exhibited by the followers as well (Zoghbi-Manrique-de-Lara & Viera-Armas, 2017). In an organisation, leadership influences followers (Avolio & Gardner, 2005; Brown & Trevino, 2006). When followers model their leaders, a social connection is created (Avolio & Bass, 1995; Fry, 2003; Greenleaf, 1977; Sethi, 2009). The term ‘modelling’ covers a broad range of psychological matching processes, including observational learning, imitation and identification (Brown, Trevino & Harrison, 2005; Rizzolatti, 2014). This connection strengthens team cohesion, weaves the organisation culture and facilitates various organisational outcomes (Fry, 2003; Bass & Avolio, 1993). Leadership behaviours are aspects of behaviour that explain leader influence on the performance of a team (Gooty et al., 2010), work unit or organisation (Yukl, 2012). A combination of skills and traits determine the behaviour of the leader (Avolio, 2007; Avolio & Bass, 1995; Brown and Trevino, 2006; Yukl, 2012).

Leadership styles that exhibit positive attributes include: transformational leadership (TL) (Bass & Avolio, 1993), authentic leadership (AL) (Avolio & Gardner, 2005), ethical leadership (EL) (Brown & Trevino, 2006), servant leadership (SL) (Greenleaf, 1977) and spiritual leadership (SP) (Fry, 2003). Transformational leadership encourages, inspires and motivates to innovate and create change, that facilitates growth and success of followers into leaders, through trust building, mentoring and training (Bass & Avolio, 1993). Authentic leadership emphasises on transparency, genuineness and honesty aligned with consistency and authenticity, in the workplace, building strong and honest relationships in which leader is trusted and followed (Avolio & Gardner, 2005). Ethical leadership is to act in accordance with moral principles in all activities and while making decisions (Brown & Trevino, 2006). Servant leadership is based on the philosophy and practice of service to enrich individuals, build better organisations and create a just and caring world (Greenleaf, 1977). Spiritual leadership is characterised by integrity, honesty, altruism and genuine care for others, effecting trust through the process of identifying vision and motivating faith/hope, which in turn increases followers’ intrinsic motivation to implement creativity in pursuit of organisational vision (Fry, 2003). These leadership styles positively influence
organisational outcomes, thereby also influencing the performance of individuals and organisations (Yukl, 2012). A leadership style with positive attributes is related to life orientation, resilience, flourishing, satisfaction with life and happiness, thereby creating organisational positivity (Youssef & Luthans, 2012). Organisational positivity triggers positive phenomena such as culture, strategy, structure, and human capital (Avolio, Walumbwa & Weber, 2009). However, positive leaders are not born; some of the characteristics that create them could be deeply embedded in personality (Zbierowski & Göra, 2014) or acquired through training (Sethi, 2009). These leaders exhibit a mixture of some special characteristics and traits that an individual either possesses and learns to strategise (Boal & Hooijberg, 2001), or learns to adopt (Sethi, 2009), and thereby to lead.

Cantero-Gomez (2019) posited that the conceptual framework of leadership with positive attributes has deepened into different forms of positive leaders: transformational, servant, spiritual, authentic, and ethical. This was evidenced by Blanch et al. (2016) when they presented a conceptual framework consisting of these five leadership styles. Integrated leadership links the cumulative effects of behaviours on various organisational outcomes (Avolio, 2007; Podsakoff, Mackenzie & Bommer, 1996). There are a number of differences in these leadership styles. Positive psychological capital (Fredrickson, 2001; Luthans, Youssef & Avolio, 2007) is evidenced in AL, but not in SL and SP. However, positive moral perspective is evidenced in all three, as in leader self-awareness through values, cognitions and emotions. While leader self-regulation through internalised, balanced processing and relational transparency is evidenced in AL and SP (Avolio, 2007), it is absent in SL (Avolio, Walumbwa & Weber, 2009). However, self-regulation through authentic behaviour is evidenced in both AL and SL (Avolio, 2007) but not in SP. Leadership behaviours through positive modelling is evidenced in AL and SL (Avolio, 2007) and supporting self-determination is evident in AL and SP (Avolio 2007) but leadership behaviours through personal and social identification, emotional contagion and positive social exchanges is evident only in AL (Avolio, Walumbwa & Weber, 2009). Values in follower self-awareness and self-regulation are evident in all three behaviours, while cognitions and emotions are evident in AL and SP (Avolio, Walumbwa & Weber, 2009). Follower development is a focal component in all three behaviours. Inclusion in organisational context and performance beyond expectations is evident in AL and SP (Avolio, 2007) but all other factors of organisational context and performance, such as facing uncertainty, being ethical, positive and veritable and sustaining performance is seen in AL and EL (Avolio, Walumbwa & Weber 2009). Positive relationships of SL, TL, EL with job satisfaction and work engagement (Bass & Avolio, 1993; Brown & Trevino, 2006; Van Dierendonck & Nuijten, 2011), trust and team performance (Fry, 2003; Brown & Trevino, 2006; Schaubroeck et. al., 2011), team potency and firm performance (Hu & Liden, 2011) have been evidenced. TL, if authentic, altruistic, and ethical, exhibits common behaviours as SL, AL, and SP; while a prerequisite of EL is that the characteristics of SL, SP, and AL should be effective.

Intellectual stimulation is one of the four elements of TL giving it a specific significance (Bass, 1985) which is not found in AL, EL, SL however intellectual stimulation as in mind training is mentioned in SP (Fry, 2003). The role of intellectual stimulation in TL is that of a training to challenge assumptions, take risks, solicit ideas with the purpose of stimulating and encouraging creativity, nurturing and developing independence in thinking, and, grasping learning opportunities (Bass, 1985). Intellectual stimulation like meditation acts as a facilitator to train the mind (Fry, 2003; Sethi, 2009). It trains to exhibit the positive characteristics (Smith, Koppes Bryan & Vodanovich, 2012). This set of traits allows a leader to induce
subordinates to accomplish tasks productively (Luthans & Avolio, 2009; Luthans, Youssef & Avolio, 2007; Koppes Bryan & Vodanovich, 2012). Positive leaders have three characteristics: (1) facilitation of extraordinarily positive performance (above-average performance); (2) focus on people’s strengths and abilities; and (3) facilitation of the best of the human condition, thereby fostering virtuousness (Antino et al., 2014; Cameron, 2008). The difference in the intellectual stimulation that is a factor of TL and a facilitator in SP, is that, in TL problem solving skills are developed (Bass, 1985) while in SP traits are developed (Fry, 2003). This study concentrates on the manifestation and/or development of flow – a mental state (Csikszentmihayli & Csikszentmihayli 1988) and grit – a positive non-cognitive trait (Duckworth et al. 2007), hence intellectual stimulation plays the role of a facilitator in this research.

Comparison of these five leadership styles suggests that these leadership behaviours possess similarities. Five common components are (1) a positive moral outlook, (2) leader’s self-knowledge, (3) positive modelling of the followers’ behaviour, (4) personal and social identification of followers with the leader and the group and (5) positive social exchanges between the leader and the followers. (Avolio & Gardner, 2016). These five leadership styles are accepted as positive styles of leadership (Blanch et al., 2016; Cantero-Gomez, 2019). Integration of these behaviours brings their individual similarities together, thereby reflecting the manifestations exhibited by practising meditation and the attributes of positive psychology.

