Transformational leadership, innovative work behavior, and employee well-being

Mohammad Sadegh Sharifirad

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Abstract Different studies have shown that transformational leadership, which is categorized as a positive leadership, can increase employee's well-being and innovation. However, the research about the social interactional mechanism used to improve the aforementioned outcomes is scant. This research investigates the mediating roles of leader's active empathetic listening and psychological safety through a survey data collected from 583 postgraduate management students in three top universities in Iran working either full-time or part-time. After doing a series of confirmatory factor analyses, this study employed structural equation modeling to test the hypotheses of the proposed model. Results of the analyses revealed that leader's active empathetic listening and psychological safety fully mediated the influence of TL on innovative work behavior, and partially mediated the influence of TL on employee well-being. This paper contributes in three ways. First, it investigates the mediating roles of leader's active empathetic listening and psychological safety as two interpersonal factors on innovative work behavior and employee well-being. Second, findings of the study make contributions to the body of research in a number of related disciplines, such as transformational leadership, employee well-being, and innovative work behavior. Third, this paper highlights the significant impact of listening as a taken-for-granted aspect of interactions in leader–follower relationship. Implications of the findings for research and practice are discussed.

Keywords Transformational leadership · Active empathetic listening · Innovative work behavior · Psychological safety · Employee well-being

M. S. Sharifirad (✉)
Faculty of Economic and Administrative Sciences, Ferdowsi University of Mashhad, Mashhad, Iran
e-mail: ili_teacher@yahoo.com

Introduction

Employee wellbeing has recently attracted much attention of researchers, not only for the sake of happier and productive employees (Wright and Staw 1999), but also to mitigate the negative effects of stress in the workplace such as frustration, depression, anxiety, and many physical problems, including cardiovascular diseases and high blood pressure among individuals (e.g., Siu et al. 2007). Some employers in Western societies have taken increasing interest in enhancing and maintaining employee well-being, and some employees are even willing to take pay-cuts in order to be healthier and happier (Warr 1999).

Previously-published research has proved that employee well-being is affected both by the physical work environment and the psychological work environment (e.g., Gilbreath and Benson 2004). As summarized by Sparks et al. (2001), management style is one of the four main psychosocial work environment issues that is one of current concerns for employee well-being and occupational health in the 21st-century workplace (Liu et al. 2010). The focus has been on supervisors because they can be a major influence, positive or negative, on employees' work lives because supervisors have a large impact on work demands, control, and social support (e.g., Gilbreath and Benson 2004; Harris and Kacmar 2006). It is argued that positive leadership, which comprises positive attitudes of passion, skills, and confidence to inspire followers, has the potential to elevate followers in the long term in areas such as trust, commitment, and well-being (Liu et al. 2010). The closest leadership style to positive leadership is transformational leadership (TL), since Bass (1985) considered leader's motivational and elevating effect on followers as the core of his definition.

The close link between innovation and performance has caused enthusiasm to understand factors shaping innovation. A review by Mumford et al. (2002) mentions a broad range of factors including strategy, structure, climate practices, group interactions and individual performance capabilities. More recently, various authors have specifically highlighted the impact of leadership on creative efforts and innovation (Mumford et al. 2002; Jung et al. 2003; Mumford and Licuanan 2004). Within the strand of research concerned with the relationship between leadership and the innovation process, transformational leadership is especially interesting, as theory suggests that transformational leaders can enhance innovative work behavior (Bass and Avolio 1990; Sosik et al. 1998). Bass (1985) defined a transformational leader as one who motivates followers to do more than they are originally expected to do. Despite theoretical reasoning, little empirical evidence exists to confirm the relationship between leadership, innovative work behavior, and the socio-psychological mechanism in between, inspiring the need for further investigation (Reuvers et al. 2008).

Confirming positive leadership thesis, researchers have established associations between TL, innovative work behavior and employee well-being based on research done in Western societies (e.g., Gong et al. 2009; Arnold et al. 2007; Densten 2005; Sivanathan et al. 2004; Seltzer et al. 1989). However, there is very little research exploring the relationship between TL and employee well-being in Eastern contexts, especially Iran, and even there is less research examining the socio-psychological mechanism of this relationship.

Cultural dimensions can impact relationships and the outcomes such as stress. The two most impactful dimensions of national culture, in this respect, are power distance and individualism/collectivism. As an Eastern context, Iranian managers are characterized as being individualistic and high in power distance (Javidan and Dastmalchian 2003). Iranians can be quite external in their locus of control, attributing control of events to forces outside of themselves (Boyacigiller and Adler 1991; House et al. 1999). Control itself has been linked to perceptions of both job stressors and job strains (Ganster and Fusilier 1989).

Countries in which people are external tend to score high in job strains. According to Iran's economic and political position in the world, employee well-being is very susceptible. With the imposition of sanctions on Iran and, as a result, its struggling economy and devalued currency, organizations, employees and people have experienced much economic pressure. As a notorious example, job stress has increased among the Iranian since every crisis brings lack of stability and unpredictability which are the sources of stress (Miller 1981).

This study aims to bridge the above-mentioned gap in this knowledge by exploring the relationship between transformational leadership, employee well-being and innovative work behavior in three Iranian societies. Specifically, we intend to examine the roles of leaders active empathetic listening and perceived psychological safety by the follower as two links between transformational leadership and two constructs of employees' innovative work behavior and well-being. Several researchers have underlined the importance of pro-subordinate behaviors and positive relationships between supervisors and subordinates (Einarsen et al. 2007; Gerstner and Day 1997; Humphrey et al. 2007; Ilies et al. 2007). Nevertheless, there is little research exploring the potential of social interactions to increase or decrease employees' innovative work behavior and well-being. Aligned with this point, we use active empathetic listening and psychological safety to reflect the quality of relationships and organizational climate, respectively, and posit them as mediators between transformational leadership and two outcomes for the followers: innovative work behavior and well-being.

Theory and hypotheses

Transformational leadership and employee well-being

Wellbeing is such a broad concept that has resulted in the complexity of employee well-being construct. The definitions of well-being range from a simple one such as feeling good or feeling bad (Warr 2006) to a multi-construct one such as containing objective list, preference satisfaction and mental states (Parfit 1984). In a narrower sense, employee well-being is simply defined as “a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences” (Locke 1976). Some research has proposed that it comprises some psychological indicators such as affect, anxiety and frustration and physiological ones such as blood pressure and heart condition and general physical health (Danna and Griffin 1999).

Leadership is an influential aspect of the work environment for employees (e.g., Oldham and Cummings 1996; Scott and Bruce 1994). Transformational leadership describes a class of behaviors enacted by a leader composed of four dimensions: intellectual stimulation (i.e., challenging the status quo and taking novel approaches to problems), charisma or idealized influence, inspirational motivation (i.e., energizing followers by articulating a compelling vision), and individualized consideration (i.e., supporting, mentoring, and developing followers) (Bass 1985).

