

Resonant Leadership: Scale Development and Validation

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Abstract

This empirical research conducted four studies in distinct stages to conceptualize, construct and validate a multidimensional reflective-reflective scale of resonant leadership (RL). Study 1, comprising three phases, the researchers mapped dimensions and the nomological network of RL through a systematic literature review applying the ADO (Antecedents-Dimensions-Outcomes) framework. The dimensions were further validated through a focus group comprising experts from industry and academia. In Phase two, items representative of the construct domain were generated and subjected to another focus group discussion to establish face validity. In the third phase, content validity indices at the item-level and scale-level (ICVI and SCVI) and modified kappa were estimated to refine the item pool. Study 2, pilot tested the items on responses from 100 professionals of Indian IT/ITeS sector. Following data factorability assessment, principal component analysis with varimax rotation was applied for exploratory factor analysis. A 19-item, five-dimensional solution was extracted. Study 3 validated the latent structure through confirmatory factor analysis on another sample of 564 IT/ITeS professionals and empirically corroborated the hierarchical component model. Reliability analyses using Cronbach's alpha, composite reliability and average variance extracted were established with values well in recommended range. Tests for common method bias, discriminant, convergent and nomological validities and tetrad analyses confirmed the robustness of the scale. Study 4 tested the generalizability of the RL scale by cross-validating the psychometric fitness of the measure on 325 professionals working in the Indian BFSI sector. The study confirms teamwork, mindfulness, inclusive decision making, compassion and emotional management as the distinct first order reflective dimensions of RL. The study contributes to literature and practice a unique five-dimensional, 19-item, second-order reflective-reflective scale of WLF, psychometrically fit for use on samples from diverse contexts.

Keywords: resonant leadership; emerging leadership; leadership; scale development; content validity index; factor analysis

1. Introduction

The outbreak of the COVID pandemic disrupted the world along all known dimensions. The long-anticipated future of work materialized at the global level overnight. While the changes were inevitable, they induced immense psychological stress amongst leaders and followers alike. The nature of organizing in the competitive and unpredictable knowledge age was already complex (Boyatzis et al., 2012). The disruption caused by the collective crisis amplified the challenges multi-fold and necessitated investing in the emotional and relational competence of a leader. Sinha et al. (2021) and Thomas (2021) call resonant leadership a panacea to all problems within the ambit of organizational behavior and management studies. Resonant leaders smoothly switch between different styles of leadership depending on the requirements of the situation, be it optimization of business operations or well-being of followers or the leader itself (Goleman, Boyatzis, & McKee, 2002a; Marques, 2015).

Alhilawyl et al., (2020) call resonant leadership as indispensable for strategic supremacy in these contemporary times. However, the concept is identified as still in nascent phases of construal and investigation, particularly in the eastern world (Alhilawyl et al., 2020; Lenka & Tiwari, 2016). Attempts to develop and validate a psychometrically robust measure of resonant leadership are lacking in literature. Extant scales are ad-hoc in nature or do not qualify along the rigorous robust scale development parameters laid out in research (Churchill, 1979; Cortina et al., 2020; DeVellis, 2016; Hair et al., 2019; Hinkin, 1998; Denise F. Polit & Beck, 2006; Sarstedt et al., 2019). Based on the gaps identified, this study aims to conceptualize, construct and validate a scale of resonant leadership in the context of Indian professionals.

Objective of the study: To conceptualize, construct and validate a psychometrically robust measure of Resonant Leadership in the Indian context

Following the standard scale development primers (Churchill, 1979; Cortina et al., 2020; DeVellis, 2016; Hair et al., 2019; Hinkin, 1998; Denise F. Polit & Beck, 2006; Sarstedt et al., 2019), rigorous research was undertaken to develop a valid and reliable measure of resonant leadership hereon to be referred as RL. A multi-stage investigation with four unique studies was undertaken on multiple samples adding upto 989 working professionals from Indian IT/ITeS and BFSI industry. The first study was multi-phased and involved four focus group discussions. The dimensions of RL were investigated using a systematic review literature review and validated by a focus group of experts. Items were generated deductively, face and content validity examined iteratively via focus group discussions of multiple experts, and content validity indexes estimated. In later experiments, the refined scale was evaluated on three separate samples. Study 2 pilot tested the RL scale and exploratory factor analysis identified a five-factor solution. The latent factor structure was confirmed in study 3 through confirmatory factor analysis, corroborating the reliability and validity of the scale. The third study further analysed the type-1 reflective-reflective hierarchical component model proposed, checked for common method bias and analysed tetrads. The RL scale was further tested for generalizability on another sample of 325 professional in the Indian BFSI sector. The results of the empirical investigation confirm that the newly developed RL measure is valid, reliable, generalizable and psychometrically fit for usage across diverse contexts.

The study contributes to literature and practice in many ways. First, it fills the void of a valid and reliable measure of RL. Through the psychometrically validated tool of RL, the study aims to catalyse rigorous investigation in the area of leadership from which findings of practical value can be drawn. The enhanced conceptual clarity would enrich leadership theory. Second, this scale development endeavour endorses teamwork, mindfulness, inclusive decision making,

compassion and emotional management as the five dimensions of RL. Third, the study contributes a tool to practitioners to be used in leadership development and training in organizations.

This paper is structured as follows. The second section presents the review of the extant literature, followed by the third section which describes the research methodology adopted. The results of the data analysis are presented in the fourth section, followed by an elaborate discussion on the five-factor structure of resonant leadership in the fifth section. Finally, the sixth section discusses the implications of the study and the seventh section discusses the limitations and future research directions.

2. Literature Review

2.1 Dimensions

The four dimensions of emotional intelligence are grouped into two classes based on the subject in focus: personal competence comprises of self-awareness and self-management and the other-oriented social competence comprises of social awareness and relationship management (Bawafaa et al., 2015; R. Boyatzis & McKee, 2005; Daniel Goleman, Boyatzis, & McKee, 2002). The faculty to perceive one's own emotions and their ramifications is known as *self-awareness*. It includes using this mental awareness to guide one's actions and not act impulsively. Resonant leaders are able to evaluate their own moods, and know intuitively how they touch others (Daniel Goleman et al., 2001). The attributes of *self-management* encompass emotional prudence, openness, agility, accomplishment orientation, agency, and positivity (Bawafaa et al., 2015). Resonant leaders use self-management to save their bad mood from usurping the day; they either leave it behind work or explain the reason behind it to affected parties in a sensible manner. (R. Boyatzis & McKee, 2005; Daniel Goleman et al., 2001). The expression of empathy, organizational awareness, and rendering of services to oneself, one's staff, and one's clients are all instances of *social awareness* (Bawafaa et al., 2015); resonant leaders are not only conscious of the affective impact of their words and actions on others, but also perceptive enough to tactfully chose their words and modulate their actions to evade a negative effect (Daniel Goleman et al., 2001). *Relationship management* entails using motivation, the capacity to develop others, initiating and convincing, catalysing change, preserving and forging strong ties, and most significantly, encouraging cooperation, team cohesiveness, and a sense of camaraderie through effective communication. (R. Boyatzis & McKee, 2005). Resonant leaders use these skills to resolve differences with humour and kindness and spread enthusiasm (Daniel Goleman et al., 2001).

Goleman and colleagues describe four resonant leadership styles used in leading teams in organizations. They are Visionary, Coaching, Affiliative, and Democratic approaches. Leaders can acquire different emotional intelligence competencies and learn to use each of these style depending on its pertinence for the situation in hand (Daniel Goleman, 2002; Laschinger et al., 2014). A *visionary* leader effectively guides followers in the direction of a common goal or dream by articulating a shared vision and providing clear guidance. By prioritizing the personal growth of the follower, the *coaching* style prepares individuals for the future. By encouraging relationships between individuals, the *affiliative* style fosters harmony within the group. They give more attention to individuals and their emotions than to activities and goals to build emotional capital in the team. A *democratic* leader is someone who builds consensus, pays attention to others, and incorporates their arguments while taking any decision (Daniel Goleman, 2000).