Managers and the leader in them

In this study all employees across all levels of management fulfilling the responsibility of managing a team is taken as a leader (Glinkowski, 2017). Managers generally comprise the middle and top levels of an organisation, acting as liaison between the level above and the level lower than themselves within the organisation (Huy, 2001), while some organisations also have team leaders who fall in the lower level of management. Managers’ role becomes that much difficult with their superior loosening control (Caker & Siverbo, 2018) emphasising the requirement of positivity in their leadership attributes to prevent the negative effect cascading to the lower levels of the organisation. Their role requires them to fortify the culture of the organisation through leading, communicating and linking (Mintzberg, 1990). Though they lead teams and people, they also have to manage a complex web of influencing forces; synthesise and link operational reality with the strategic picture; work at an unrelenting pace; balance work while promoting change; and be oriented to action rather than reflection (Mintzberg, 2013). The burden of managers is the dual expectations they carry (Mintzberg, 2013). Their role can be likened to that of the filling in of a sandwich. They are expected to plan strategically though their role always lands them in situations that require knee-jerk reactions; to plan, train, play a leadership role and operate on three planes: people, action and information; to use art, science and craft where art brings in the ideas and the integration; craft makes the connections, building on tangible experiences; and science provides the order, through systematic analysis of knowledge; to attend a steady stream of meetings and one-to-one verbal conversations that take up most of their days; to respond to the pressures of the job while always bearing in mind the mounting emails and callers requiring response; to deal with messy stuff; and to apply their specialised knowledge to make decisions (Minzberg, 1990; 2013). They have to shift moods quickly and frequently as the activities require off them yet make time for calm, focused reasoning (Wheeler, 2016).

Daily juggling unexpected change and uncertainty leads to high levels of stress and anxiety, and subsequently job strain (Brendel et al., 2016). This stress is a dynamic process between physiological,
psychological, and behavioural factors that are cognitively interpreted by the individual (Walinga & Rowe, 2013). For every £1 invested a return of £1.50 to £9 was shown by Deloitte through evaluations of workplace mental wellbeing interventions resulting in happier, more engaged and more productive staff who are less likely to need to take time off sick (Mamo, 2019). Though the participants in this study are taken as leaders they carry many stress points in their daily work, elucidating their daily struggles and justified their need for support in their wellbeing; and justifies the previous the integration of the five leadership styles. These leadership styles positively influence organisational outcomes, thereby also influencing the performance of individuals and organisations (Yukl, 2012). The review outcome was the understanding that an integration of these five leadership styles could be used as a guideline by which to comprehend the development of positive leadership attributes in participants. The integrated approach under the umbrella of positive leadership was applied to distinguish leadership attributes from the responses in the interviews. Positive leadership was one of the four constructs used in the study.

Positive psychology
Seligman (2002) posited three levels in the field of positive psychology:

1. the subjective level is concerned with valued experiences of the individual, such as wellbeing, contentment and satisfaction (in the past), hope and optimism (for the future), and flow and happiness (in the present).
2. the individual level considers positive individual traits, such as the capacity for love and vocation, courage, interpersonal skills, aesthetic sensibility, perseverance, forgiveness, originality, future mindedness, spirituality, high talent, and wisdom; and
3. the group level, which is concerned with the civic virtues and the institutions that move individuals towards better citizenship, including responsibility, nurturing, altruism, civility, moderation, tolerance, and work ethic.

Positive psychology has influenced the conceptual and theoretical models developed in the field of psychology, and positive styles of leadership are among the most vital factors within positive organisational psychology (Cantero-Gomez, 2019).

In broaden and build theory, Fredrickson (2001) stated that ‘certain discrete positive emotions—including joy, interest, contentment, pride, and love—although phenomenologically distinct, all share the ability to broaden people's momentary thought-action repertoires and build their enduring personal resources, ranging from physical and intellectual resources to social and psychological resources’ (p.219). This suggests that positive emotions produce health and wellbeing, and fuel human flourishing. The ‘broaden and build’ theory (Fredrickson 2004) puts forth that positive emotions expand cognition and behavioural tendencies and facilitates increases in the number of potential behavioural options. Fredrickson (2004) found that cultivating positive emotions leads to benefits in health and wellbeing. These benefits are exhibited as distinguishing features, which are attainable through intellectual stimulation achieved by practising meditation (Antino et al., 2014; Fredrickson, 2001; Lewis, 2011; Luthans & Avolio, 2009; Youssef & Luthans, 2012). Intellectual stimulation or mental training acts as a buffer to psychological stress responses (Creswell et al., 2014). The consequences of a broadened mindset lead to the promotion of innovative and creative actions, ideas and bonds, which positively affect individuals’ personal resources and produce optimal, long-term functioning (Fredrickson 2001). In the current study, two attributes of positive psychology – flow and grit – are assessed. Applying the broaden and build theory facilitated understanding of these two attributes in the study.
How does positive psychology relate to positive leaders?

Leadership with positive attributes is one of the most vital factors within positive organisational psychology and a key element for optimal performance of individuals, groups and organisations leading to the flourishing of all the positive dimensions of human beings, and the promotion of organisational and occupational wellbeing and health, both at the individual and collective levels (Cantero-Gomez, 2019). Affect and emotions are deeply intertwined with the process of leading, leader outcomes and follower outcomes (Gooty et al., 2010). Emotion is a psychological state of specific duration, accompanied by behaviour, which is the result of cognitive appraisal or evaluation regarding a change in the environment (Fox & Calkins, 2003). Emotions and emotionality are assumed to be affects (Zineldin & Hytter 2012). The common component in both is positive affect (Antino et al., 2014; Fredrickson & Joiner, 2002; Watson et al., 1999). Positive affect alters mindsets, widens scope of attention, broadens behavioural repertoires, increases intuition and creativity, and alters physiological systems (Fredrickson & Losada, 2005).

Mayer et al. (2001) define emotional intelligence as the ability to perceive emotion in oneself and others, to use emotions to facilitate thinking, understand emotions and emotional processes, and to manage the experience and expression of emotions in oneself and others. Learning does not occur only through cognition but also through emotional responses that act without conscious awareness (Goleman, Boyatzis & McKee, 2003). Lewis (2011) stated that ‘positive psychology at work is about pursuing wellbeing at work as an ethical endeavour’ (p. 7). It balances positive against negative emotions and affects both individual and organisational wellbeing (Fredrickson, 2001; Fredrickson & Joiner, 2002; Lewis, 2011; Van Gordon et al., 2014). Virtuous acts, as in doing good and the recipient feeling good, produce positive emotions (Lewis, 2011) and triggers a virtuous spiral (Fredrickson & Joiner 2002). Feeling good, in turn, has positive effects of increasing the possibility of doing better and improving personal wellbeing (Lewis, 2011). Virtuous acts help to create social capital, a reference to the value within social networks of the organisation creating a platform that allows speedy, coordinated, responsive and flexible action or reaction; facilitates communication and cooperation; enhances employee commitment; fosters individual learning; strengthens relationships and involvement; and, ultimately, enhances organisational performance (Antino et al., 2014; Fredrickson & Joiner, 2002; Lewis, 2011). According to Cantero-Gomez (2019):

… positive leadership has specifically, three necessary components:
• A focus on people’s strengths and abilities that reaffirm their human potential.
• An emphasis on results and facilitates above the average individual and organisational performance.
• A field of action concentrated on the components that can be seen as essential virtues of the human condition (para. 6).