Several studies have found that leaders' behavior affects employees' well-being. Gilbreath and Benson (2004) investigated the effect of supervisory behavior on employee well-being (conceptualized as psychiatric disturbance) using a structure versus consideration conceptualization of supervisory behavior. A recent experimental study (Bono and Ilies 2006, p. 331) focused on the effect of charismatic leaders on the mood of followers and showed that "charismatic leaders enable their followers to experience positive emotions".

To elaborate, some features of the transformational pattern have been proposed relating to employee well-being. For example, individual consideration from a transformational leader is reflected in the leader's behaviors showing concern for followers' needs and feelings (Liu et al. 2010). This kind of transformational leader behavior could be associated with favorable affective responses, such as job satisfaction (Butler et al. 1999). Inspirational motivation could increase followers' task clarity and eliminate uncertainty and ambiguity by providing a frame of reference for describing expected performance, which in turn are related to lower levels of perceived work stress and less stress symptoms (Turner et al. 2002). As early as 1990, Podsakoff et al. demonstrated that transformational leader behaviors influenced employees' job satisfaction, and this has been confirmed by Fuller et al. (1996) meta-analysis. Seltzer et al. (1989) carried out research among 277 MBA students who held full-time jobs, and found that symptoms of stress and burnout could be attributed to the lack of TL. In other words, TL can reduce subordinates' stress symptoms and job burnout. Therefore, we hypothesize that:

Hypothesis 1a Transformational leadership is positively related to employee well-being.

Transformational leadership and innovative work behavior

Farr and Ford (1990) define innovative work behavior (IWB) as an individual's behavior that aims to achieve the initiation and intentional introduction (within a work role, group or organization) of new and useful ideas, processes, products or procedures. IWB differs from employee creativity—the production of new and useful ideas procedures (Amabile 1988)—because it also includes the implementation of ideas. Unlike creativity, IWB is explicitly intended to be somehow beneficial. It has a clearer applied component and is expected to result in innovative output. Creativity can be seen as a crucial component of IWB, most evident in the beginning of the innovation process when problems or performance gaps are recognized and ideas are generated in response to a perceived need for innovation (West 2002).

Some studies, albeit few, have revealed the direct and indirect positive correlations between transformational leadership and innovation. A study by Sosik et al. (1998) used the number of creative ideas generated as a component of effectiveness. Results indicated a positive relationship between transformational leadership and creativity in a computer-mediated brainstorming exercise. In a series of studies by Wilson-Evered et al. (2001, 2004), transformational leadership was linked with innovative work climate and behaviors in health care teams. Reuvers et al. (2008) asserted that only two studies have successfully and specifically linked transformational leadership to innovative work behavior: Janssen (2002) and Wilson-Evered et al. (2001, 2004). More indirect evidence for the posited relationship is provided in a study by Jung et al. (2003). Their study examined the relationship between transformational leadership and organizational innovation in 32 Taiwanese companies in the electronics industry. Analysis yielded a direct and positive link between transformational leadership and organizational innovation. Wilson-Evered et al. (2001, 2004) work on health care teams found a positive relationship between transformational leadership and climate for innovation as well as a link between transformational leadership and morale and morale and implemented innovations. In 2008, Reuvers and his colleagues after doing research in four Australian hospitals revealed a positive and significant relationship between transformational leadership and innovative work behavior. As evidenced through the previously reviewed studies, this study conforms to the theorized relationship that transformational leadership positively influences followers' innovative work behavior (Hater and Bass 1988; Bass and Avolio 1990).

Hypothesis 1b Transformational leadership is positively related to innovative work behavior.

The mediating role of active empathetic listening

Multiple attempts have been made to define listening within the workplace environment for the purposes of enabling research on listening. Glenn (1989) found over 50 definitions and models in her review of the listening literature to that date. Along with these definitions and models, different words have attached listening to give it a more restrictive and practical nature. As two examples, active listening is much more than hearing; it requires use of the ears and the mind (Newstrom 2011); effective listening comprises of learning about the feelings and emotions of that person and sending signals to show care about employees. In 1999, Comer and Drollinger proposed a new approach toward listening by adding empathy to active listening. Although it is used in buyer–seller relations to enhance selling performance (Drollinger and Comer 2012; Comer and Drollinger 1999), the introduction of this topic in the relations between leaders and followers does not seem absurd and strange since one may consider leaders as those who are working with some people having ideas, thoughts, feelings, emotions and even complaints about their job, workplace, colleagues and so on and may try to show them to leaders to ask for the enhancement, change or preservation of the status quo. In return, it is incumbent upon leaders to

increase enthusiasm, cooperation commitment and creativity, to say a few, through paying attention to what they own in their hearts and minds.

Active empathetic listening is the process whereby listeners receive verbal and nonverbal messages, process them cognitively, respond to them verbally and nonverbally, and attempt to assess their underlying meaning intuitively by putting themselves in the other person's place throughout. The work of Comer and Drollinger (1999) and Drollinger et al. (2006) continues to foster this stream of listening research by synthesizing listening, or particularly what they call active empathetic listening, into three dimensions of sensing—the physical receipt of the message; processing—operations in the mind of the listener that assign meaning to incoming messages; and responding—the information that the listener sends back to speakers indicating that their messages have been received correctly (Comer and Drollinger 1999). In this paper, we adopted the construct proposed by Comer and Drollinger (1999) to examine our conceptual model.

Transformational leaders show empathy in their relations with subordinates. Skinner and Spurgeon (2005) conducted a study with 96 middle and senior level health managers working for the Western Australian Health Department. They examined the relationship between health managers' self-assessed empathy, their leadership behaviors as rated by their subordinates and subordinates' personal ratings on a number of work satisfaction and related outcome measures. Empathy showed a significant positive relationship to transformational leadership. This construct encompasses behaviors such as acting in a friendly manner and supportively, listening to subordinates' problems, showing concern for their needs and feelings, consulting subordinates on important issues, and treating subordinates as equal. In terms of transformational leadership, Individualized consideration encompasses a leader's ability to give personal attention to followers, to treat each employee individually, to coach, mentor, and advice followers (Bass 1990). These are the traces of empathy permeating into the building blocks of transformational leadership.

Yukl (1998) defines consideration as leader behavior that involves concern for people and interpersonal relationships. Transformational leaders create an atmosphere in which followers are allowed to express their opinions, discuss their problems, and share ideas. Needless to say, it entails listening to subordinates to show the path. Learning culture can grow in this cultivated ambience because this type of culture is supported through the process of encouraging team members to question their assumptions, approach old problems in new ways, or reframe problems in the light of the newly integrated organization's challenges (Jung et al. 2003).