Great leadership works through emotions (Daniel Goleman, Boyatzis, & McKee, 2002). Leaders bring out everyone's best when they drive emotions positively (Daniel Goleman, Boyatzis, & McKee, 2002; Squires et al., 2010). The authors call this resonance. Resonance involves utilising one's social, financial, cultural, environmental, and emotional intelligence to inspire and motivate others to strive to perform at their highest potential under all conditions in order to achieve anticipated outcomes (R. Boyatzis & McKee, 2005; G Cummings, 2004; Squires et al., 2010). Resonant Leadership is a positive style of leadership that is relational in approach and has its birth in the Emotional Intelligence competence (Bawafaa et al., 2015; R. Boyatzis & McKee, 2005; G Cummings, 2004). Resonant leaders are in synchronization with the emotions and thoughts of their people through their high awareness of their surroundings. They manage their own and their followers' emotions, simultaneously forging strong, trusting and cordial relationships (Bawafaa et al., 2015; Squires et al., 2010; B. Tiwari & Lenka, 2015) which establishes an environment of sanguinity and stimulates devotional loyalty (Squires et al., 2010). These leaders stimulate emotional resilience of their employees (Lenka & Tiwari, 2016). They handles the difficulties faced by their employees on job, discharging them of any stress, and improve their contentment with their work (G Cummings, 2004; Lenka & Tiwari, 2016). "Vision, compassion and overall positive mood" are the pillars of resonant leadership (Richard E Boyatzis et al., 2006; Mahon et al., 2014). Vision motivates and guides to achieve the firms' desired objectives. Resonant leaders instil commitment in the employees by providing them with a vision and goal. Overall positive mood expresses an employee's perception of its organization and work. Compassion is awareness of and responsiveness to the feelings of others. A Resonant Leader has three dimensions: mindfulness, hope and compassion (McKee & Massimilian, 2006; Taner & Aysen, 2013). By fostering compassion, mindfulness and hope, they develop an organizational climate of vibrancy, reverberating with positive emotions among employees (Daniel Goleman, Boyatzis, & McKee, 2002; Squires et al., 2010). The dreams and expectations of a leader help his or her followers construct an desirable portrait of the future (hope), the leader's awareness of and attention to others helps them solve problems that they deduce from others' feelings and thoughts (mindfulness), and the leader's concern and care for others' suffering leads to enduring triumphs (compassion) (R. Boyatzis & McKee, 2005; Chawla & Lenka, 2015). Through compassion, hope, and mindfulness, these leaders establish a strong system of values that strikes a chord also with their team members. (Lenka & Tiwari, 2016).

Resonant leaders are committed, passionate and empathetic. They comprehend people and groups with accuracy. By addressing the emotions of others, they induce in them courage and hope in moving towards an exciting new future and cooperate with others (Laschinger et al., 2014; Squires et al., 2010; Richard E Boyatzis, 2008). They engage others in organizational goals through their interpersonal skills like mentorship, team support and rapport building (Richard E Boyatzis et al., 2006). This stimulates employees to perform at their optimum and endeavour for meaningful outcomes in all circumstances (R. Boyatzis & McKee, 2005).

When leader is resonant, followers become passionate and optimistic and resonate with the leaders. The emotional impact of leader is strengthened by resonance (Daniel Goleman, Boyatzis, & McKee, 2002). Such a leadership fosters emotional growth amongst followers (Squires et al., 2010). Resonant leaders transfer their knowledge and expertise, empowering those around them (Laschinger et al., 2014). Such leaders ensure employee engagement by thinking strategically and formulating policies in harmony with employees' needs and expectations (B. Tiwari & Lenka, 2015). They offer independence to employees to make decisions within optimal resources and create a meaningful life over their competitors (R E Boyatzis & Soler, 2012; S. W. Smith et al., 2011). Employees feel empowered to access

resources, information and opportunities, thus leading to higher engagement and job satisfaction (Judeh, 2013; Lucas et al., 2008). When relationships between employees and supervisors at work are cooperative and exhibit high levels of assurance and autonomy, employee engagement soars. Resonant leaders convince their employees that their contributions will be appreciated and recognized. This gives employees satisfaction and hence they are able to better engage in organizational work (Judeh, 2013; Lucas et al., 2008).

Lenka & Tiwari, (2016) opined considering altruism as another dimension of resonant leadership. They further added that due to the value-led, meaningful vision of the organization that the leaders communicate, their followers feel psychologically secure and superior to their competitors. This boosts employee morale and self-efficacy. Considering the complexities of the market situation they further suggest the urgency to nurture resonant leaders who will inspire the workforce to upgrade their skills in order to become potential talents, which will subsequently improve organizational competitiveness and sustain organizational growth. (Lenka & Tiwari, 2016).

Insert Table 1 about here

2.2 Outcomes

Most studies studied the association of resonant leadership with individual follower level variables. Follower attitudes like job satisfaction (Bawafaa et al., 2015; Cummings et al., 2018), organizational commitment (Ali & Kashif, 2020; Wagner et al., 2013, 2015) and intent to stay (Cummings et al., 2005; Squires et al., 2010) were most studied. A positive association with psychological ownership, organizational commitment (Judeh et al., 2022), health, job security and professional efficacy (Cummings et al., 2005a), employee engagement (Parr et al., 2021; Tiwari & Lenka, 2019), psychological empowerment (Wagner et al., 2013, 2015) and spirit at work (Wagner et al., 2015). A negative association of resonant leadership and follower emotional exhaustion (Cummings et al., 2005; Squires et al., 2010) and follower behavior of incivility (Casale, 2017; Laschinger et al., 2014) is reported. Resonant leadership demonstrated positive association with follower behaviours like citizenship behavior (Tabche et al., 2022) and compassion (Ali & Kashif, 2020) and follower performance in work (Gaan & Shin, 2022). Studies have reported positive association of resonant leadership with both organizational-level (Squires et al., 2010; Chawla & Lenka, 2015), and team-level outcomes (Parr et al., 2021). Follower perception of leader was also investigated in few earlier studies and gave promising results (Cummings et al., 2005a; Parr et al., 2021; Squires et al., 2010).

2.3 Antecedents

None of the studies reviewed had explored antecedents of resonant leadership. This observation identified a gap in the literature to be filled by future research.

3. Methodology

The present study followed mixed-method approach of RL scale development, recommended for social sciences (Zhou, 2019). Applying qualitative methods of focus group discussion and literature review and quantitative methods of statistical analyses the scale development exercise

was conducted (Creswell & Plano Clark, 2007). Study 1 was conducted in three parts with experts in four focus group discussions. The preliminary dimensions of resonant leadership were identified through review of literature and face validity and content validation performed. Study 2 refined the RL scale through exploratory factor analysis on the data collected from 100 workers in IT/ITeS companies situated in Delhi-NCR. To validate the identified factor structure, study 3 conducted confirmatory factor analysis and nomological validity assessment on responses collected from 564 IT/ITeS employees. Finally, study 4 established the generalizability of the RL scale by replicating the study on a sample of 325 employees working in the BFSI sector. The following section elaborates on the steps and analysis. Figure 1 below diagrammatically presents the scale development exercise.

Insert Figure 1 here

4. Data Analysis and Findings

4.1 Study 1: Dimensionality and Item Analysis

Phase 1: Dimension Identification and Confirmation

A systematic literature review identified the nomological network of resonant leadership. Suitable keywords to identify relevant research studies from databases were suggested by a focus group discussion of 6 experts. 53 studies qualified the selection criteria applied in the 4-step PRISMA methodology and were included in the final thorough review. The studies were analysed through the ADO (Antecedents, Dimensions, Outcomes) framework (Paul & Benito, 2018). This exercise ensures valid items are generated and facilitates scale validation by guiding identification of criterion and marker variables. The dimension table in table 1 presents the dimensions identified through the review. Another discussion with a focus group of 6 experts was organized to elaborate upon dimensions of resonant leadership from perspective of industry relevance.

Phase 2: Item Generation and Face Validation

The deductive method was used to create items, with the dimension table serving as foundation. The wording of items took into account the content domain and target population, ensuring each element of the content domain was reliably assessed. The development process followed DeVellis' (2016) recommendations for scale construction, such as using simple language, splitting double-barrelled statements and avoiding, dated, double negative and colloquial expressions. Additionally, the phrasing of statements was designed to elicit responses of agreement and disagreement, in accordance with the format of a Likert scale used for data collection.

A focus group of 10 experts evaluated the face validity of the 46 items so generated. The judgement was guided by the list of dimensions and definitions that was presented to the experts to gauge the relevance of items to the construct and its dimension. Items were judged for clear language, ambiguous, redundant or ineffective expression. Based on the judgement of experts the items were either removed or revised. 40 items qualified for analysis of content validity in the next step.

Phase 3: Content Validation

A six-step technique for calculating the content validity index was used, as recommended by Yusoff (2019).

Step 1: To communicate the expectations from experts a content validation form. To facilitate understanding and rating of relevance by experts, descriptions of the construct domain and dimensions was added to the form. The experts marked their rating on a 4-point ordinal scale ranging from 1 (not relevant) to 4 (highly relevant).