An organisation can be influenced in a positive way through effective leadership (Blanch et al., 2016; Fredrickson, 2001; Lewis, 2011; Youssef & Luthans 2012). These leaders utilise their attributes for the betterment of the organisation (Levy, 2009). Organisational survival is directly related to employee performance and the quality of leadership (Dellaportas, Cooper & Braica, 2007).

How does positive psychology relate to meditation?

Sethi (2009) states that the brain changes are a function of where an individual puts their attention. Arch and Craske (2006) suggest that by using meditation to focus the mind for 15–20 minutes every day, ‘mental muscle’, and learning to focus in general, are built (p. 1852). Awakening mindfulness through the practice of meditation facilitates the development and sustaining of behaviour and traits similar to those
characterised by positive psychology which reflect mindfulness (Allman et al. 2001; Austin, 1999; Goenka, 2000; Joseph, 2001; Kabat-Zinn, 2005). The neuroplasticity feature of the brain facilitates the reshaping of the brain towards the attention on which it was focused (Rizzolatti, 2014). There are three factors that causally affect happiness (Lyubomirsky, Sheldon & Schkade, 2005). The most powerful affect at 40%, is considered to be action or thought of the individual; while genetic setpoint affects 50% and circumstances of life affects 10% (Lyubomirsky, Sheldon & Schkade, 2005). Action and thoughts have the power to affect the quality of happiness as it is totally under the control of the individual (Lyubomirsky, Sheldon & Schkade, 2005). Positive brain transformations occurring during meditation (Baerentsen et al., 2010; Creswell et al., 2014; Fayed et al., 2013; Fox et al., 2014; Kasala et al., 2014; Hölzel et al., 2011; Slagter, Davidson & Lutz, 2011) justify the act of meditation affecting individual happiness; the relatability of positive psychology with meditation is comprehensible and is therefore used as a theoretical basis in the framework of this research.

The concept of flow and its relationship to meditation
Flow is characterised by absolute engagement and absorption in an action, where time ceases to play a role, sensations of self-consciousness and ego disappear, thereby unifying the activity and person (Csikszentmihalyi, 2002; Lewis, 2011). Lewis (2011) found that flow is inherently connected to growth. Flow correlates with perseverance, a trait of positive styles of leadership and an attribute of positive psychology (Csikszentmihalyi, 2002; Lewis, 2011). This indicates that flow could be a result of focused attention and perseverance. The concurrent development of flow and mindfulness results in improvement in the attributes of positive psychology, as in attentiveness, being focused and engaged, leading to absorption, work enjoyment and intrinsic work motivation, and resulting in enhanced job performance (Demerouti, 2006; Lewis, 2011). Flow acts as a natural mediator in the relationship between positive leadership and positive psychology and promotes both (Csikszentmihalyi, 2002; Fredrickson, 2001; Lewis, 2011; Luthans & Avolio, 2009).

Csikszentmihalyi (1990) states that flow theory points the way whenever the goal is to improve the quality of life. An indication of prolonged regular practice of meditation is the feature of flow in the meditator (Baccarani, Mascherpa & Minozzo, 2013). Flow is a state of optimal experience (Csikszentmihalyi & Csikszentmihalyi, 1988; Smith et al., 2020). It plays a significant role in enhancing satisfaction, motivation, and productivity in the workplace (Martin, 2005). Flow is the function of focusing attention over a prolonged period, induced through (i) external interests such as practising meditation or (ii) inherent capability (Lewis, 2011).

Grit and the concept of its relationship to meditation
Grit is a non-cognitive trait that accounts for successful outcomes and high achievement (Duckworth et al., 2007). It falls under the trait of effort, which influences cumulative effort (Duckworth, Eichstaedt & Ungar, 2015). Grit entails having a dominant superordinate goal and tenaciously working towards it in the face of obstacles and setbacks, often for years or decades (Duckworth & Gross, 2014). A superordinate goal is a goal that is of higher value than other goals, being more important and having higher priority for the high achiever (Duckworth & Gross, 2014). The principles of grit lie in the type of goal being pursued: achieving and improving skill by extremely effortful, focused and deliberate practice; the capacity to sustain both effort and interest in projects; and the time taken to achieve the goal (Duckworth & Gross, 2014; Duckworth & Quinn, 2009; Duckworth et al., 2007).
Grit approximately correlates with self-control (Duckworth & Gross, 2014). Self-controlled behaviour refers to an individual having the ability to voluntarily regulate attention, emotion and behaviours to advance personally valued, longer-term goals despite conflicting urges that are more potent in the moment; at times self-control entails inhibiting an undesired impulse and at other times it entails strengthening a desired action (Duckworth & Steinberg, 2015). Prefrontal and associated areas of the brain (e.g. dorsolateral prefrontal cortex, anterior cingulate gyrus) have been associated reliably with self-control, not just for the regulation of emotion but also for delaying gratification and suppressing thoughts (Carlson, Zelazo & Faja, 2013; Duckworth & Steinberg, 2015). Assuming that grit will also be associated with the same areas of the brain as self-control, meditators may exhibit grit as one of their positive psychological attributes.

This proposition is further supported by the words used to describe grit. Since grit is associated with words like tenacity and assiduousness, it implies that to be gritty requires the bearing of pain for a prolonged period. When meditation affects the amygdala, higher pain tolerance or lower pain sensitivity (Grant & Rainville 2009) and reduction in the perceived unpleasantness of painful stimuli (Zeidan et al. 2011, Grant et al. 2010, Grant, Courtemanche & Rainville 2011; Zeidan et al. 2011) is observed, making the meditator resilient to stress (Kaouane et al. 2012).

Research on grit is continuing to evolve, and though grit has a significant positive association with work engagement (Ion, Mindu & Gorbânescu 2017; Suzuki et al. 2014), much remains to be discovered about its underlying psychological mechanisms (Duckworth & Gross 2014). Therefore, we do not know to what extent grit affects actual work performance in a business environment (Ion, Mindu & Gorbânescu 2017; Suzuki et al. 2014).

**How do flow and grit complement each other?**

Perseverance is the steadfast pursuit of a task despite obstacles, discouragement, or distraction, while grit is taken to be a trait of perseverance (Duckworth et al. 2007). Individuals motivated by engagement in flow-producing activities sustain effort towards long-term goals (Von Culin, Tsukayama & Duckworth 2014). Grit sets apart exceptional individuals (Duckworth et al. 2007). Self-control, self-awareness, and self-regulation are traits of positive styles of leadership and, though there are differences, both grit and self-control are strongly correlated (Duckworth & Gross 2014).