Through individualized consideration, transformational leaders deal with others as individuals; consider their individual needs, abilities; listen attentively (Bass 1997; Bass and Avolio 1994). Also, individualized consideration provides the respect necessary to support psychological safety (Shin and Zhou 2003). On the whole, using intellectual stimulation and individualized consideration, transformational leadership behaviors create a team culture that is open to diverse ideas by listening to and valuing team members' divergent views, creating open exchanges of information, and resolving conflicts effectively (Bass 1998). Finally, these leaders establish mechanisms, such as ad hoc committees, to enable subordinates to participate in strategy (Vera and Crossan 2004).

Hypothesis 2 Transformational leadership is positively related to active empathetic listening.

There is growing evidence that an effective listening (e.g., active empathetic listening) plays a vital role in successful communication and ultimately the development of healthy working relationships (Aggarwal et al. 2005; Comer and Drollinger 1999; Ramsey and Sohi 1997). Pro-subordinate behaviors, on the other hand, are behaviors that foster the motivation, well-being, and job satisfaction of subordinates, including taking care of and supporting subordinates (e.g., listening to subordinates, attending to social relations among subordinates, giving praise when due, and showing appreciation and respect) (Einarsen et al. 2007).

Mineyama et al. (2007) empirically demonstrated that subordinates who reported that supervisors demonstrated higher levels of listening skills, as well as higher levels of a person-centered attitude—that is, an attitude—based on empathy, congruence and unconditional positive regards—demonstrated more favorable psychological stress reactions.

If we pay attention to the empathetic aspect of active listening, empathic individuals possess a pro-social orientation toward others, frequently displaying consideration (Eisenberg and Miller 1987). As a result, those high in empathy tend to develop more positive interpersonal relationships with others than those low in empathy (Batson 1987). From employees' perspectives, working for an empathic manager is more enjoyable than working for a manager who lacks empathy, eliciting higher average levels of positive affect and lower average levels of negative effect. Lobdell et al. (1993) found that poor listening diminished subordinates' individual sense of control and empowerment. Ellinger et al. (2003) found that how a supervisor listens in his or her dyadic relationships with subordinates directly equated to employee satisfaction. Hence:

Hypothesis 3a Leaders' active empathetic listening is positively related to employee well-being.

According to Dutton and Heaphy (2003), a work climate that is characterized by high-quality connections is likely to be life-enhancing and energizing and fosters human development and growth. We contend that a work context characterized by a high level of connections and psychological safety will induce a sense of vitality and energy and this state will enable individuals to lower their defenses and unleash their motivation to explore and become involved in creativity. Furthermore, a recent theoretical work (Heaphy and Dutton 2008) suggested that the physiological resourcefulness generated in positive social interactions contributes to higher levels of physiological resources for engagement in a work role. This suggests that an environment characterized by psychological safety can contribute to a sense of physical and mental strength, and this in turn will affect individuals' ability to become engaged in work behavior, and more specifically be involved in creative work.

Hypothesis 3b Leader's active empathetic listening is positively related to innovative work behavior.

Taking Hypothesis 2 and Hypotheses 3a and 3b together, and based on the evidence suggesting manager's support can enhance employee well-being (Sparks et al. 2001) and approachability of the manager as an important mediating factor between transformational leadership and innovative work behavior (Janssen 2002), we hypothesize that:

Hypothesis 4a Active empathetic listening is a mediator between TL and well-being.

Hypothesis 4b Active empathetic listening is a mediator between TL and innovative work behavior.

The mediating role of perceived psychological safety

Psychological safety refers to individuals' perceptions of the consequences of taking interpersonal risks in their work environment (Edmondson 1999, 2004). A belief that an individual is psychologically safe means that he or she feels able to show and employ his or herself without fear of negative consequences to self-image, status, or career (Kahn 1990). In the workplace, it consists of basic beliefs about how others will respond when an individual employee chooses to act in a way that may be risky (e.g., asking a question, seeking feedback, reporting a mistake, or proposing a new idea) (Cannon and Edmondson 2001; Edmondson 2004). Edmondson (2003) argues that individuals engage in a cognitive process in which they weigh their decision whether to take a potential action or proceed in a given direction by assessing the interpersonal risk associated with that given action or behavior in the particular interpersonal work climate characterizing their organization or work group.

The relationship between supervisors and their reports has a significant positive impact on subordinates' feeling of psychological safety, and strong feelings of psychological safety have been demonstrated to have numerous positive effects in the workplace, including increasing the level of employee engagement (Kahn 1990; May et al. 2004), affecting the employee's level of vitality and creativity (Kark and Carmeli 2009), increasing the employee's ability to seek help and admit errors (Tynan 2005), enabling the ability to learn from failures (Carmeli 2007; Carmeli and Gittell 2009), strengthening the level of employee voice (Detert and Burris 2007), and further increasing productivity through greater job involvement and effort (Brown and Leigh 1996).

With the support and encouragement of transformational leaders, employees are more likely to focus on tasks rather than worries and fears (Shamir et al. 1993), thus they become willing to take risks to voice their thoughts. In 2009, Nemanich and Vera showed that there is a significantly positive relationship between transformational leadership and learning culture consisting of psychological safety (Edmondson 1999; Lipshitz et al. 2007), openness to diversity of opinions (Baker and Sinkula 1999; Hurley and Hult 1998; Tagger 2002; Woodman et al. 1993; Yang 2003), and participation in decision making (Hedberg 1981; Hurley and Hult 1998; Thompson and Kahnweiler 2002). Hence:

Hypothesis 5 Transformational leadership is positively related to perceived psychological safety.

A psychologically safe environment gives the employees the opportunity to learn without having the anxiety of being castigated for their mistakes and risks. In a classic study on organizational change, Schein and Bennis (1965) argued that a work environment characterized by psychological safety is necessary for individuals to feel safe and be able to change their behavior. This is because psychological safety is likely to help employees overcome defensiveness and learning anxiety. For example, when individuals encounter new ideas and information that disconfirm their prior knowledge, expectations, or hopes, they may experience a sense of anxiety that will hinder their ability to learn. A sense of psychological safety is likely to enable them to overcome their anxiety and make good use of new input (Schein 1985).