Step 2: 10 experts with requisite training, experience and qualification were selected from academia and industry.

Step 3: The researchers organized a focus group discussion where the above selected 10 experts independently studied the information on the content validation form and reviewed the relevance of items to the construct and dimension.

Step 4: The experts rated the relevance along the 4-point ordinal scale and provided comments.

Step 5: Experts resubmitted the content validation form to the authors of the study

Step 6: The rates assigned to the items by experts were recoded for calculation of content validity indices. Item level and scale level content validity and modified kappa statistic was calculated as instructed in the study by (D. F. Polit et al., 2007).

Lastly, in accordance with Waltz et al. (2005), items with I-CVI equal to or greater than 0.78 and kappa greater than 0.75 were chosen for retention. The S-CVI/Ave statistic was chosen over the S-CI/UA to determine the overall content validity of the RL measure in accordance with arguments of Polit et al. (2007) and Polit and Beck (2006). The S-CVI/Ave was above the lower limit of 0.90 (Waltz et al., 2005), indicating excellent content validity. The elaborate content validity index calculation can be found in table 2.

26 items were retained for data collection in the pilot study in subsequent step.

4.2 Study 2: Scale Purification

Pilot testing and Exploratory Factor Analysis

The objective of study 2 was to explore the factors of RL instrument. The 26 items qualifying tests for face and content validity were scaled on a 7-point Likert scale. The survey used to collect data had two parts: part A to collect demographic information of the respondents and part B was the 26 items from the RL instrument.

Sample: The scope of the study extended to professionals at lower and middle ranks working in IT/ITeS companies in Delhi-NCR region. The initial list of companies in IT/ITeS sector was compiled using CMIE Prowess database. Shortlisted companies had a minimum annual turnover of Rs. 100 crores, a minimum staff of 500, and a presence in Delhi-NCR. The proposed sample size was 180 people. Purposive sampling was used to contact 30 workers from each of the six qualifying organizations to participate in the pilot test. Google document weblink of the survey were distributed by e-mail or WhatsApp messaging. A succinct summary of the survey and its goal was supplied to participants prior to giving the survey for ease of comprehension. Participants were also reassured about the safety and confidentiality of their

personal information. The survey was self-administered. The survey was completed by 103 participants out of 180 responses sought, with a response percentage of 57.2%. The statistical analysis was carried out on 100 respondents after discarding three unsuitable responses. Among those polled, 63% were men and 81% were not married. The majority of the respondents, i.e., 89%, were under the age of 35 and 84% had less than five years of professional experience. Table 3 below provides descriptive statistics of the sample demographics.

Exploratory Factor Analysis: The study utilized SPSS v24 for exploratory factor analysis of usable data collected from 100 respondents on the 26-item instrument. First the factorability of the data was verified by applying the test of sampling adequacy or the KMO test (Kaiser Myer Ohlin) and test for normality of data or the Bartlett's test of sphericity. Bartlett's measure was highly significant (1039.732, df. 171, $p < 0.001$), hence rejecting the null hypothesis and confirming that linear combinations exist. The KMO value observed to be 0.880, was above the threshold value of 0.60 (Tabachnick & Fidell, 2001). Hence, it was concluded that the data is suitable and adequate for application of factor analysis.

To extract the initial factor structure of resonant leadership, principal components analysis (PCA) with varimax rotation was applied. Initial communality estimates in PCA were made through square multiple correlations, eliminating items with cross-loadings. Applying the criterion of eigen values greater than 1 for extraction, factor loading and communalities greater than 0.5, a five-factor structure was extracted. Table 4 below depicts the total variance explained by the five factors together is 70.582%. The initial 26 items condensed to 19 items distributed across 5 factors. The dimensions demonstrated internal consistency (0.76 - 0.87) within the acceptable limits and the overall reliability of the RL scale was 0.9, above the threshold value of 0.7 (Lance et al., 2006; Nunnally, 1978). The five emergent dimensions were labelled teamwork, mindfulness, inclusive decision making, compassion and emotional management.

4.3 Study 3: Scale Refinement and Nomological Validation

The third study was conducted to enhance the accuracy of the 19-item scale of resonant leadership and validate the latent structure extracted in the pilot study (Hinkin, 1995). The study was replicated on a sample with comparable characteristics to participants in the pilot study. Table 3 shows that out of the 564 respondents examined, 58.3% were women, 78.4% were under 35 years of age, 66.15% were unmarried and 64.1% had work experience below 5 years.

SMARTPLS 4.0 software applying PLS-SEM was used to conduct the CFA. The results revealed adequate model fit ($SRMR = 0.073$). According to literature resonant leadership was conceptualised as a type 1 construct with multiple dimensions as reflective first-order and reflective second-order. The lower order reflective dimensions are teamwork and mindfulness measured by 5 items each and inclusive decision making, compassion and emotional management measured by 3 items each. To examine presence of multicollinearity in the latent factor structure variance-inflation factors were calculated. The results of VIF were below 5, the acceptable threshold value recommended (Hair Jr et al., 2021). As shown in table 5, all the item-to-factor loadings lay between the values of 0.77 and 0.93, above the recommended limit of 0.708 (Hair et al., 2019) hence, all the items were retained. Furthermore, the Cronbach's alpha values ranged from 0.84 to 0.91 and composite reliability for each factor was also within the acceptable limit (0.7 and 0.95) (Bagozzi, R. P., & Yi, 1991; Hair et al., 2019; Nunnally, 1978). Hence, the RL scale demonstrated internal consistency. To examine the convergent validity of the RL measure, the average variance extracted (AVE) of all factors was examined.

The AVE values lying between 0.69 and 0.84, confirmed convergent validity of the RL scale. The discriminant validity was examined by calculating the HTMT ratios of correlations (Henseler et al., 2015). All HTMT values were within the upper limit of 0.85 as recommended for conceptually distinct construct (Hair et al., 2019).

Self-reported cross-sectional surveys may suffer from biased estimates of the relationships due to common method bias (CMB) (Jordan & Troth, 2020). Harman's single factor and marker variable techniques were used to check and control for CMB (Podsakoff et al., 2003). The overall variance due to the single factor created by loading all items of the scale is below the 50% limit hence, the study is unaffected by CMB. Additionally, "Fashion Consciousness" was the preferred marker variable to assess for presence of CMB (Simmering et al., 2015) as it was theoretically uncorrelated with the observed variable and measurable on a 7-point Likert scale. The items of fashion consciousness scale ("I am very alert to changes in fashion", "I would say I am very fashion conscious") had satisfactory reliability (0.883). The variance explained by the marker variable was under the threshold of 25%, hence, confirming CMB had no effect on the present study.

The nomological validity of RL was tested by studying its causal relationship with burnout. The choice of variable was guided by evidence from the systematic literature review. The 9-item bergen burnout inventory with highly satisfactory reliability (Cronbach's $\alpha=0.85$) measured burnout (Salmela-Aro et al., 2011). The hypothesis tested was:

H1: There exists a significant and negative relationship between RL and burnout of professionals working in IT/ITeS sector.

The results conformed the nomological validity of RL.

The theoretically conceptualized reflective first-order, reflective second-order measurement model of RL was further empirically substantiated using the confirmatory tetrad analysis or CTA-PLS assessment routine (Gudergan et al., 2008). The results from the tetrad analysis did not show any significant results, supporting the hypothesis that RL is a reflective-reflective second-order construct (Hair et al., 2019).

Therefore, study 3 confirmed that the resonant leadership scale developed has a reflective-reflective second-order factorial structure with 19 items and five dimensions. The scale also demonstrated satisfactory psychometric properties.

4.4 Study 4: Generalizability and Cultural Analysis

To determine if the psychometric properties of the newly created RL scale were consistent in diverse situations, the study was repeated using a different group of 325 professionals from the BFSI sector in the Delhi-NCR region. The sample included 58.2% women, 75.1% of respondents under the age of 35, 61.8% unmarried individuals, and 59.4% professionals with less than 5 years of work experience. Confirmatory factor analysis (CFA) resulted in acceptable model fit indices (SRMR=0.079). Table 7 reported that the indicator loadings, the composite reliabilities, and Cronbach's alphas were all within the acceptable limits. Additionally, all values of average variance extracted (AVE) were greater than 0.5 and HTMT ratios were less than 0.85, indicating the WLF scale had both convergent and discriminant validity (Hair et al., 2021). Therefore, the above-mentioned results presented sufficient proof for the applicability of the RL scale and verified that it is suitable for utilization in various samples and situations.