Meaningfulness, vigour, perseverance, diligence, possessing a work ethic and dedication are all attributes common to both grit and flow, and are associated with both positive styles of leadership and positive psychology (Bakker & Leiter 2010; Duckworth & Gross 2014; Meriac et al. 2015; Suzuki et al 2014; Von Culin, Tsukayama & Duckworth 2014). It is assumed that while grit is a combination of passion and perseverance, flow is a combination of focused attention and perseverance. Reviewing the literature, the common component in both grit and flow is positive affect (Fredrickson & Joiner 2002) and perseverance (Csikszentmihayli 2002; Lewis 2011). Positive affect alters mindsets, widens scope of attention, broadens behavioural repertoires, increases intuition and creativity, and alters physiological systems (Fredrickson & Losada 2005). Positive affect is signified through happiness, flourishing, contentment, motivation, and selflessness (Fredrickson & Losada 2005; Demerouti 2006; Martin 2005; Smith, Koppes Bryan & Vodanovich 2012). From the review of the literature, it is understood that since flow and grit share positive affect and perseverance, and since positive affect is derived from meditation, grit is proposed to relate to flow and with meditation.
From the literature review on grit there were three rationales that emerged. The first was that, since meditation facilitates the flow attribute of positive psychology in meditators (Cziksentmihayli 2000) and flow and grit are attributes of positive psychology, grit will also be facilitated. Given that research on grit is evolving and its relationship to meditation is yet unexplored, the literature review findings are based on paucity of studies in this area (Ion, Mindu & Gorbănescu 2017; Suzuki et al. 2014), its correlation with flow is a proposition of this study. The second is that, if grit is associated with the same areas of the brain as self-control, then meditators may exhibit grit as one of their positive psychological attributes. This is supported in the literature, where grit sets apart exceptional individuals (Duckworth et al. 2007) who exhibit self-control, self-awareness and self-regulation as traits of positive leadership, though there are differences. Both grit and self-control are strongly correlated (Duckworth & Gross 2014). Therefore, there was a possibility that meditation facilitates grit, an attribute of positive psychology, just as it has been studied to facilitate flow (Cziksentmihayli 2002). The third literature review finding was that, based on the words used to describe grit, words such as ‘tenacity’ and ‘assiduousness’ imply that to be ‘gritty’ requires the bearing of pain for a prolonged period (Lee & Duckworth 2018), which is exhibited in meditation practitioners (Grant et al. 2010; Grant, Courtemanche & Rainville 2011; Zeidan et al. 2011).

Applying the theories of Positive Psychology (Seligman & Csiksentmihalyi 2000) and Broaden and build theory (Fredrickson 2001) alongwith the theories on flow (Csiksentmihalyi 1990) and grit (Duckworth 2007), the outcome was a focus on flow and grit as two attributes that would be assessed and studied to discern positivity in participants. The outcome from the review of studies of the neurology and physiology of meditators (Creswell et al. 2014; Kasala et al. 2014; Fox et al. 2014; Tang et al. 2009), was that practising meditation would manifest attributes of positive psychology (Baerentsen et al. 2010; Davidson 2013; Desbordes et al. 2012) irrespective of the management level. The outcome of the literature review on the role of meditation with positive styles of leadership (Fry 2003), performance at work and positive psychology (Dhiman 2009; Sparks, Faragher & Cooper 2001; Tenney, Poole & Diener 2016; Wright 2014; Wright & Coprazano 2004) would be useful, leading to the proposition that all levels of management will also exhibit positive leadership style. Insufficient research to validate the role of meditation in workplaces (Passmore 2019), while understanding whether its application produces positive leaders, affecting positivity in people management capabilities or any other positive outcome (Donaldson-Feilder, Lewis & Yarker 2019) is addressed with this study. While there are no studies, there are two reviews in 2019 which are the latest on meditation outcomes on leaders and managers (Donaldson-Feilder, Lewis & Yarker 2019; Passmore 2019) and a review on empirical studies (Cheng 2016).

Three research objectives were developed after reviewing the literature. The first objective examines whether meditation practicing leaders exhibit positive skills, attributes and abilities required to fulfill their role as a leader. The second objective is to examine the relationships between grit, flow, and meditation. The third objective is to examine if the relationship between grit, flow and meditation facilitates development of positive leaders. Three research questions were developed linked to these objectives. (1) What is the role of meditation in developing positive leaders? (2) How is the relationship between grit, flow and meditation? (3) How does the relationship between grit, flow and meditation play a role in developing positive leaders?
METHODOLOGY
The study follows a participatory paradigm. The nature of reality is a subjective–objective ontology. The methodology aligns with the reality of the practical, conceptual, empathic, and imaginal sense with opinions, ideas and logical discussions being the mode of collecting data. The epistemology is interactive, as the known and the knower interchange their roles. Grounded theory is the method of analysis. In this study, as the knowledge is fragmented, and the study begins with a few preconceptions; an inductive approach is assumed as likely to lead to a theory as an appropriate amalgamation of all the fragmented knowledge.

The work reported is not preregistered with an analysis plan. The study design and hypotheses of the reported work are not preregistered. There are no computer codes or syntaxes needed to reproduce analysis. The manuscript contains raw and processed data on which the study conclusions are based which are available through the link submitted herewith. Data is available through [https://doi.org/10.25439/rmt.13315355.v1](https://doi.org/10.25439/rmt.13315355.v1). The raw data gathered in this study was approved following the rules and procedures of RMIT Ethics Committee. Ethics Approval number 21381 given by RMIT University Ethics Committee on 13 Feb 2018.

The study was expected to advance the conceptual framework. After the initial interview, participants either were asked questions to clarify their descriptions, explanations or answers, or were probed into sharing an opinion or experience that they had glossed over previously. The follow-ups usually were by telephone and email, 4–8 weeks after the initial interview. The first interviews were conducted in person, organised for participants’ convenience and comfort. The instruction sheet for conducting the interviews included questions on the two attributes, flow and grit, through which the effects of meditation on practitioners were assessed. The interview guide was broadly based on questions for grit from Grit-S (Duckworth & Quinn 2009), for flow from Flow-Q (Csikszentmihayli & Csikszentmihayli 1988; Nakamura & Csikszentmihayli 2009) and the ESF (Larson & Csikszentmihalyi 2014). The questions in these instruments were used to set the tone of the interviews, and further opinions and views were gleaned through probes and scenarios constructed to get elaborate and detailed answers. The questions on being a leader were based on feedback received from the researcher’s supervisors, peers and team, and scenarios, hypothetical situations and opinions elucidated on the characteristics, attributes and components common to positive styles of leadership (Antino et al. 2014; Avolio & Gardner 2016; Avolio, Walumbwa & Weber 2009; Cameron 2008; Youssef & Luthans 2012; Zbierowski & Góra 2014). Responses were probed to seek participants’ elucidations on life orientation, resilience, flourishing, satisfaction with life, happiness and creating organisational positivity (Avolio, Walumbwa & Weber 2009; Youssef & Luthans 2012; Zbierowski & Góra 2014). Opinions were asked on participants’ moral outlook, modelling of the followers’ behaviour, personal and social identification of followers, and social exchanges between the leader and the followers (Avolio & Gardner 2016). Responses were noted for reflecting whether (1) it facilitates extraordinarily positive performance (above-average performance); (2) it focuses on people’s strengths and abilities; and (3) it facilitates the best of the human condition fostering virtuousness (Antino et al. 2014; Cameron 2008). Since the full questionnaires and scales were not used, this research did not require permissions. The questions on meditation dwelled on the technique practised, the duration of attention and point of losing attention (Goenka 2000; Thich 1998; Kabat-Zinn 2005; Yogi 1977). The phenomena under examination are the manifestation of grit and flow and their relationship with each other in developing leaders who become positive by practising meditation.
In this study, thick descriptive narratives were developed from the data so that degree of fit could be attained, and the findings could be used elsewhere if required. All conflicts were noted and presented. Authenticity was adhered to by not manipulating the participants, giving them an environment in which an open, opinionated discussion was permitted; the participant would share knowledge and experiences through recounts while the researcher would act as facilitator. Participants’ inputs were respected and honoured, while giving them the power to decide whether they wanted to continue being part of the study, giving them the opportunity to make an informed choice about joining the study and empowering each participant by giving them the confidence that their voice was heard, respected and honoured.