Several studies suggest that psychological safety in the work environment contributes to creativity-related performance outcomes. Edmondson (1999) demonstrated that psychological safety helps teams to engage in learning behavior and argued that individuals weigh their decisions before engaging in risky actions, avoiding errors that could help the team to develop new solutions rather than maintaining the status quo. In a non-threatening climate, team members are more likely to innovate due to their lack of anxiety about negative judgments (West 1990; West and Anderson 1996; Edmondson 1999). There is evidence supporting a link between process innovation, firm performance and psychological safety at the organizational level (Baer and Frese 2003), showing that in groups larger than teams, in which collaboration is required, a feeling of safety is needed to drive the adoption and implementation of innovation. Kark and Carmeli (2009) demonstrated the existence of a relationship between psychological safety and creativity at the individual level in a study of half-time graduate students working in various industrial settings. In the most recent research Kessel et al. (2012) showed that the feeling of psychological safety in teams contributes to the teams creative performance. We therefore hypothesize that:

Hypothesis 6a Perceived psychological safety is positively related to employee well-being.

Hypothesis 6b Perceived psychological safety is positively related to innovative work behavior.

Taking Hypothesis 5 and Hypotheses 6a and 6b together, and based on the earlier studies showing that a work environment that emphasizes positive work relationships is a central source of positive states and experiences such as satisfaction, enrichment, development, and growth (Dutton 2003; Dutton and Heaphy 2003; Quinn and Dutton 2005) we therefore hypothesize that:

Hypothesis 7a Perceived psychological safety is a mediator between TL and employee well-being.

Hypothesis 7b Perceived psychological safety is a mediator between TL and innovative work behavior.

Fig. 1 The research model along with the status of the proposed hypotheses

The conceptual model of the study is shown in Fig. 1.

Method

A self-administered survey method using structured questions was adopted to gather data from students of management in Tehran, Mashhad and Kerman. All the questionnaires in which the option “I am working now” was checked were considered and others were excluded from the research. Therefore, all statistics are related to those working and studying simultaneously.

Sampling and procedures

The data collection was conducted from August to December 2012. The author organized a plan to collect data from the universities. Three days of Saturday, Tuesday, and Thursday were selected since the weekdays start from Saturday to Thursday. Most classes are held at the beginning or end of weeks to facilitate the transportation and accommodation of students living far from their hometowns. Then on each day two periods of 9–12 and 5–8 were selected to randomly select classes. Before each class, the professors of the classes were thoroughly informed about the research and the objectives. After receiving the permission, 5 min before the classes, the author gave brief but detailed explanations of the study to the postgraduate students of management and the confidentiality of their responses was insured. The completed questionnaires were returned immediately on site after 15 min.

For the sample recruited in Tehran, a total of 500 questionnaires were distributed, and 380 valid questionnaires were returned, making a response rate of 76 %. Among the participants, 236 (62 %) had either a full-time or a part-time job. Participants ranged in age from 22 to 45 years with an average age of 25.45 (SD = 3.87). They had worked, on average for 3.77 years (SD = 2.59) within their organizations and 1.87 years (SD = 2.67) with their current supervisors. For the sample recruited in Mashhad, a total of 460 questionnaires were distributed, and 352 valid questionnaires were returned, making a response rate of 76.5 %. Among the participants, 180 (51 %) had either a full-time or a part-time job.

Table 1 Demographic profiles of subjects

Variable	Category	Tehran		Mashhad		Kerman	
		<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Gender	Male	151	64	101	56	104	62
	Female	85	36	79	44	63	38
Marital status	Single	168	71	122	68	117	70
	Married	68	29	58	32	50	30
Education	Master	198	84	146	81	145	87
	PhD	38	16	34	19	22	13
Industry	Manufacturing	125	53	86	48	68	41
	Service	111	47	94	52	99	59
Organizational type	Governmental sector	76	32	68	38	73	44
	Private-sector	160	68	112	62	94	56

Participants ranged in age from 21 to 36 years, with an average age of 28.25 ($SD = 4.47$). They had worked, on average for 3.21 years ($SD = 4.50$) within their organizations and 2.14 years ($SD = 2.91$) with their current supervisors. For the sample recruited in Kerman, a total of 500 questionnaires were distributed, and 388 valid questionnaires were returned, making a response rate of 94 %. Among the participants, 167 (43 %) had either a full-time or a part-time job. Participants ranged in age from 21 to 42 years, with an average age of 25.61 ($SD = 3.47$). They had worked, on average for 2.96 years ($SD = 2.50$) within their organizations and 4.35 years ($SD = 2.77$) with their current supervisors. Table 1 summarizes the demographic profiles of the three samples.

Measures

All the measures were translated into Persian by forward–backward translation procedure (Brislin 1980). In order to insure that the questionnaire was not lengthy, selected items from job satisfaction, perceived work stress, and stress symptoms were used.

Transformational leadership

Since this research was done within an Iranian context, we used a questionnaire designed in an eastern context (China) with similar cultural features (Both are high in collectivism and power distance). We used Li and Shi's (2005) 26-item scale, developed for Chinese societies based on Bass's conceptualization of TL. Employees indicated the extent to which they agreed with the statements about their immediate supervisor's behaviors. Four dimensions were measured, including charisma, morale building, inspirational motivation, and individual consideration. Importantly, this scale has been widely used in Chinese societies, and its reliability and validity have been empirically demonstrated (e.g., Li et al. 2007; Wu et al. 2007).

To evaluate the construct validity of the transformational leadership measure in the current study, we conducted a confirmatory factor analysis (CFA). Three fit indices, namely the comparative fit index (CFI), the Tucker–Lewis index (TLI) and the root-mean-square error of approximation (RMSEA), were inspected. The results of the CFA showed an acceptable fit to a four-factor model (For the Tehran sample, $\chi^2 [155] = 461.87$, CFI = 0.94, TLI = 0.93, RMSEA = 0.06; for the Mashhad sample $\chi^2 [155] = 513.67$, CFI = 0.91, TLI = 0.90, RMSEA = 0.08; for the Kerman sample, $\chi^2 [155] = 487.77$, CFI = 0.92, TLI = 0.91, RMSEA = 0.07).

Despite the fact that there are some suggestions to administer TL as a group-level variable (e.g., Purvanova et al. 2006), since the hypotheses were tested at the individual level, TL was also measured at the individual level in this study. Supporting prior studies, the four dimensions of TL were highly correlated in our data, ranging from 0.81 to 0.89 with an average correlation of 0.84. Moreover, previously-conducted research has shown that a single higher order TL construct adequately captured the variance in the sub-dimensions of TL (e.g., Judge and Bono 2000), and that the sub-dimensions did not demonstrate discriminant validity in predicting outcomes (e.g., Bycio et al. 1995), so we combined the items to form a single TL factor. The scale had the following four subscales (26 items total) and sample items: morale building (e.g., “My immediate supervisor shares happiness and woe with his/her subordinates”); inspirational motivation (e.g., “My immediate supervisor explains to his/her subordinates the long-term meaning of their work”); individualized consideration (e.g., “My immediate supervisor would like to help his/her subordinates with their problems in life and family”); charisma (e.g., “My immediate supervisor is good at and never hesitates to take actions when dealing with tough problems”). Response options for items used a 5-point scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The Cronbach’s alpha of this scale was 0.94 for the Tehran Sample, 0.86 for the Mashhad sample, and 0.92 for Kerman Sample and 0.91 for the combined sample.