However, we would like to add to this discussion that leadership is culturally contingent (Biermeier-Hanson, Liu, & Dickson, 2015). The understanding of the structure and characteristics of a leadership style changes across cultures as the meaning and importance associated with values varies. Conceptualising a leadership style as universal is an oversimplification of the real-world. It is a subject matter of prospective research to examine whether resonant leadership, as conceptualised in this study is a variform universal, functional universal or variform functional universal (Biermeier-Hanson, Liu, & Dickson, 2015). For instance, cultures with high power distance perceive leadership as effective if the leader demonstrates autocratic decision making instead of inclusive decision making. Further, collectivistic cultures are more appreciative of a leader who maintains harmony and well-being of groups unlike individualistic cultures that are goals-driven primarily. Resonant leadership dimensions of teamwork and compassion may be more effective in collectivistic cultures than individualistic.

5. Discussion and Conclusion

The main objective of this study was to develop and validate a psychometrically fit measure of Resonant Leadership. 4 independent studies involving 4 focus group discussions with experts and 3 samples of working professionals spanning Indian IT/ITeS and BFSI sector were rigorously conducted to achieve the objective. A five-factor solution of 19 items was extracted and validated. The reflective-reflective model demonstrated psychometric fitness across different parameters tested. The 5 dimensions of resonant leadership identified are Teamwork, Mindfulness, Inclusive Decision Making, Compassion, and Emotional Management.

The first factor labelled as Teamwork comprised items measuring the leader's ability to foster team-spirit in his followers. This factor includes items that measure the leader's expression of faith in the abilities of his followers and encouragement to support each other and collaborate despite differences. The ability to develop the spirit of teamwork among the followers holds immeasurable relevance in the globalized and digitalized knowledge economy. As increasingly heterogeneous groups of people work together, immense efforts at relationship management are necessitated so that conflict remains constructive and diversity may be leveraged for synergistic collaboration to emerge. Resonant leaders demonstrate faith in the individual capabilities of their followers, instilling in them confidence as independent and encouraging them to work as a team. Resonant leaders make it clear to their followers that their individual and collective needs, values, sentiments, notions, knowledge, and commitments are understood and appreciated (Ungerleider & Ungerleider, 2019). The ability to kindle team spirit means the followers resolve differences amicably, support each other personally and professionally, and have healthy relationships amongst themselves as they understand and appreciate each other. The relationship-oriented approach of a resonant leader benefits followers as it develops a social network for employees to fall back on.

The second factor labelled as Mindfulness comprises items that are indicative of a resonant leader's mindful orientation. "Mindfulness is a way of attending to yourself, others, and the world around you that allows you to adopt more productive and positive ways of acting and being" (Chaskalson, 2011). The items that loaded onto this factor show that a resonant leader purposefully pays attention to taking care of his/her mind and body. According to Kabbat-Zinn (1990) "Mindful attention is rooted in the here and now and is not biased by the preconceptions inherent in everyday preferences" (Hunter & Chaskalson, 2013). This factor included

statements that measure follower perception of growth and positive change in the leader with time. The items in this factor gauge whether a leader is positive and instils optimism in his/her followers. Mindfulness is an indispensable quality to ameliorate stress in the challenging position of a leader in the VUCA environment and has a restorative effect (Klocko & Wells, 2015). It involves living with full awareness, where the experience of self, others, and the environment is heightened (McKee & Massimilian, 2006). Being present at the moment, observing without judgment and a nonreactive approach inspires a renewed perspective on matters at hand, distant from the mechanical approach, consequently fuelling growth and productivity (Klocko & Wells, 2015). As leaders are aware of themselves, they take care of their body, mind, and soul by indulging in recuperative practices. Nonjudging observation fosters optimism and this spreads around contagiously as the leader interacts with others. Mindfulness helps a leader sustain resonance within, with followers and the context.

The third factor is labelled as Inclusive Decision Making. The items included in this dimension reflect the degree to which a resonant leader incorporates the suggestions and opinions of followers while making decisions. The leader paying attention to what the followers have to say inspires participation from the followers who consequently feel valued and empowered. As the workforce of the information age is highly educated and independent in its thinking (Higgs, 2003), they expect to be more involved, empowered with more information and do not follow their leaders mindlessly (Marques, 2015). The inclusive approach to decision-making makes the followers feel valued and trusted. The followers in exchange develop trust in their leader, demonstrate commitment and are more accepting of his final take on matters (Vesterinen, Isola & Paasivaara, 2009).

The fourth factor was labelled as Compassion and included items relating to a resonant leader's concern and care for his/her employees. The statements measure that a resonant leader is sensitive to the needs of, understands the emotions of and responds to the concerns of his followers empathetically. The humanitarian value of Compassion is integral to resonant leadership and highly relevant in contemporary times (McKee & Massimilian, 2006). The individualized and materialistic nature of society aggravates the emotional state of employees necessitating compassion and care in the workplace where people spend their maximum time (Taner & Aysen, 2013). Resonant leaders are genuinely concerned for the well-being of their followers, such that they empathetically act to address their concerns (Klocko & Wells, 2015; McKee & Massimilian, 2006). Demonstrating compassion builds high-quality, resonant relationships between the leader and followers (Klocko & Wells, 2015).

The final fifth factor was labelled as Emotional Management and included items that measure the resonant leader's ability to handle his/her emotions in all situations. The items in this factor measured the leader's ability to retain a balanced perspective even in emotionally charged situations, such as never having an emotional outburst and acting with composure. Emotional Management is an important dimension of resonant leadership. As an emotionally intelligent leader the resonant leader retains a balanced perspective even in emotionally overwhelming and complex situations. Even in adverse situations resonant leaders do not spill over their frustration and are able to empathize with others (Lenka & Gupta, 2020). This behavior inspires followers and they feel psychologically safe with the leader in all situations. The ability to manage personal emotions and behaviours preserves personal resources at the same time safeguards social resources with followers.

Together, the above-discussed five emergent dimensions comprehensively define resonant leadership. The emergent factors are in alignment with the review of previous literature. The

dimensions holistically focus on creating resonance with oneself, others and the environment simultaneously.

6. Implications

The development and validation of a scale of resonant leadership has significant contributions for academia and practice.

The empirical exploration and confirmation of the dimensionality of Resonant Leadership contributes to improved theoretical understanding and development of the construct. The study contributes a rigorously developed psychometric measure to the body of knowledge. The reliable and valid measure was developed following the established scale development frameworks (Churchill, 1979; DeVellis, 2016; Hinkin, 1998; Polit et al., 2007; Smith et al., 2003). The study may serve as a blueprint for future scholars' endeavours in scale development due to the elaborate application of content validation exercise (Polit et al., 2007; Polit & Beck, 2006) and the scale construction flowchart developed. The psychometrically fit measure so developed can be employed in future quantitative studies of resonant leadership and further expand resonant leadership theory and nomological network. Each of the five identified dimensions opens avenues of future theoretical development.

The dimensions identified will help practitioners better understand the characteristics of Resonant Leadership. Administering the scale will help identify the dimensions along which a leader is lacking and design a suitable training and development program for them. The study endorses Teamwork, Mindfulness, Inclusive Decision Making, Compassion, and Emotional Management as essential components of practicing Resonant Leadership. These dimensions holistically define the multi-dimensional construct where emotional management and mindfulness are focused on the leader in relation to oneself, compassion is focused on the leader in relation to others, while teamwork and inclusive decision making are focused on the leader both in relation to others and the business context. In these complex, stressful times, inattention to any of these dimensions would risk the leader losing resonance with followers, oneself, or the environment and consequentially lose effectiveness. Leaders face numerous challenges and crises, both within and externally. Practitioners may design comprehensive training and development programs focused on the five identified dimensions. Institutionalised programs to train leaders in fostering teamwork, to practice mindfulness, be inclusive in decision making, treat employees with compassion and demonstrate emotional management should be designed. In these tumultuous times, practicing resonant leadership will have a restorative effect on employees, the economy and the leader itself. Leaders may be trained in meditation practices, deep breathing and yoga to encourage the practice of mindfulness and facilitate emotional management. Emotional awareness workshops may be organized for leaders to enhance identification of emotions and effective management of both negative and positive emotions in oneself and others. Training the leaders for active listening, patience, empathising and communicating well will further help them demonstrate resonant leadership. Sensitivity groups, simulation exercises or role playing may be used to develop these skills.