Following the ethics policy, the consent forms assured participants of confidentiality, anonymity, and privacy. The selection of participants was determined by two factors: those who practiced meditation and had some people-management responsibilities. The first question asked at the beginning of the interview was whether the respondent was currently practising meditation or attending a meditation program, including the number of years or months. Participants were asked about the duration and frequency of their meditation practice and whether meditating allowed the mind to remain calm without distractions. Further probing sought to determine how long in minutes participants could pay complete attention while meditating, without allowing themselves to be distracted. All participants meditated for 20 minutes or more (Van Gordon et al. 2014). Based on the evidence that meditation, if practised for a minimum of 8 weeks, produces changes in the practitioner (Kabat-Zinn 2013), participants who practiced for 8 or more continuous weeks were accepted into the study.

From the literature, it was understood that leadership was not an inherent quality but was a capability that could be developed (Sethi 2009). Thus, since others who are not in a leadership or managerial role can also develop leadership capabilities; front-line managers and team leads were also included to assess their inherent leadership capabilities. In the research all those with management functions were included in the study.

ANALYSIS
The background characteristics of the participants was the first step of the analysis, then the interviewer’s observations and notes were used. A diagram of the entire analysis was drawn up to represent its phases. Refer Figure 1. The entire analysis was repetitive in the first phase. The second phase constituted collation of the analysis of the first phase.
Figure 1: The research analysis map

The dotted arrowheads represent the steps of Thematic Analysis repeated for each participant. The thick arrowheads represent the next step in the research analysis.

The conceptual themes that were found to recur in the thematic analysis of data from all 20 participants are *Immerse oneself fully to accomplish goals, Leadership, Persistence, Meditation* and *Positive emotions*. Applying open coding in grounded theory (Strauss & Corbin, 1990), often-used words, phrases, and synonyms, and responses to questions from the interview guide conceptual categories were deduced on the basis of dimensions and properties, from the conceptual themes. All data from each participant was individually analysed to generate initial themes and subthemes from each participants’ response given to the questions asked in Table 1.
<table>
<thead>
<tr>
<th>Constructs</th>
<th>Issues/ Indicators</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grit</td>
<td>Following a long-term goal and then leaving it to follow another</td>
<td>Are you able to focus on projects that take more than a few months to complete?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Have you achieved a goal that took years of work?</td>
</tr>
<tr>
<td></td>
<td>Overcoming setbacks to conquer important challenge</td>
<td>Will you be able to share what kept your ongoing focus? Do setbacks discourage you?</td>
</tr>
<tr>
<td></td>
<td>Hardworker</td>
<td>Would you describe yourself as a hard worker?</td>
</tr>
<tr>
<td></td>
<td>Diligent</td>
<td>Would you describe yourself as diligent?</td>
</tr>
<tr>
<td></td>
<td>Complete undertaken work</td>
<td>Have you overcome setbacks to conquer an important challenge?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Do you finish whatever you begin? Is/are there any that after beginning you did not complete?</td>
</tr>
<tr>
<td>Flow</td>
<td>Give up easily</td>
<td>Would you be able to give an instance when you set a goal but later chose to pursue a different one?</td>
</tr>
<tr>
<td></td>
<td>Distractedness</td>
<td>Would you describe yourself as a person who gets distracted by new ideas and projects from previous ones? If yes, please share the instance/s.</td>
</tr>
<tr>
<td></td>
<td>Obsessive but for a short while</td>
<td>Is there any idea or project that you have obsessed with for a short time but later lost interest?</td>
</tr>
<tr>
<td>Positive leader</td>
<td>Feedback received from team and supervisor</td>
<td>What are their subordinates’/team’s feedback about them as a manager?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What does their supervisor say about their team-management capability?</td>
</tr>
<tr>
<td></td>
<td>Self-assessment of team-management capability</td>
<td>How do they relate with the subordinates as their indirect/direct manager?</td>
</tr>
<tr>
<td>Meditation</td>
<td>Practice duration</td>
<td>How many minutes per day and how many times does the participant practice meditation per day?</td>
</tr>
<tr>
<td></td>
<td>Concentration</td>
<td>For how long in minutes, while meditating, does the mind remain calm without any distractions?</td>
</tr>
<tr>
<td></td>
<td>Attention</td>
<td>How long in minutes can the participant pay complete attention while meditating, without being distracted?</td>
</tr>
</tbody>
</table>

Table 1: Key concepts used in the research and the relevant questions

The review depicted in Table 2 shows the recurring themes that were predominant and common across the 20 participants. These common themes are accepted as the conceptual themes for the study. Churning
the data and using all the techniques and strategies that were used in thematic analysis, the categories and subcategories are analysed.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Conceptual themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>Overcoming setbacks to conquer important challenges</td>
</tr>
<tr>
<td>2nd</td>
<td>Overcoming setbacks to conquer important challenge</td>
</tr>
<tr>
<td>3rd</td>
<td>Resolve to achieve</td>
</tr>
<tr>
<td>4th</td>
<td>Obsessive but for a short while</td>
</tr>
<tr>
<td>5th</td>
<td>Obsessive but for a short while</td>
</tr>
<tr>
<td>6th</td>
<td>Obsessive but for a short while</td>
</tr>
<tr>
<td>7th</td>
<td>Following a long-term goal and then leaving it to follow another</td>
</tr>
<tr>
<td>8th</td>
<td>Obsessive but for a short while</td>
</tr>
<tr>
<td>9th</td>
<td></td>
</tr>
<tr>
<td>10th</td>
<td>Overcoming setbacks to conquer important challenges</td>
</tr>
<tr>
<td>11th</td>
<td></td>
</tr>
</tbody>
</table>
Table 2: Thematic review: Collation of conceptual themes of all 20 participants

<table>
<thead>
<tr>
<th>Table 2: Thematic review: Collation of conceptual themes of all 20 participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note: The themes set in <strong>bold</strong>, <em>italics</em> are the common ones across the collated data. The thematic review revealed conceptual themes and subthemes which were then collated and mapped. The open coding of the conceptual themes was then mapped to reveal the associations between the themes and subthemes leading to inducing the subcategories for each participant was carried out. One such illustration, refer Figure 2, is given below:</td>
</tr>
</tbody>
</table>
The themes and the subthemes were mapped. According to the mapping of the themes and subthemes, the ... easily. 