Active empathetic listening

The active empathetic listening scale (Drollinger et al. 2006) was chosen for this study because it embraces a listening model that has a theoretical background similar to that for psychological safety. It based its empathetic element on the therapeutic work of Rogers (1961) and his idea of unconditional positive regard. Paying attention to the nature of listening, the elements can be used for listening to everyone, although it was coined to show effective relationships between customers and salespeople. The survey encompasses three standard elements of the listening process—sensing, processing, and responding (Brownell, 1985). The scale’s authors encouraged further research using the instrument outside of the sales profession to include supervisors of salespeople and other business professionals. This study continued the application of the scale in leader–follower relationship. The active empathetic listening (AEL) scale developed by Drollinger et al. (2006) was used in order to measure leaders’ ability to demonstrate AEL in supervisor–subordinate interactions. The scale consisted of 21 items and internal consistency was at an acceptable level ($\alpha = 0.785$). Confirmatory factor analysis indicated a satisfactory fit (For the Tehran sample, $\chi^2 [19] = 64.94$,

CFI = 0.94, TLI = 0.92, RMSEA = 0.05; for the Mashhad sample χ^2 [19] = 53.18, CFI = 0.92, TLI = 0.91, RMSEA = 0.06; for the Kerman sample, χ^2 [19] = 45.11, CFI = 0.95, TLI = 0.93, RMSEA = 0.07). Response options for items used a 5-point scale, ranging from 1 (Strongly disagree) to 5 (strongly agree). Sample items included, “My immediate supervisor keeps track of points I make” and “My immediate supervisor assures me that he or she is receptive to my ideas”.

Perceived psychological safety

Five items from Edmondson’s (1999) psychological safety scale adapted to this context were used to assess the extent to which respondents felt safe to speak up about issues or ideas. Examples of these items are: “Members of this organization are able to bring up problems and tough issues” and “Members of my organization are able to bring up problems and tough issues.” Respondents’ agreement (1 = strongly disagree, 5 = strongly agree) with these items formed a single scale (Cronbach alpha = 0.83).

Innovative work behavior

It was measured using ten items from innovative work behavior (IWB) designed by De Jong and den Hartog (2010). This scale has four dimensions. The dimensions with sample questions are: idea exploration (e.g., “I wonder how things can be improved”), idea generation (e.g., “I search out new working methods, techniques or instruments”), idea championing (e.g., “make important organizational members enthusiastic for innovative ideas”), and idea implementation (e.g., “contribute to the implementation of new ideas”). The results of CFA showed an acceptable fit to a one-factor model (For the Tehran sample, For the Kerman sample). A 5-point Likert scale ranging from “1 = never” to “5 = always” was used to gather data. For the four-item scale, a reliability coefficient (Cronbach’s alpha) of 0.86 was obtained.

Employee well-being

To measure employee well-being, three dimensions of job satisfaction, perceived work stress, and stress symptoms were considered. For job satisfaction we used two items developed by Cammann et al. (1979) to measure job satisfaction. A sample item was, “All in all, I am satisfied with my job”. The Cronbach’s alpha of this scale was 0.85, 0.91, 0.81, and 0.88 for the Tehran sample, Mashhad sample, Kerman sample and combined sample, respectively. To measure perceived work stress, we selected two items from prior studies (Siu et al. 2006, 2007) to measure perceived work stress. A sample item was “I usually feel that I am under a lot of pressure”. The Cronbach’s alpha of this scale was 0.87, 0.90, 0.90 and 0.88 for the Tehran sample, Mashhad sample, Kerman sample and combined sample, respectively. We included six items from ASSET, an organizational stress screening tool (Cartwright and Cooper 2002) to measure stress symptoms. The items were symptoms of stress-induced ill-health such as headache and constant tiredness. Each item was rated on a 5-point scale ranging from 1 (never) to 4 (frequently).

Since well-being has three dimensions which have positive and negative natures, in this paper, work stress and stress symptoms are reversely coded to maintain the positive nature of well-being. The results of CFA showed an acceptable fit to a one-factor model (for the Tehran sample, χ^2 [132] = 504.45, CFI = 0.92, TLI = 0.90, RMSEA = 0.06; for the Mashhad sample χ^2 [132] = 630.46, CFI = 0.92, TLI = 0.91, RMSEA = 0.07; for the Kerman sample, χ^2 [132] = 445.64, CFI = 0.93, TLI = 0.92, RMSEA = 0.07). The Cronbach's alpha of this scale was 0.87, 0.87, 0.90 and 0.92 for the Tehran sample, Mashhad sample, Kerman sample and combined sample, respectively.

Results

We first conducted the data analysis on the Tehran, Mashhad and Kerman samples separately. These analyses yield similar results; therefore, we report only the results in the combined sample.

Preliminary analysis

Confirmatory factor analysis

In order to examine the distinctiveness of the study variables, we conducted CFA to compare the fit of our hypothesized measurement model to a number of nested plausible alternative models. Due to the length of transformational leadership scale, the four dimensions were used as manifest indicators ("Parceling"; Kishton and Widaman 1994) of the latent TL factor. The same strategy was also applied to the active empathetic listening scale, which was parceled as seven indicators, and each indicator included three items which were randomly selected. Table 2 presents the results of the CFA that examined the distinctiveness of the study variables. As shown in Table 2, the fit indices revealed that the hypothesized five-factor measurement model was a better fit than any alternative nested models, indicating support for the distinctiveness of the constructs in the study.

According to Joreskog (1971), the five-factor measurement model was evaluated for metric invariance across the three samples of Tehran, Mashhad and Kerman. In the unconstrained model, each indicator was allowed to load only on its factor as shown in the five-factor measurement model, but the factor loadings and covariances were allowed to vary between the three samples. With an equality constraint imposed on the factor loadings between the three samples, the constrained model was estimated and compared with the unconstrained model. An insignificant change in the Chi square statistics ($\Delta\chi^2$) was considered as evidence for metric invariance given that the CFI, TLI, and RMSEA displayed an acceptable overall model fit. The fit indices revealed measurement equivalence given that both the constrained model (χ^2 [251] = 635.33, CFI = 0.93, TLI = 0.92, RMSEA = 0.07) and the unconstrained model (χ^2 [239] = 609.57, CFI = 0.92, TLI = 0.91, RMSEA = 0.07) were acceptable, with an insignificant change in Chi square ($\Delta\chi$ (12) = 25.76, $P > 0.05$).