7. Limitations and Future Research Direction

While the current research was thorough and rigorous, it has limitations that may be addressed in future studies. Given that scale development is an iterative exercise, future studies must be conducted to refine construct validity. The resonant leadership scale was constructed and validated in the Indian context, specifically the Delhi-NCR region. As different cultural dimensions dominate in different countries, people's expectations from effective leaders result in variations in characteristics of leadership styles (Jogulu, 2010). The applicability of the measure in context of other countries and culture needs further examination. Using Dickson's (2009) approach, each of the resonant leader dimensions and sub-dimensions may be evaluated against cultural dimensions (Biermeier-Hanson, Liu, & Dickson, 2015). Further, the scale was only tested only in context of IT/ITeS and BFSI employees. This limits the generalizability of the findings to working professionals even across diverse sectors in India. Future studies must test the validity of the measure on other sectors like telecom, media, manufacturing, retail, public sector etc., and across diverse states of India. This would help overcome the limitation of this study and establish the generalizability of the findings. Hence future research should validate the resonant leadership scale across different cultures and in different sectors and industries and understand the changes in the dimensions and structure of the resonant leadership construct. Second, this study was cross-sectional in nature as data was collected only at a particular point in time. This does not take into account the changes brought forth by the fluctuations in the environment. A longitudinal study would help understand the dynamism within the construct of resonant leadership better and draw more convincing conclusions about the dimensionality of the newly developed measure. The structure of resonant leadership may undergo modifications as per the findings of these studies. Third, the impact of demographic variables like gender and age of leader on follower perception of characteristic of resonant leadership can be considered. Finally, to establish the nomological validity of the resonant leadership scale we studied its causal relationship with only one outcome variable, burnout. We recommend future scholars to study both antecedents of RL and study outcome variables of different categories like follower attitudes, behavior, performance and leader-specific outcome variables also. The developed RL scale may be used to conduct empirical studies that expand the nomological network of resonant leadership.

References

- Alhilawy, A. H. O., Aljanabi, A. A. A., & Bareas, A. K. (2020). Resonant Leadership and Its Impact on strategic supremacy. *Transylvanian Review*, 27(47).
- Ali, R., & Kashif, M. (2020). The role of resonant leadership, workplace friendship and serving culture in predicting organizational commitment: The mediating role of compassion at work. *Revista Brasileira de Gestao de Negocios*, 22(4), 799–819. <https://doi.org/10.7819/rbgn.v22i4.4085>
- Bagozzi, R. P., & Yi, Y. (1991). Multitrait-multimethod matrices in consumer research. *Journal of Consumer Research*, 17(4), 426–439.
- Bawafaa, E., Wong, C. A., & Laschinger, H. (2015). The influence of resonant leadership on the structural empowerment and job satisfaction of registered nurses. *Journal of Research in Nursing*, 20(7), 610–622. <https://doi.org/10.1177/1744987115603441>
- Biermeier-Hanson, B., Liu, M., & Dickson, M. W. (2015). Alternate views of global

- leadership: Applying global leadership perspectives to leading global teams. *Leading global teams: Translating multidisciplinary science to practice*, 195-223.
- Boyatzis, R., & McKee, A. (2005). *Resonant Leadership. Renewing yourself and connecting with others through mindfulness, hope and compassion*. Harvard Business School Press.
- Boyatzis, R E, & Soler, C. (2012). Vision, leadership and emotional intelligence transforming family business. *Journal of Family Business Management*, 2(1), 23–30.
- Boyatzis, Richard E. (2008). Competencies in the 21st century. *Journal of Management Development*.
- Boyatzis, Richard E, Smith, M. L., & Blaize, N. (2006). Developing sustainable leaders through coaching and compassion. *Academy of Management Learning & Education*, 5(1), 8–24.
- Casale, K. R. (2017). *Exploring Nurse Faculty Incivility and Resonant Leadership*. 38(4), 177–181. <https://doi.org/10.1097/01.NEP.0000000000000171>
- Chawla, S., & Lenka, U. (2015). A study on learning organizations in indian higher educational institutes. *Journal of Workplace Learning*, 27(2), 142–161. <https://doi.org/10.1108/JWL-07-2014-0052>
- Churchill, G. A. (1979). A Paradigm for Developing Better Measures of Marketing Constructs. *Journal of Marketing Research*, 16(1), 64–73.
- Cortina, J. M., Sheng, Z., Keener, S. K., Keeler, K. R., Grubb, L. K., Schmitt, N., Tonidandel, S., Summerville, K. M., Heggstad, E. D., & Banks, G. C. (2020). From alpha to omega and beyond! A look at the past, present, and (possible) future of psychometric soundness in the Journal of Applied Psychology. *Journal of Applied Psychology*, 105(12), 1351–1381. <https://doi.org/10.1037/apl0000815>
- Creswell, J. W., & Plano Clark, V. L. (2007). *Designing and Conducting Mixed Methods Research*. Sage, Thousand Oaks, CA.
- Cummings, G. G., Hewko, S. J., Wang, M., Wong, C. A., Laschinger, H. K. S., & Estabrooks, C. A. (2018). Impact of Managers' Coaching Conversations on Staff Knowledge Use and Performance in Long-Term Care Settings. *Worldviews on Evidence-Based Nursing*, 15(1), 62–71. <https://doi.org/10.1111/wvn.12233>
- Cummings, G. (2004). Investing relational energy: the hallmark of resonant leadership. *Nursing Leadership (Toronto, Ont.)*, 17(4), 76–87.
- Cummings, Greta, Hayduk, L., & Estabrooks, C. (2005a). Mitigating the impact of hospital restructuring on nurses: The responsibility of emotionally intelligent leadership. *Nursing Research*, 54(1), 2–12. <https://doi.org/10.1097/00006199-200501000-00002>
- Cummings, Greta, Hayduk, L., & Estabrooks, C. (2005b). *Mitigating the Impact of Hospital The Responsibility of Emotionally Intelligent Leadership*. 54(1), 2–12.
- DeVellis, R. F. (2016). *Scale Development: Theory and Applications*. Sage Publications Sage CA: Thousand Oaks, CA.
- Gaan, N., & Shin, Y. (2022). Multilevel analysis of resonant leadership and subordinate's work performance during COVID-19: a study of the indian software industry. *Current Psychology*, 0123456789. <https://doi.org/10.1007/s12144-022-02746-3>

- Goleman, D, Boyatzis, R. E., & McKee, A. (2002). *Primal Leadership: Learning to Lead with Emotional Intelligence*. Harvard Business School Press.
- Goleman, Daniel. (2000). HBR 's Must-Reads on Managing People Leadership That Gets Results. *Harvard Business Review*, 21(March-April), 114–124. <https://doi.org/10.1111/j.1523-1739.2006.00537.x>
- Goleman, Daniel. (2002). Leading resonant teams. *Leader to Leader*, 25, 24–30.
- Goleman, Daniel, Boyatzis, R. E., & McKee, A. (2002). *The New Leaders – Transforming the art of leadership into the science of results*.
- Goleman, Daniel, Boyatzis, R., & McKee, A. (2001). The Hidden Driver of Great Performance by Daniel Goleman, Richard Boyatzis, and Annie McKee. *Harvard Business Review*, August.
- Goleman, Daniel, Boyatzis, R., & McKee, A. (2002). The emotional reality of teams. *Journal of Organizational Excellence*, 21(2), 55–65. <https://doi.org/10.1002/npr.10020>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage publications.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Higgs, M. (2003). How can we make sense of leadership in the 21st century? *Leadership & Organization Development Journal*, 24(5), 273–284. <https://doi.org/10.1108/01437730310485798>
- Hinkin, T. R. (1995). A review of scale development practices in the study of organizations. *Journal of Management*, 21(5), 967–988.
- Hinkin, T. R. (1998). A brief tutorial on the development of measures for use in survey questionnaires. *Organizational Research Methods*, 2(1), 104–121. <https://doi.org/10.1177/109442819800100106>
- Jogulu, U. D. (2010). Culturally-linked leadership styles. *Leadership & Organization Development Journal*, 31(8), 705–719.
- Jordan, P. J., & Troth, A. C. (2020). Common method bias in applied settings: The dilemma of researching in organizations. *Australian Journal of Management*, 45(1), 3–14. <https://doi.org/10.1177/0312896219871976>
- Judeh, M. (2013). Emotional intelligence and retention: The moderating role of job involvement. *International Scholarly and Scientific Research & Innovation*, 7(3), 656–661.
- Judeh, M., Al-Ghasawneh, J., Al-Zu'bi, H., & Ngah, A. H. (2022). Linking resonant leadership, psychological ownership, and organizational commitment: The mediating role of employee empowerment. *Problems and Perspectives in Management*, 20(1), 153–163. [https://doi.org/10.21511/ppm.20\(1\).2022.14](https://doi.org/10.21511/ppm.20(1).2022.14)