Reason for attraction and losing interest

Obsessive but for a short while

Distractedness

Meditation

Persistence

Leadership

Overcoming setbacks to conquer important challenge

Hardworker

Diligent

Complete undertaken work

Give up Easily

Figure 2: Illustrating mapping for one participant. the associations between the themes and subthemes are established

Open coding of the mappings was then conducted given in Table 3. Open coding brought together all the subthemes and indicated the themes that each subtheme fell under.

<table>
<thead>
<tr>
<th>Themes</th>
<th>Leadership</th>
<th>Persistence</th>
<th>Meditation</th>
<th>Positive emotions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immerse oneself fully to accomplish goals</td>
<td>Subtheme</td>
<td>Subtheme</td>
<td>Subtheme</td>
<td>Subtheme</td>
</tr>
<tr>
<td>Subtheme</td>
<td>Subtheme</td>
<td>Subtheme</td>
<td>Subtheme</td>
<td>Subtheme</td>
</tr>
<tr>
<td>Passion to accomplish</td>
<td>People-oriented</td>
<td>Determination</td>
<td>Sustainability</td>
<td>People-oriented</td>
</tr>
<tr>
<td>People-oriented</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• just resonates for me</td>
<td>• people are</td>
<td>• quite a lot of</td>
<td>• things operate at the</td>
<td>• very emotional</td>
</tr>
<tr>
<td>• an emotional intelligence that really put the people</td>
<td>consciously</td>
<td>the determination</td>
<td>same time</td>
<td>person</td>
</tr>
<tr>
<td>• It was pure love</td>
<td>attracted to</td>
<td>that is one thing</td>
<td>don’t relate to life as</td>
<td>I have to be</td>
</tr>
<tr>
<td>• Very intense and really, how strongly…</td>
<td>it</td>
<td>which will lead you to what</td>
<td>being a challenge</td>
<td>mentally strong</td>
</tr>
<tr>
<td>• build capacity in their capacity</td>
<td></td>
<td>you want to become</td>
<td>have to kind of be</td>
<td>I'm just mindful</td>
</tr>
<tr>
<td>• need to work together</td>
<td>• evolving, ever</td>
<td>need for it in a way</td>
<td>ready for it in a way</td>
<td>that I have to</td>
</tr>
<tr>
<td>• evolution</td>
<td>• perseverance</td>
<td>“that's all aligned well”</td>
<td>to get out of it</td>
<td>clear it</td>
</tr>
<tr>
<td>• It’s grit.</td>
<td>• determination</td>
<td></td>
<td></td>
<td>to make it as</td>
</tr>
<tr>
<td>• things operate at the same time</td>
<td></td>
<td></td>
<td></td>
<td>inclusive as I can</td>
</tr>
<tr>
<td>• don’t relate to life as being a challenge</td>
<td></td>
<td></td>
<td></td>
<td>recognising the</td>
</tr>
<tr>
<td>• have to kind of be ready for it in a way</td>
<td></td>
<td></td>
<td></td>
<td>signs</td>
</tr>
</tbody>
</table>

Focused objectivity

Passion to accomplish

People-oriented

Focused objectivity

Focused objectivity
I can feel it, quite aware of what people think. I always have “aware of your emotional state and not allow the outside world to affect it.” “there should be no fear attached to it. “That would come with a calming effect. Lead to more value as in it can be done easy to follow your passion and excelling. pure love a very meaningful the driving factors my motivation having that compassion, empathy, even with those people finding that ecosystem input flows and the people who want having a vision my care for the people who matter most in my life can feel pain. Probably up to a point in my life I concentrate on my breathing reflect on it and wish I had been able to do better for them “The affinity towards it.” coming out and observing, more friendlier an intention was set, and it would manifest. I do believe you become much more powerful manifest that excitement comes an energy feeling and you feel energised” an intention was set, and it would manifest. I do believe you become much more powerful manifest that kind of trust I have been able to build Adaptable developing is good goal is purposeful why it’s meaningful to me first I’m efficient. Let it go. Let flow like have to be mentally strong not being fair to myself. ensure harmony I can feel pain. a lot of detailed work just focused on work before a channelling experience that I could stay focused it’s also about passion state of balance, I can, achieve my current and my long-term goals by temperament I am a very compassionate person. always think of strengths also as one’s weaknesses, virtues and strengths at the same time. forgiving of human imperfection

Table 3: Open coding of the themes and subthemes

The six subcategories are Passion to accomplish; People-oriented; Positivity; Determination; Sustainability; and Focused objectivity. The two subcategories of Immerse oneself fully to accomplish goals are Passion to accomplish and Focused objectivity. The four subcategories of Leadership are People-oriented; Passion to accomplish; Positivity; and Focused objectivity. The four subcategories of Persistence are Determination; People-oriented; Positivity; and Focused objectivity. The two subcategories of Meditation are Sustainability and Focused objectivity. The categories are Immerse oneself fully to accomplish goals, Leadership, Persistence and Meditation.
Each category has properties and dimensions that link to the overarching core category through the relationship specified in the paradigm model. Strauss and Corbin (1990) framed questions that establish the choice of the core category. If the categories are not conceptually rich and dense, the theory generated will not have explanatory power (Strauss & Corbin 1990). The choice of the core category is reconfirmed through the answers to the following question: What is the main analytic idea presented in this research (Strauss & Corbin 1990)? The main analytic idea presented in this research is the role of meditation in developing grit and flow to develop positive leaders. Grit is described by two words: passion and perseverance. Flow is described by the following words: attention, focus and concentration. From the definitions of grit and flow, focused objectivity reflects the foundation of the study (Table 4).

The next question is: if my findings are to be conceptualised in a few sentences, what do I say (Strauss & Corbin 1990)? In one sentence, the findings reveal that there are relationships between all five conceptual categories, indicating that these categories will tell a story that will support the development of theory. Persistence represents grit. Immerse fully to accomplish goal represents flow and grit. To answer the question in detail it would mean that all five categories are directly related to each other. What does all the action/interaction seem to be about (Strauss & Corbin 1990)? Immerse fully to accomplish goals, positive emotions and leadership are directly related. Positive emotion, leadership and persistence are directly related. Leadership, persistence and meditation are directly related. All five themes are also directly related. This means that there are interactions between all five themes. How can I explain the variation that I see between and among the categories? (Strauss & Corbin 1990) All five categories are common to focused objectivity. They are based on focussed objectivity. Leadership is visible as the only outcome of all the categories. The categories immerse oneself fully to accomplish goals and persistence share the category meditation, while immerse oneself fully to accomplish goals and persistence also share the category positive emotions. Positive emotions and meditation also overlap each other. Focussed objectivity evolve from responses to questions on the measure flow. Therefore, all the five categories are related to flow and depict relation to transform through the entire range of flow, from shallow to deep (Moneta, 2010).