Table 2 Results of contemporary factor analysis for the measures of variables studied

Model	χ^2	df	TLI	CFI	RMSEA
Five-factor model	480.01	131	0.91	0.94	0.08
Four-factor model 1: Innovative work behavior and employee well-being combined	806.39	135	0.86	0.92	0.11
Four-factor model 2: Leaders' active empathetic listening and psychological safety are combined	1082.96	135	0.77	0.81	0.15
Four-factor model 3: Leaders' active empathetic listening and employee well-being are combined	1228.34	135	0.65	0.72	0.23
Three factor model 3: Innovative work behavior, employee well-being and also leader's active empathetic listening and psychological safety combined	1264.73	139	0.53	0.66	0.31
One-factor model	4452.32	142	0.32	0.48	0.47

TLI Tucker–Lewis index, *CFI* comparative fit index, *RMSEA* root-mean-square error of approximation

Convergent validity and internal consistency were examined by the loading paths of all dimensions, which are statistically significant if they exceed 0.50. Table 6 (in [Appendix](#)) provides internal consistency and convergent validity of all variables analyzed in this study, including composite reliability index (CRI) and average variance extracted (AVE), calculated in order to test the composite (construct) reliability, as suggested by Škerlavaj et al. (2007). The values of CRI as well as AVE are presented for all constructs of the research model. The values exceed the thresholds (0.50 for AVE and 0.70 for CRI), meaning the measuring instruments proposed are both valid and reliable.

Finally, discriminant validity is assessed with a variance-extracted test, where we compared the variance-extracted estimates for the two factors of interest with the square of the correlation between the two factors. Discriminant validity is demonstrated if the variance-extracted estimates are greater than the corresponding squared correlation (Fornell and Larcker 1981; Netermeyer et al. 1990). Table 3 shows all the variance-extracted estimates are greater than the corresponding squared correlations. Therefore, the above three tests fully support the discriminant and convergent validity of the five constructs tested in this study. Table 3 shows discriminant validity of the theoretical construct measures.

The common method variance problem should not be a concern for the interaction effect in this study because we obtained data from students/employees at different time periods. The use of similar methods to collect measures on criterion and predictor variables is not a source of spurious interactions (Aiken and West 1991; Evans 1985). In order to address possible concerns, we examined this CMV issue below (Podsakoff et al. 2003; Spector 2006). We used Harman's one-factor test to address the potential common method/source bias (Podsakoff et al. 2003). The basic assumption of this technique is that if a substantial amount of common method/source bias exists, either (a) a single-factor will emerge from the factor analysis, or (b) a general factor will account for the majority of the covariance

Table 3 Discriminant validity of the theoretical construct measures

Variable	1	2	3	4	5
1. Transformational leadership	0.65**	0.31	0.23	0.17	0.06
2. Leader's active empathetic listening	0.56	0.56**	0.17	0.13	0.06
3. Perceived psychological safety	0.48	0.41	0.63**	0.25	0.07
4. Innovative work behavior	0.36	0.36	0.50	0.62**	0.08
5. Employee well-being	0.25	0.25	0.27	0.29	0.60**

Diagonal represents the average variance extracted; while above the diagonal the shared variance (squared correlations) are represented. Below the diagonal the 95 % confidence interval for the estimated factor correlations is provided, $n = 583$

** $P < 0.01$

among the measures. Specifically, we conducted an exploratory factor analysis using a principal components extraction and a varimax rotation on the scales used in this study. Results indicated the presence of five factors with the first factor explaining only 25.35 % of the variance while the five factors in the total explained 82.34 % of the variance. Although this procedure did not completely rule out the possibility of same source bias, it is postulated that common method/source bias was not a serious problem in the current study. The fact that none of the fit indices for the single-factor measurement model approached acceptable levels (see Table 2) was also a strong support. Table 4 presents the means, standard deviations, and correlations among variables.

Test of hypotheses

The correlations between TL and employee well-being ($r = 0.252$, $P < 0.01$), innovative work behavior ($r = 0.365$, $P < 0.01$) provided preliminary evidence to support Hypotheses 1a and 1b. Supporting Hypotheses 2 and 5, TL had positive correlations with both leader's active empathetic listening ($r = 0.564$, $P < 0.01$) and psychological safety ($r = 0.481$, $P < 0.01$). Also, as it is evident from Table 4, both leader's active empathetic listening and psychological safety were significantly related to the innovative work behavior and employee well-being. Thus, Hypotheses 3a and 3b as well as 6a and 6b were preliminarily supported.

Table 4 Means, standard deviations, and correlations among variables

	Mean	SD	1	2	3	4
1. Transformational leadership	3.10	0.73				
2. Leader's active empathetic listening	3.17	0.59	0.564**			
3. Perceived psychological safety	3.08	0.54	0.481**	0.414**		
4. Innovative work behavior	3.13	0.69	0.365**	0.357**	0.497**	
5. Employee well-being	2.05	0.54	0.252**	0.245**	0.265**	0.289**

$n = 583$, ** $P < 0.01$

Note: The figures on the paths are the standard coefficients

Fit indexes: χ^2 (df) = 479.46(132); TLI = 0.92; CFI = 0.93; RMSEA = 0.07

n = 583

** $p < 0.01$

* $p < 0.05$

Fig. 2 The path estimates of the final model

Hypotheses 4a and 4b as well as 7a and 7b were tested through a series of nested models comparison. Model 1 represents a fully mediated model. We specified paths from TL to leader's active empathetic listening and psychological safety and from both leader's active empathetic listening and psychological safety to innovative work behavior and employee well-being. All fit indices showed a good fit χ^2 [133] = 485.48, CFI = 0.93, TLI = 0.92, RMSEA = 0.07).

Based on Model 1, we drew model 2 by adding paths from TL to innovative work behavior and employee well-being. After evaluating the fit indices of the model (χ^2 [131] = 480.01, CFI = 0.93, TLI = 0.92, RMSEA = 0.07), which showed a good fit, we figured out that the path from TL to innovative work behavior was not significant. So we tested model 3 based on Model 2 by deleting the direct path from TL to innovative work behavior (χ^2 [132] = 479.46, CFI = 0.93, TLI = 0.92, RMSEA = 0.07). The difference between Chi squares was significant for model 1 compared with model 3 ($\Delta\chi^2$ (1) = 6.02, $P < 0.05$). In summary, the results of model comparisons showed that Model 3 best fit our data. Table 7 in [Appendix](#) shows the comparison of the final model with alternative models. According to Fig. 2, it was obvious that Hypotheses 4b and 7b were fully supported. However, Hypotheses 4a and 7a were only partially supported, since active empathetic listening and psychological safety partially mediated the relationship between TL and employee well-being. Besides, Hypotheses 2, 3a, 3b, 5, 6a, and 6b were all fully supported. Figure two illustrates the final model and Table 5 shows the results of hypothesis testing.