- Lance, C. E., Butts, M. M., & Michels, L. C. (2006). The Sources of Four Commonly Reported Cutoff Criteria: What did they really say? *Organizational Research Methods*, 9(2), 202–220.
- Laschinger, H. K. S., Wong, C. A., Cummings, G. G., & Grau, A. L. (2014). Resonant leadership and workplace empowerment: the value of positive organizational cultures in reducing workplace incivility. *Nursing Economic\$, 32*(1), 5–16.
- Lenka, U., & Tiwari, B. (2016). Achieving triple “P” bottom line through resonant leadership: an Indian perspective. *International Journal of Productivity and Performance Management*, 65(5), 694–703. <https://doi.org/10.1108/IJPPM-02-2015-0023>
- Lucas, V., Laschinger, H. K., & Wong, C. A. (2008). The impact of emotional intelligent leadership on staff nurse empowerment: the moderating effect of span of control. *Journal of Nursing Management*, 16(8), 964–973.
- Mahon, E. G., Taylor, S. N., & Boyatzis, R. E. (2014). Antecedents of organizational engagement: exploring vision, mood and perceived organizational support with emotional intelligence as a moderator. *Frontiers in Psychology*, 5, 1322.
- Marques, J. (2015). Article information : *Journal of Management Development*, 34(10).
- McKee, A., & Massimilian, D. (2006). Resonant leadership: A new kind of leadership for the digital age. *Journal of Business Strategy*, 27(5), 45–49. <https://doi.org/10.1108/02756660610692707>
- Nunnally, J. C. (1978). *Psychometric Theory*. McGraw-Hill Book Company.
- Parr, J. M., Teo, S., & Koziol-McLain, J. (2021). A quest for quality care: Exploration of a model of leadership relationships, work engagement, and patient outcomes. *Journal of Advanced Nursing*, 77(1), 207–220. <https://doi.org/10.1111/jan.14583>
- Paul, J., & Benito, G. R. (2018). A review of research on outward foreign direct investment from emerging countries, including China: what do we know, how do we know and where should we be heading? *Asia Pacific Business Review*, 24(1), 90–115.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903.
- Polit, D. F., Beck, C. T., & Owen, S. V. (2007). Is the CVI an Acceptable Indicator of Content Validity? Appraisal and Recommendations. *Research in Nursing & Health*, 30(4), 459–467.
- Polit, Denise F., & Beck, C. T. (2006). The Content Validity Index: Are You Sure You Know What’s Being Reported? Critique and Recommendations. *Research in Nursing & Health*, 29, 488–497. <https://doi.org/10.1002/nur.20147> §2006
- Sarstedt, M., Hair, J. F., Cheah, J. H., Becker, J. M., & Ringle, C. M. (2019). How to specify, estimate, and validate higher-order constructs in PLS-SEM. *Australasian Marketing Journal*, 27(3), 197–211. <https://doi.org/10.1016/j.ausmj.2019.05.003>
- Simmering, M. J., Fuller, C. M., Richardson, H. A., Ocal, Y., & Atinc, G. M. (2015). Marker Variable Choice, Reporting, and Interpretation in the Detection of Common Method Variance: A Review and Demonstration. *Organizational Research Methods*, 18(3), 473–

511. <https://doi.org/10.1177/1094428114560023>

- Smith, G. T., Fischer, S., & Fister, S. M. (2003). Incremental Validity Principles in Test Construction. *Psychological Assessment*, 15(4), 467–477. <https://doi.org/10.1037/1040-3590.15.4.467>
- Smith, S. W., Bresnahan, M. J., & Smith, S. L. (2011). Application of the altruistic behavior coding scheme to cross-cultural contexts. *World Cultures EJournal*, 18(1).
- Squires, M., Tourangeau, A., Spence Laschinger, H. K., & Doran, D. (2010). The link between leadership and safety outcomes in hospitals. *Journal of Nursing Management*, 18(8), 914–925. <https://doi.org/10.1111/j.1365-2834.2010.01181.x>
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). Harper & Row.
- Tabche, I., Behery, M. H., & Bin Ahmad, K. Z. (2022). Resonant leadership and organizational citizenship behavior: a moderated-mediation analysis of followers' resilience. *International Journal of Productivity and Performance Management*. <https://doi.org/10.1108/IJPPM-02-2022-0069>
- Taner, B., & Aysen, B. (2013). The Role of Resonant Leadership in Organizations. *European Scientific Journal*, 594–601. <http://www.eujournal.org/index.php/esj/article/view/1292>
- Tiwari, B., & Lenka, U. (2015). *Role of Resonant Leaders in Engaging Employees of Firms Facing Economic Crisis*. 247667. <https://doi.org/10.15242/icehm.ed0315118>
- Tiwari, D. B., & Lenka, D. U. (2019). Employee engagement: A study of survivors in Indian IT/ITES sector. *IIMB Management Review*. <https://doi.org/10.1016/j.iimb.2019.10.003>
- Wagner, J. I. J., Warren, S., Cummings, G., Smith, D. L., Olson, J. K., Wagner, J. I. J., Warren, S., Cummings, G., Smith, D. L., & Olson, J. K. (2013). Resonant Leadership, Workplace Empowerment, and “Spirit At Work”: Impact on RN Job Satisfaction and Organizational Commitment. *Canadian Journal of Nursing Research*, 45(4), 108–128.
- Wagner, J. I. J., Warren, S., Cummings, G., Smith, D. L., Olson, J. K., Wagner, J. I. J., Warren, S., Cummings, G., Smith, D. L., & Olson, J. K. (2015). Workplace model for physical therapists and occupational therapists. *Journal of Health Organization and Management*, 28(3), 290–314.
- Waltz, C. F., Strickland, O. L., & Lenz, E. R. (2005). *Measurement in nursing and health research* (3rd ed.) (3rd ed.). New York: Springer Publishing Co.
- Yusoff, M. S. B. (2019). ABC of Content Validation and Content Validity Index Calculation. *Education in Medicine Journal*, 11(2), 49–54. <https://doi.org/10.21315/eimj2019.11.2.6>
- Zhou, Y. (2019). A Mixed Methods Model of Scale Development and Validation Analysis. *Measurement: Interdisciplinary Research and Perspectives*, 17(1), 38–47. <https://doi.org/10.1080/15366367.2018.1479088>

Figures and Tables

Table 1: Dimension Table of Resonant Leadership

		(Cummings, Hayduk & Estabrooks, 2005)	(Squires, Tourangeau, Laschinger & Doran, 2014)	(Laschinger, Wong, Cummings & Grau, 2014)	(Boyatzis, Pasarelli, Koenig, Lowe, Mathew, Cummings, Midodzi, Wong & Estabrooks, 2014)	(Hewko, Brown, Fraser, Wong & Cummings, 2014)	(Boyatzis, Smith, Van Oosten & Woolford, 2014)	(Vesterinen, Isola & Paasivaara, 2009)	(Wagner, Warren, Cummings, Smith, Olson, Heckemann, Schols & Halfens, 2015)	(Cummings, Hewko, Wang, Wong, Laschinger, Ahn, Ettner & Loupin, 2012)	(Parr, Teo, Koziol-McLain, 2021)	(Lenka, Gupta, 2020)	(Cummings, MacGregor, Davey, Lee, Wong, Lo, Boyatzis & Khawaja, 2014)	(Rasmussen-Barr, Savage & Von Knorring, 2019)	(Ungerleider & Ungerleider, 2019)	(Tiwari & Lenka, 2019)	(Boyatzis & McKee, 2006)	(Chawla & Lenka, 2015)	(McKee & Massimilian, 2006)	(Bawafaa, Wong & Laschinger, 2015)	(Wagner, Warren & Cummings, 2013)	(Lenka& Tiwari, 2016)	(Klocko & Wells, 2015)	(Chawla & Lenka, 2016)	(Guillet, n.d.)	(Marques, 2015)
empathy	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
mindfulness							✓			✓						✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
hope				✓			✓			✓							✓	✓	✓	✓		✓	✓	✓	✓	✓
compassion							✓			✓		✓				✓	✓	✓	✓			✓	✓	✓	✓	✓
overall positive mood												✓				✓		✓				✓				
passionate				✓												✓	✓									✓
committed				✓													✓									
self-renewal																	✓						✓			✓
emotionally intelligent	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
self-awareness	✓	✓	✓	✓			✓	✓	✓			✓	✓				✓	✓	✓	✓	✓					
self-management	✓	✓	✓	✓			✓	✓	✓		✓	✓					✓		✓	✓						
social awareness	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓					✓		✓	✓					✓	
relationship management	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
visionary				✓	✓		✓		✓	✓		✓			✓	✓			✓		✓	✓	✓	✓		✓
developing others					✓		✓					✓	✓		✓	✓				✓	✓			✓	✓	
teamwork					✓		✓					✓								✓	✓					
recognition		✓	✓		✓				✓												✓					
optimistic						✓						✓									✓	✓	✓			