This results in two simultaneous outcomes. The first outcome states the commonness of Focussed objectivity with all the five categories making it the core category while the second one states that the result of all the relationships is leadership. The core category is focused objectivity and leadership, persistence, meditation, positive emotions and immerse oneself to accomplish goals are directly related to each other, with leadership as the result of the relationships. Leadership is the consequence of all the categories in relation to the subcategories of the paradigm. In selective coding using story line, relating subsidiary categories around the core category with a paradigm, relating categories at a dimensional level and validating their relationships against data, an overarching theory is generated.
DISCUSSION

From the storyline delineating focused objectivity, it is found that grit and flow are related with flow being the building brick of grit. Grit and meditation are related through flow, and confirms previous studies that flow, and meditation are related. Applying related subsidiary categories around the core category with a paradigm and relating categories at a dimensional level simultaneously, the overarching theory When immersing oneself fully to accomplish goals leads to persistence, facilitated through practicing meditation and exhibited through positive emotions, focused objectivity results in leadership is generated. Validating their relationships against data, the theory relevant to the study is formed: When flow is experienced repeatedly, facilitated by meditation, grit is manifested and leads to development of positive leaders. A conceptual model is also developed to represent the theory.

The emergent theory is depicted through a conceptual model. Refer Figure 3. The model depicts that though flow is directly related to meditation and positive leaders, grit is related to flow to develop positive leaders indicating that grit and meditation are related but through flow. The conceptual model depicts Findings 1 and 2.

![Figure 3: The conceptual model developed from the emergent theory](image)

Finally, the conditional matrix is used to summarise and integrate the three steps of Straussian grounded theory to identify the breadth of determination of conditions and consequences related to the subject of study (Strauss & Corbin, 1990). The conditional matrix indicates that the theory is adaptable and has generalisability, precision, predictive capacity and reproducibility. The synopsis of the answers to the research questions is that meditation facilitates positive leadership, facilitates manifestation of grit through the development of flow and develops positive leaders. Further discussion is based on answers to each research question as presented below.

**Role of meditation in developing positive leaders**

The answer to this question is derived from the alignment between categories meditation and leadership and subcategory positivity. Firstly, the category meditation is found to align with the subcategory positivity while the category leadership aligns with the subcategory positivity as well. This alignment demonstrates that meditation plays a role in developing leaders. Secondly the category leadership is found to align with subcategory people oriented. This leads to the derivation that meditation facilitates leadership in positively leading people within the organisation. The answer to the first research question addresses the absence of research on the effects of practising meditation in the management context, and its relationship with positive leaders and organisational development. Training in meditation, facilitates the development of positive leaders. The Meditation facilitates leaders of organisations to lead people positively within the
organisation. Training in meditation facilitates the development of leaders who exhibit positive attributes in their role as a leader. Therefore, training in meditation facilitates the development of positive leaders. The answer attains the first objective of the thesis which was to examine whether meditation practicing leaders exhibit positive skills, attributes and abilities required to fulfill their role as a leader. In the research analysis the relationship between the categories - meditation, leadership and positivity and the dimensions of the categories exhibiting equal range of frequency, intensity, degree and duration (refer Table 4) validates the answer to the first research question. This research finding fulfills the first objective of the research which was to examine whether meditation practicing leaders exhibit positive skills, attributes and abilities required to fulfill their role as a leader. It lends a fresh outlook representing a contribution to the literature, highlighting that meditation plays a role in developing leaders who exhibit positivity. This is a fresh contribution to the studies on application of meditation.

**Relationship between grit, flow, and meditation**

Training in meditation manifests grit and flow in combination, in meditation practitioners. This research finds evidence that grit and flow are related. Grit develops when the time gap between two flow states is minimal. The lesser the time gap between the two flow states the more effective the grit. Flow is the building block of grit. The analysis also finds that grit and meditation are related through flow. These two research findings are original contributions to the literature and to theoretical studies on flow and grit, and thus are significant as original contributions to studies on flow and grit. Grit develops because of flow states that occur subsequent to one another with a minimal time gap between the two flow states. The lesser the time gap between two flow states, the stronger the manifestation of grit.

<table>
<thead>
<tr>
<th>Participant</th>
<th>1st flow state</th>
<th>Gap between flow states</th>
<th>2nd flow state</th>
<th>Exhibition of grit</th>
<th>Time practising meditation</th>
<th>Time of meditation session</th>
<th>No. of times a day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>14 hours</td>
<td>10 hours</td>
<td>14 hours</td>
<td>“...that’s perseverance...” “like pushing myself like this...”</td>
<td>5 years</td>
<td>1 hour</td>
<td>2</td>
</tr>
<tr>
<td>2nd</td>
<td>6 hours</td>
<td>3-4 hours</td>
<td>4 hours</td>
<td>“...The longer it takes seems to be more efficient...”</td>
<td>1 year</td>
<td>20 minutes</td>
<td>3</td>
</tr>
<tr>
<td>3rd</td>
<td>6 hours</td>
<td>3 hours</td>
<td>6 hours</td>
<td>“a very strong desire to...”</td>
<td>2 years</td>
<td>20 minutes</td>
<td>1</td>
</tr>
<tr>
<td>4th</td>
<td>3 hours</td>
<td>20 minutes</td>
<td>3 hours</td>
<td>“7 years to become financially strong to buy a house”</td>
<td>3 years</td>
<td>45 minutes</td>
<td>1</td>
</tr>
<tr>
<td>5th</td>
<td>12-14 hours</td>
<td>10 hours</td>
<td>12-14 hours</td>
<td>“...kept on doing OK. I want to achieve that goal...”</td>
<td>21 years</td>
<td>1 hour 15 minutes</td>
<td>1 many</td>
</tr>
<tr>
<td>6th</td>
<td>5-6 hours</td>
<td>10-15 minutes</td>
<td>5-6 hours</td>
<td>“Dogged determination.”</td>
<td>12 years</td>
<td>1 hour</td>
<td>2</td>
</tr>
<tr>
<td>7th</td>
<td>5 hours</td>
<td>12 hours</td>
<td>5 hours</td>
<td>“...never thought of giving up...” “...that's where the driving factor...”</td>
<td>2 years</td>
<td>30 minutes</td>
<td>1</td>
</tr>
<tr>
<td>8th</td>
<td>4 hours</td>
<td>30 minutes</td>
<td>4 hours</td>
<td>“...using my time intensely...”</td>
<td>1 year</td>
<td>30 minutes</td>
<td>1</td>
</tr>
<tr>
<td>9th</td>
<td>2-3 hours</td>
<td>10 minutes</td>
<td>2 hours</td>
<td>“...to have that extra edge...”</td>
<td>6-7 years</td>
<td>45 minutes</td>
<td>1</td>
</tr>
<tr>
<td>10th</td>
<td>4 hours</td>
<td>1 hour</td>
<td>2-3 hours</td>
<td>“...The desired outcome is not achieved, if I don't give my hundred percent...”</td>
<td>6 months</td>
<td>20 minutes</td>
<td>1</td>
</tr>
<tr>
<td>11th</td>
<td>2 hours</td>
<td>10 minutes</td>
<td>2 hours</td>
<td>“...never felt pressure/challenged...”</td>
<td>16 years</td>
<td>20 minutes</td>
<td>1</td>
</tr>
</tbody>
</table>
Table 5: Description of the flow state and its relationship with grit and meditation