Discussion

The purpose of the study was to examine the relationship between transformational leadership and two constructs of innovative work behavior and employee well-being in Iranian societies through the mediating roles of active empathetic listening and psychological safety. The results showed that transformational leadership has positive impact on employee well-being and innovative work behavior. Importantly,

Table 5 Hypothesis testing

Hypothesis	Structural relation (path)	Standardized path coefficient	Sig.	<i>t</i> Value
H1a	TL → Employee well-being	0.29	0.00	18.91
H1b	TL → Innovative work behavior	0.03	0.23	0.12
H2	TL → Leader's active empathetic listening	0.56	0.00	14.97
H3a	Leader's active empathetic listening → Employee well-being	0.10	0.02	8.42
H3B	Leader's active empathetic listening → Innovative work behavior	0.25	0.00	9.89
H5	TL → Perceived psychological safety	0.36	0.00	23.33
H6a	Perceived psychological safety → Employee well-being	0.17	0.04	3.04
H6b	Perceived psychological safety → Innovative work behavior	0.35	0.00	8.72

Fit indexes: χ^2 (df) = 479.46 (132); TLI = 0.92; CFI = 0.93; RMSEA = 0.07, n = 583

TL transformational leadership

leader's active empathetic listening and perceived psychological safety fully mediated the relationship between transformational leadership and innovative work behavior. Also, these two mediating factors partially mediated the relationship between transformational leadership and employee well-being.

Thus, our results have confirmed the significant relationship between TL and outcomes in Iranian societies and extended the literature by illustrating the importance of leader's active empathetic listening and psychological safety in the processes from TL to employee well-being and innovative work behavior.

Based on the hypothesis regarding the effect of TL on employee well-being, our results showed that TL had both direct and indirect effects on employee well-being. In this study, the structure of employee well-being comprises job satisfaction, perceived work stress and stress symptoms. The global and broad meaning of job satisfaction which includes satisfaction with different aspects of job such as the task itself, supervisor, co-workers, pay and promotion has caused the direct and indirect relationships between transformational leadership and employee well-being. This finding supports the same result of the study done by Liu et al. (2010).

In the final model, there is no direct relationship between transformational leadership and innovative work behavior. There are mixed findings on transformational leadership and follower's creativity (Eisenbeiß and Boerner 2013). Some researchers have found positive (e.g., Shin and Zhou 2003; Gong et al. 2009), non-significant (e.g., Wang and Rode 2010) or even negative (Basu and Green 1997) relationships between transformational leadership and follower's innovation and creativity. In two studies done in Iran, vision and intellectual stimulation had no significant impact on innovativeness in production (Pouya et al. 2010) and the indirect effects of adaptability culture as a mediating factor was more than the direct effect of TL on innovation (Sanjaghi et al. 2011).

There are some reasons for the indirect rather than direct effect of TL on innovation. First, transformational leaders may censor follower's critical and non-

conformal viewpoints and ideas that differ from their own, thereby triggering follower dependency and limiting innovativeness (Basu and Green 1997). Also, a change in the image of followers about leaders from those who assume responsibility and turn chaos into order to those who are idols and role models for values, beliefs, and behavioral norms (Gardner and Avolio 1998; Kark et al. 2003) can lead to a kind leadership exploiting followers by producing exceedingly high levels of emotional engagement and attachment. To support the findings of research done by Pouya et al. (2010), followers in this situation become dependent on their leader and his/her ideas, desires and visions.

High levels of power distance and individualism among Iranian managers (Javidan and Dastmalchian 2003), can lead to the centrality of self in psychosocial processes (Ghorbani et al. 2010). Self-centeredness fuels narcissistic tendencies of leaders which aggravate innovation process (Hogan et al. 1990; Kets de Vries 1988). Narcissistic leaders tend to deny their negative personal characteristics, to overestimate their abilities and to reject critical comments on their ideas or their visions (Conger and Kanungo 1998; Shamir 1991). This paper may suggest that leaders high in active empathetic listening can keep the dependency of followers in balance and cause their expressing of innovative behavior through giving opportunity to the followers to risk without any fear of the consequences. Such leaders—who are not narcissistic—in their interactions supersede “It is ok, but...” with “It is ok and...”.

Implications of findings limitations and future research

First, the results add to the knowledge of transformational leadership consequences. In most previous studies, the centrality of transformational leadership’s impact on performance has been highlighted. Some researchers have labeled transformational leaders as those unjustly treat some stakeholders (top management, owners and customers) and employees because of much emphasis on task motivation and performance (Stevens et al. 1995). With the epiphany and development of positive psychology, some scholars turned their attention from performance as the only consequence of transformational leadership to other outcomes (Roberts 2006). Having the intention to fill this gap, we tried to support and add employee well-being and innovative work behavior as two outcomes to the range of positive outcomes associated with transformational leadership.

Second, most studies exploring the relationship between transformational leadership and employee well-being have been conducted in Western societies and the paucity of research on this relationship in Eastern countries, especially Iran, has been apparent. As a stark contrast, Iranian societies score high on individualism and power distance (Javidan and Dastmalchian 2003) in comparison with Western societies. Therefore, it seems questionable to use the constructs built in Western countries in Eastern contexts without considering cultural differences.

In two studies in Canada, Arnold et al. (2007) showed the positive effect of transformational leadership on psychological well-being. In this paper, in an Eastern context, we reached the same conclusion. Based on self-determination theory (SDT theory), psychological health and well-being are the products of motivation (Deci

and Ryan 2008) which is the foundation of transformational leadership. Transformational leaders—consciously or unconsciously—focus on the three basic needs of human: competence, relatedness and autonomy. Based on this theory, leader's active empathetic listening, through the help of psychological safety, increases autonomous causality orientation which is positively related to psychological health and affective behavioral outcomes (Deci and Ryan 2008).

This paper also showed that apart from extrinsic factors such as incentives and money, the factors relating to the psychology of interactions between leaders and followers can positively and directly impact employees' well-being. In other words, transformational leaders, through spending time on listening to the followers empathetically, can increase emotional resources of employees and increase job satisfaction and decrease stress. This may trigger research on active empathetic listening showing its effect on decreasing follower's emotional depletion and burnout.