[illegible]

Table 2: Final Retained Items for Data Collection after Content Validity Index calculation

S.No.	Items	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	N	A	N-A	UA	I-CVI	Pc	K	Interpretation
1	My leader can understand the emotional states of his/her employees	1	1	1	1	1	1	1	1	1	1	10	10	0	1	1	0.00976563	1	Excellent
2	My leader is sensitive to the needs of his/her employees	1	1	1	0	1	1	1	1	1	1	10	9	0	1	1	0.00976563	1	Excellent
3	My leader empathetically responds to employees' concerns	1	1	0	1	1	1	1	1	1	1	10	9	1	0	0.9	0.009765625	0.899013807	Excellent
4	My leader works to create harmonious relationships among employees	1	1	1	0	1	1	1	0	1	1	10	8	2	0	0.8	0.043945313	0.790806946	Excellent
5	My leader fosters team-spirit among the employees	1	1	1	1	1	1	1	0	1	1	10	9	1	0	0.9	0.009765625	0.899013807	Excellent
6	My leader encourages collaboration despite differences	1	0	1	1	1	1	1	1	1	1	10	9	1	0	0.9	0.009765625	0.899013807	Excellent
7	My leader encourages employees to support each other	1	1	1	1	1	1	0	1	1	1	10	9	1	0	0.9	0.009765625	0.899013807	Excellent
8	My leader includes opinions of employees while making decisions	1	1	1	1	0	1	1	1	1	1	10	8	2	0	0.8	0.043945313	0.790806946	Excellent
9	My leader welcomes suggestions from all employees	1	0	1	1	1	1	1	1	1	1	10	9	1	0	0.9	0.009765625	0.899013807	Excellent
10	My leader makes all employees a part of the decision-making process	1	1	1	0	1	1	1	1	1	1	10	9	1	0	0.9	0.009765625	0.899013807	Excellent
11	My leader expresses confidence in our abilities	1	1	1	1	1	1	1	1	1	1	10	10	0	1	1	0.00976563	1	Excellent
12	My leader is able to manage his/her emotions	1	1	1	1	1	1	1	1	1	1	10	10	0	1	1	0.00976563	1	Excellent
13	My leader has never had an emotional outburst	1	1	1	1	1	1	1	0	1	1	10	9	1	0	0.9	0.009765625	0.899013807	Excellent
14	Even in emotionally overwhelming situations, my leader acts with composure	1	1	1	1	1	1	1	1	1	1	10	10	0	1	1	0.00976563	1	Excellent
15	My leader takes care of his/her employees' needs	1	1	0	1	1	1	0	1	1	1	10	8	2	0	0.8	0.043945313	0.790806946	Excellent
16	My leader takes care of employees' well-being	1	0	1	1	1	1	1	0	1	1	10	8	2	0	0.8	0.043945313	0.790806946	Excellent
17	Every interaction with my leader fills me with optimism	1	1	1	1	1	1	1	1	1	1	10	10	0	1	1	0.0097	1	Excellent

																		6563		
18	My leader's enthusiasm is contagious	1	1	1	0	1	1	1	0	1	1	1	0	8	2	0	0.8	0.043945313	0.790806946	Excellent
19	My leader believes we can achieve our dreams	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	0.000976563	1	Excellent
20	My leader is optimistic even after a failure	1	1	0	1	1	0	1	1	1	1	1	0	8	2	0	0.8	0.043945313	0.790806946	Excellent
21	My leader can see possibilities where no one can	1	1	1	0	1	1	1	0	1	1	1	0	8	2	0	0.8	0.043945313	0.790806946	Excellent
22	My leader is positive about the future	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	0.000976563	1	Excellent
23	My leader recharges with self-care practices like vacation, hobbies, workout, yoga etc.	1	1	1	1	1	1	0	1	1	1	1	0	9	1	0	0.9	0.009765625	0.899013807	Excellent
24	With time my leader has grown better	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	0.000976563	1	Excellent
25	My leader keeps reinventing himself/herself with time	1	1	0	1	1	0	1	1	1	1	1	0	8	2	0	0.8	0.043945313	0.790806946	Excellent
26	With time my leader has changed for better	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	1	0.000976563	1	Excellent
													No of items				26			
													S-CVI/Ave (through ICVI)				0.907692308			

NOTE: Where N is the total number of experts, A is the no. of experts in agreement, N-A is the difference of N and A, UA signifies universal agreement, I-CVI is item level content validity index, Pc is the probability of chance agreement, κ^* is modified kappa, S-CVI/Ave is scale level content validity index calculation through averaging method, and S-CVI/UA is scale level content validity index calculation through universal agreement method.

Table 3: Demographic Profile of Respondents

	Study 2 (n=100)		Study 3 (n=564)		Study 4 (n=325)	
	IT/ITeS		IT/ITeS		BFSI	
Demographic variable	Pilot Test, EFA		CFA and Nomological Validity		Generalizability	
Gender	Frequency	%	Frequency	%	Frequency	%
Female	63	63	329	58.3	189	58.2
Male	37	37	235	41.7	136	41.8
Age (in years)	Frequency	%	Frequency	%	Frequency	%
Less than 25 years	62	62.0	176	31.2	89	27.4
25-34 years	27	27.0	266	47.2	155	47.7
35-44 years	4	4.0	70	12.4	47	14.5
45-54 years	6	6.0	39	6.9	23	7.1
55-64 years	1	1.0	11	2.0	9	2.8
65 and above	0	0.00	2	.4	2	.6
Marital Status	Frequency	%	Frequency	%	Frequency	%
Unmarried	81	81.0	373	66.1	201	61.8
Married	19	19.00	185	32.8	120	36.9
Divorced	0	0	5	.9	3	.9
Widowed	0	0	1	.2	1	.3
Number of Dependents	Frequency	%	Frequency	%	Frequency	%
None	70	70.0	301	53.4	156	48.0
1	4	4.0	48	8.5	37	11.4
2	11	11.0	100	17.7	61	18.8
3	10	10.0	66	11.7	45	13.8
4	4	4.0	31	5.5	18	5.5
More than 4	1	1.0	18	3.2	8	2.5
Total Job Experience	Frequency	%	Frequency	%	Frequency	%
less than 1 year	63	63.0	117	20.7	55	16.9
1 - 5 years	21	21.0	245	43.4	138	42.5
6 - 10 years	5	5.0	90	16.0	52	16.0
11 - 15 years	6	6.0	53	9.4	43	13.2
16 - 20 years	3	3.0	19	3.4	11	3.4
21 - 25 years	2	2.0	19	3.4	10	3.1
More than 25 years	0	0.00	21	3.7	16	4.9

Total Income per Annum	Frequenc y	%	Frequenc y	%	Frequenc y	%
Up to Rs. 10 lacs	91	74.0	367	65.1	214	65.8
Rs. 11 lac - Rs. 20 lacs	8	17.0	136	24.1	84	25.8
Rs. 21 lac - Rs. 30 lacs	1	8.0	44	7.8	21	6.5
Rs. 31 lac - Rs. 40 lacs	0	0.0	11	2	4	1.2
More than Rs. 40 lacs	0	0	6	1.1	2	.6
Level in Organization	Frequenc y	Percent	Frequenc y	Percent	Frequenc y	Percent
Junior	72	72.0	231	41.0	123	37.8
Middle Management	24	24.0	279	49.5	169	52.0
Senior Management	4	4.0	54	9.6	33	10.2