<table>
<thead>
<tr>
<th>Week</th>
<th>Hours</th>
<th>Description of Flow State</th>
<th>Grit</th>
<th>Meditation Relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>12th</td>
<td>8-10 hours Ongoing even through breaks 8-10 hours 11 years to complete postgraduation while working full time</td>
<td>18 years 1 hour</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>13th</td>
<td>2 hours 5-10 minutes 2 hours “...It's really about perseverance...” “...it's also about passion...”</td>
<td>4 years 1 hour</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>14th</td>
<td>8 hours 20 minutes 8 hours “Just Do it. Can do it.”</td>
<td>10 years 1 hour</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>15th</td>
<td>3 hours 30 minutes 2 hours “responsibility...”</td>
<td>4 years 30 minutes</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>16th</td>
<td>9-10 hours Ongoing even through breaks 9-10 hours “passion...” “...give my best”</td>
<td>5 years 2-3 hours</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>17th</td>
<td>2 hours 8 hours 1 hour “complete the day”</td>
<td>6 months 30 minutes</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>18th</td>
<td>2.5 hours 6 hours 1.5 hours “work needs to take care of”</td>
<td>1 year 30 minutes</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>19th</td>
<td>2 hours 10 hours 1 hour “I can do it”</td>
<td>7 months 20 minutes</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>20th</td>
<td>2 hours 6 hours 2 hours “finishing is important”</td>
<td>11 months 30 minutes</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Therefore, flow is the building block of grit. With grit and meditation relationship, it was found that the more experience in meditation the better is the development of grit. However, flow is also required for the manifestation of grit. The research findings evidence that grit and flow are related and manifested in meditation practitioners. However, flow and grit do not manifest individually in meditation practitioners. These two research findings are fresh and an important contribution to the studies on flow and grit. Since flow is required to manifest grit, the relationship between meditation and grit is through flow. It is also evidenced that the more time the participant has been practising meditation the better is the manifestation of grit, which is directly proportional to the flow (see Table 5). It attains the second objective, which is to explore what type of manifestation of flow and grit is exhibited in these meditation-practicing leaders, and to comprehend the nature of relationship that grit might have with meditation, and flow. The research finding is an original contribution to the study of grit and meditation, adding fresh knowledge to the study of grit and to the study of the application of meditation practice, making it highly significant.

**Relationship between grit, flow and meditation and its role in developing positive leaders**

It was found that the manifestation of a combination of grit and flow through the practice of meditation, facilitates development of positive leaders. The elucidations sought through the interviews were linked to the studies of Avolio and Gardner (2005), Avolio, Walumbwa and Weber (2009), Youssef and Luthans (2012) and Zbierowski and Góra (2014), which evidenced that certain styles of leadership exhibited certain positive attributes that related to life orientation, resilience, flourishing, satisfaction with life and happiness, a positive moral outlook, leader’s self-knowledge, positive modelling of the followers’ behaviour, personal and social identification of followers with the leader and the group, and positive social exchanges between the leader and their followers.

The absence of any negative responses from all the participants is a notable point. From the research analysis it indicates clearly that leadership is the outcome of the relation between positive emotions, grit, flow and meditation with grit and flow combining to reflect a positive manifestation. The research finding fulfils the third objective which examines if the relationship between grit, flow and meditation facilitates development of positive leaders. It also attains the main objective of this research, which was to examine
the relationship between grit, flow, and meditation with positive leaders. The finding is a significant contribution to the literature and theoretical studies of grit, flow, and positive leadership, adding fresh knowledge to the studies on grit and the relationship between grit and positive leadership. Combining the answers an overarching theory was developed.

Finding 1: Grit and flow are interrelated, grit and meditation are related through flow, and flow and meditation are interrelated. The overarching theory emerges as When immersing oneself fully to accomplish goals leads to persistence, facilitated through practising meditation, and exhibited through positive emotions, focused objectivity results in leadership.

The overarching theory is reworded using the constructs to state the emergent theory of Finding 2: When flow is experienced repeatedly and is facilitated by meditation, grit is manifested, leading to the development of positive leaders. Applying the emergent theory, the research framework transforms into a conceptual model depicted in Figure 3.

**Significance and originality of the findings**

The results indicate that there is a contribution to the literature on positive psychology, meditation and leaders are likely to benefit from this study. The theoretical significance of the study is found in the studies of flow, grit, positive psychology, and positive leadership. The study contributes to the practical application of meditation. The study has practical and theoretical significance, with an emergent theory generated from the integration of all the results: When flow is experienced repeatedly and facilitated by meditation, grit is manifested and leads to the development of positive leaders. The emergent theory can be explained as meditation facilitates flow to manifest grit, which combines to develop positive leaders. The practical significance of the study is in the application of meditation as a mind-training tool for leaders, irrespective of their management role. From this thesis it has been evidenced that when a manager practices meditation, flow and grit are underlying positive attributes exhibited by them, and certain positive people-management capabilities are visible in them, which make them positive leaders.

**CONCLUSION**

The research indicates that meditation facilitates flow and grit to interrelate and develop positive leaders. This interrelation of flow and grit facilitates the development of positive leaders. Recent studies on grit and creativity and attention, respectively and showing indication of grit and flow association (Sharma & Shekhawat, 2017; Smith et al., 2020), are the only work closely resembling this thesis. A proposal by Dr Nico Rose on grit and flow being alternating stages on the road to achievement (Rose, 2013) is not yet evidenced. Hence this thesis has developed new knowledge through the theory. The model, developed from the theory formed from the findings of this thesis, comprises the factors of grit and flow being interrelated and facilitated by the practice of meditation. Application of this conceptual model is the foundation of future research in this area.

However, there are three limitations. Though diligence and informed research design were used to mitigate the second and third limitation. Rigor was followed in data collection, with questions being asked until participant’s responses were repetitions; and while analysing, data stagnated by the 17th participant and reached saturation by the 19th participant, future research should mitigate the following limitations.

First the type of relationship between grit and flow is not indicated and the type of relationship between grit and meditation is also not indicated except that flow is required for the relationship. Secondly the
absence of a control group in the research design. Third limitation was the self-reflection and self-reporting mode of collecting data in the interviews.

Reference
29. Davidson, RJ 2013, The emotional life of your brain: how its unique patterns affect the way you think, feel, and live--and how you can change them. Plume, a member of Penguin Group (USA) Inc
64. Mamo, E 2019, ‘Building blocks of a mentally healthy workplace,’ Veterinary record, p.62