Third, Scholars have been studying listening from a variety of theoretical perspectives for decades (Bodie et al. 2008). Some researchers have tried to persuade sellers to listen actively and empathetically to the customers to maximize their profit (Comer and Drollinger 1999). Some have administered active listening to show the therapeutic effects of listening on patients (e.g., Ivey et al. 1968). However, there are very few, if not any, empirical studies considering listening in the relationship between leaders and subordinates. This paper has shown that active empathetic listening can be used in leader–follower communications. Also, it extends the literature of listening by addressing it as the mediating role between transformational leadership and two constructs of employee well-being and innovative work behavior.

Fourth, psychological safety has attracted increased attention primarily because it facilitates an interpersonal work context that is essential for effective learning (Edmondson 1999, 2004). In forming a psychologically safe atmosphere, the role of leaders is essential. As a proof, researchers have noted that a supportive management and context is a key antecedent of psychological safety (Carmeli and Zisu 2009; Edmondson 1999). Specific leader behaviors such as being available and accessible, inviting input, and modeling openness and fallibility, are seen to directly shape followers' perceptions of psychological safety (Edmondson 2004). This research can add active empathetic listening as a partial mediator between transformational leadership and psychological safety and highlights the impact of leader's active empathetic listening as an antecedent of psychological safety.

Last but not least, after a backward glance at results, those who are responsible for leadership development programs can figure out that transformational leadership has both direct and indirect effects on employee well-being and indirect effects on innovative work behavior. Organizations can reap benefits by providing TL training to their supervisors and managers to enhanced employees' psychological safety and increase the feeling that they are “heard”, which in return enhances employee well-being and innovative work behavior. Actually, paying attention to Yukl's (1999) criticism that “the theory of transformational leadership would be stronger if the essential influence processes were identified more clearly,” many studies have begun to focus on the processes of transformational leadership. Leadership literature

has been filled with mediating factors relating to the follower's attitudes toward their leaders and follower's attitudes toward themselves (Piccolo and Colquitt 2006). The results of this paper corroborate these findings and disclose further underlying mechanisms.

Despite the contribution of this study, it is not without limitations. First, our data are collected from cross-sectional survey of three samples of Iranian employees who are students, too, making it difficult to draw confident causal conclusions. Also, there may be other explanations that are necessary to be explored in future research. First, in the proposed model, can transformational leadership be substituted with other kinds of leadership such as authentic leadership because of its high level of empathy and adherence to moral values and principles in decision making which may maximize benefits and minimize the psychological and physical harm to most people. Also, is there any prospect of long-lasting empathy in the listening to the followers during time? If not, what factors can challenge it and trivialize active empathetic listening in leaders' minds.

Empathic listening and active listening are relatively forgotten in leadership, because listening is not yet a clear and well-constructed interactional factor (Bodie et al. 2008). Hopefully, in the future, more outcomes of effective and constructive listening are explored, since, practically not theoretically, we have almost all witnessed the influence of mothers' active empathetic listening on reducing stress after facing a problem, getting inspired and feeling respect and identity.

Second, to conduct this research, questionnaires were distributed among management students working part-time or full-time and this may limit the generalizability of the results. First, they are management students, so their answers are influenced by their educational background; second, the questionnaires were distributed at universities and the questions were about their workplace. Their different context of answering the questions may impact their answers and make them biased. Third, the students at university may have a lot more limited feeling of being an employee whose obsession is only his job. In such a context, they may feel a higher level of satisfaction because of getting involved in learning, and educational progress. Their current educational situation may impact not only their interpretations of the constructs but also their responses to the questions.

Third, our data were collected from the same source such that the common method/source may be an issue. However, we have demonstrated that it is not a serious problem in the current study. Potential rating biases could be reduced in future studies by collecting data from different resources with different methods. In future studies, more confounding variables such as employee's performance, salary amount and having extra revenue streams need to be controlled and hence stronger findings are acquired.

Furthermore, since the current study was conducted in Iranian societies, we tried to select a questionnaire which is designed in the east and the cultural traits of the country in which it is validated are closer to those of Iran. However, future research should test the proposed model with other scales for transformational leadership such as MLQ (Bass and Avolio 1990) or Podsakoff et al.'s (1990) to test the

similarity of results. Thinking of other types of well-being (e.g., social well-being or eudemonic) can be the outcome focus of future research in organizational contexts.

Conclusion

In spite of these limitations, the study here helps to understand two mechanisms (i.e., leader's active empathetic listening and psychological safety) through which transformational leaders may enhance employee well-being and promote creative work behavior. These findings highlight the fact that researchers and managers need to consider how transformational leaders and the interpersonal work context can foster employee well-being and innovative work behavior. Thinking about listening as a simple but effective tool can cause the unearthing of employees' internal feelings and needs; therefore, a transformational leader can capitalize upon employees' ideas and show himself as a coach and supporter at workplace.

Appendix

See Tables 6 and 7.

Table 6 Results of contemporary factor analysis for the measures of variables studied

Variable	Indicator	Factor loading	Robust <i>t</i> value	Loading average	CA	CRI	AVE
Transformational leadership	Charisma	0.86*	8.2	0.87	0.91	0.91	0.65
	Morale building	0.78*	14.4		0.85		
	Inspirational motivation	0.84*	12.9		0.88		
	Individual consideration	0.81*	12.7		0.85		
Leader's active empathetic listening	Sensing	0.88*	9.5	0.85	0.86	0.78	0.56
	Processing	0.78*	10.5		0.78		
	Responding	0.89*	8.2		0.80		
Perceived psychological safety	Psychological safety	0.84*	4.8	0.84	0.83	0.83	0.63
Innovative work behavior	Idea exploration	0.86*	5.4	0.88	0.84		0.62
	Idea generation	0.79*	9.2		0.77		
	Idea championing	0.89*	11.7		0.59		
	Idea implementation	0.83*	8.2		0.86		
Employee well-being	Job satisfaction	0.89*	10.6	0.85	0.87	0.89	0.60
	Perceived work stress	0.81*	11.5		0.89		
	Stress symptoms	0.86*	6.8		0.90		

Fit indexes: $\chi^2(df) = 479.46 (132)$; TLI = 0.92; CFI = 0.93; RMSEA = 0.07

AVE average variance extracted, CA Cronbach's alpha, CRI composite reliability index

$n = 583$, * $P < 0.01$

Table 7 The comparison of the final model and alternative models

Structured model	χ^2	df	$\Delta\chi^2$	Sig.	χ^2/df	CFI	TLI	RMSEA
Measurement model (model 3)	479.46	132	–	–	3.63	0.93	0.92	0.07
Model 2	480.01	131	0.55	0.18	3.67	0.93	0.92	0.07
Model 1	485.48	133	6.02	0.02	3.65	0.93	0.92	0.07

TLI Tucker–Lewis index, CFI comparative fit index, RMSEA root-mean-square error of approximation

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