Table 4: Exploratory Factor Analysis

Rotated Component Matrix^a

Item	Component				
	Teamwork	Mindfulness	Inclusive Decision Making	Compassion	Emotional Management
Eigen Values	8.23%	1.72%	1.22%	1.13%	1.12%
My leader believes we can achieve our dreams	0.75				
My leader encourages collaboration despite differences	0.742				
My leader expresses confidence in our abilities	0.686				
My leader encourages employees to support each other	0.575				
My leader fosters team-spirit among the employees	0.557				
My leader recharges with self-care practices like vacation, hobbies, workout, yoga etc.		0.762			
With time my leader has changed for better		0.682			
Every interaction with my leader fills me with optimism		0.667			
My leader is positive about the future		0.658			
With time my leader has grown better		0.644			
My leader welcomes suggestions from all employees			0.832		
My leader makes all employees a part of the decision-making process			0.799		
My leader includes opinions of employees while making decisions			0.724		
My leader can understand the emotional states of his/her employees				0.836	
My leader is sensitive to the needs of his/her employees				0.706	
My leader empathetically responds to employees' concerns				0.588	
My leader has never had an emotional outburst					0.868
My leader is able to manage his/her emotions					0.734
Even in emotionally overwhelming situations, my leader acts with composure					0.722
Cronbach's Alpha	0.8	0.85	0.87	0.82	0.76
Total Variance Explained	70.58%				

Table 5: Measurement Model Summary (N=564)

Factors	Items	Factor Loadings	Cronbach's Alpha	CR		AVE
				(rho_a)	(rho_c)	
Teamwork			0.891	0.895	0.920	0.697
	My leader believes we can achieve our dreams	0.771				
	My leader encourages collaboration despite differences	0.863				
	My leader expresses confidence in our abilities	0.857				
	My leader encourages employees to support each other	0.839				
	My leader fosters team-spirit among the employees	0.841				
Mindfulness			0.917	0.919	0.938	0.752
	My leader recharges with self-care practices like vacation, hobbies, workout, yoga etc.	0.795				
	With time my leader has changed for better	0.884				
	Every interaction with my leader fills me with optimism	0.898				
	My leader is positive about the future	0.861				
	With time my leader has grown better	0.894				
Inclusive Decision Making			0.907	0.907	0.942	0.844
	My leader welcomes suggestions from all employees	0.912				
	My leader makes all employees a part of the decision-making process	0.930				
	My leader includes opinions of employees while making decisions	0.913				
Compassion			0.907	0.907	0.942	0.843
	My leader can understand the emotional states of his/her employees	0.925				
	My leader is sensitive to the needs of his/her employees	0.916				
	My leader empathetically responds to employees' concerns	0.914				
Emotional Management			0.842	0.866	0.904	0.759
	My leader has never had an emotional outburst	0.814				
	My leader is able to manage his/her emotions	0.901				
	Even in emotionally overwhelming situations, my leader acts with composure	0.896				

Note: AVE=Average variance extracted, CR=Composite reliability

Table 6: Discriminant validity of latent constructs through Heterorait-Monotrait Ratio (N= 564)

Dimensions	Teamwork	Mindfulness	Inclusive Decision Making	Compassion	Emotional Management
Teamwork					
Mindfulness	0.8				
Inclusive Decision Making	0.840197	0.8			
Compassion	0.830869	0.8	0.8		
Emotional Management	0.663541	0.706781	0.676797	0.726888	

Table 7: Measurement Model Summary for Generalizability (N=325)

Factors	Items	Factor Loadings	Cronbach's Alpha	CR		AVE
				(rho_a)	(rho_c)	
Teamwork			0.892	0.895	0.921	0.699
	My leader believes we can achieve our dreams	0.799				
	My leader encourages collaboration despite differences	0.858				
	My leader expresses confidence in our abilities	0.840				
	My leader encourages employees to support each other	0.829				
	My leader fosters team-spirit among the employees	0.854				
Mindfulness			0.922	0.925	0.942	0.764
	My leader recharges with self-care practices like vacation, hobbies, workout, yoga etc.	0.808				
	With time my leader has changed for better	0.890				
	Every interaction with my leader fills me with optimism	0.901				
	My leader is positive about the future	0.867				
	With time my leader has grown better	0.903				
Inclusive Decision Making			0.906	0.906	0.941	0.842
	My leader welcomes suggestions from all employees	0.913				
	My leader makes all employees a part of the decision-making process	0.928				
	My leader includes opinions of employees while making decisions	0.912				
Compassion			0.903	0.903	0.939	0.838
	My leader can understand the emotional states of his/her employees	0.926				

	My leader is sensitive to the needs of his/her employees	0.914				
	My leader empathetically responds to employees' concerns	0.906				
Emotional Management			0.840	0.863	0.903	0.756
	My leader has never had an emotional outburst	0.817				
	My leader is able to manage his/her emotions	0.898				
	Even in emotionally overwhelming situations, my leader acts with composure	0.892				

Note: AVE=Average variance extracted, CR=Composite reliability

Table 8: Discriminant validity of latent constructs through Heterotrait-Monotrait Ratio (N= 325)

Dimensions	Teamwork	Mindfulness	Inclusive Decision Making	Compassion	Emotional Management
Teamwork					
Mindfulness	0.868914				
Inclusive Decision Making	0.843664	0.898543			
Compassion	0.847383	0.8	0.897555		
Emotional Management	0.670848	0.719936	0.686237	0.725994	

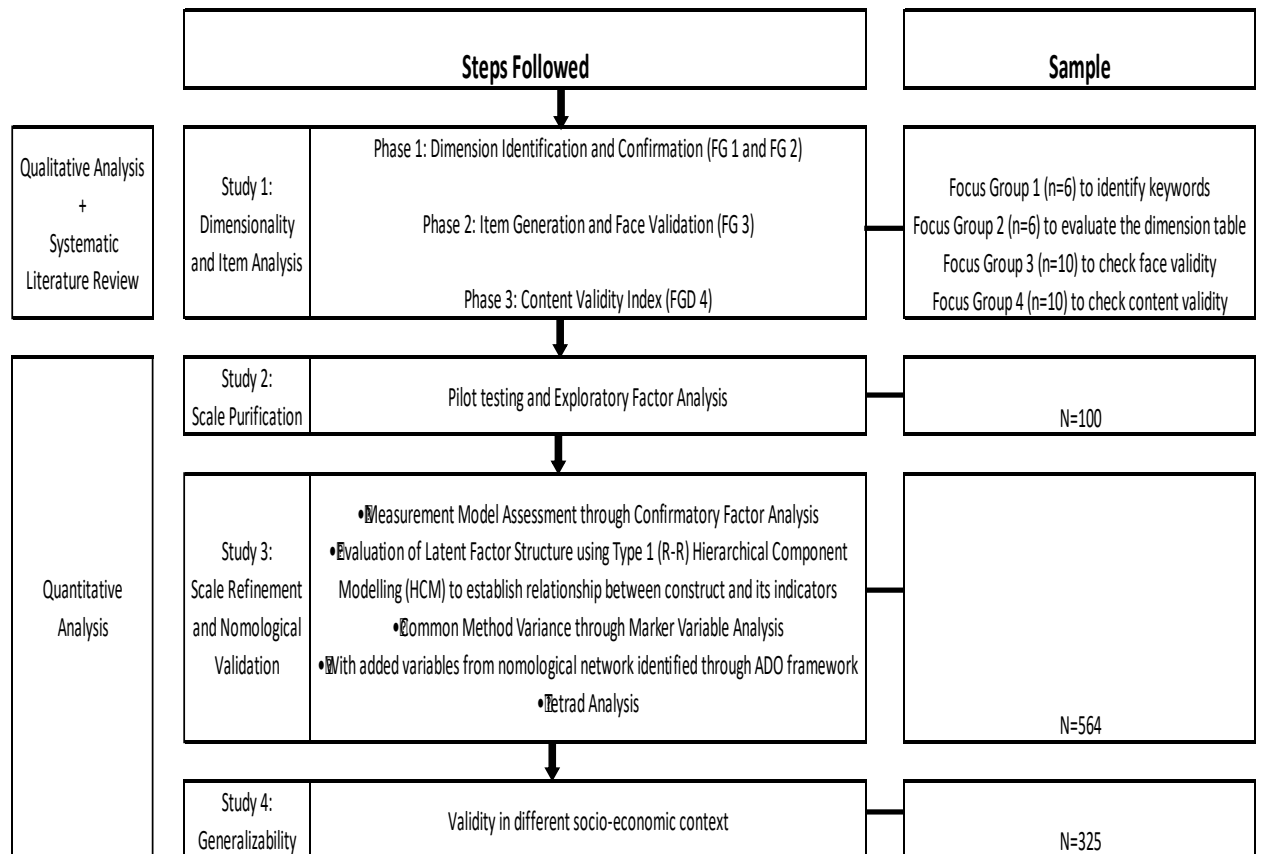


Figure 1: Scale development methodology flowchart