In this article, we explored the relationship between inclusive leadership and innovative work behavior with the mediating role of psychological empowerment. We collected data from employees in the information technology and cargo sectors within the United Kingdom and Canada. The results revealed that inclusive leadership was positively related to innovative work behavior both directly and indirectly through psychological empowerment. Cognitive evaluation theory was used to support the findings. Implications of the study were discussed.

Keywords: creativity; innovation and R&D; leadership; organizational change; cognition

Introduction
In the current competitive environment, changing customers’ needs have made it imperative for organizations to find ways to promote innovation (Battistelli, Montani, Odoardi, Vandenberghe, & Picci, 2014; Chowhan, Pries, & Mann, 2017; Hu, Wu, & Gu, 2017). In fact, earlier research demonstrated that innovation was not only concerned with research and development professionals but other employees and areas within the organization must be open toward innovation within their respective roles for the long-term success of the organization (Axtell, Holman, Unsworth, Wall, Waterson, & Harrington, 2000; Imran & Anis-Ul-Haque, 2011; Schermuly, Meyer, & Dämmer, 2013; Lee & Wong, 2017). In the innovation process, employees used their competencies and demonstrated discretionary behavior (Ramamoorthy, Flood, Slattery, & Sardessai, 2005) where they created, promoted and implemented novel ideas. This in turn shaped their innovative work behavior (IWB) (Janssen, 2000) that helped organizations meet new changes in a volatile environment (Javed, Naqvi, Khan, Arjoon, & Tayyeb, 2017b).

In view of the importance of employees’ IWB, researchers studied the factors which were conducive to IWB (Michaelis, Stegmaier, & Sonntag, 2009; Sanders, Moorkamp, Torka, Groeneveld, & Groeneveld, 2010; Černe, Jaklič, & Škerlavaj, 2013). Leadership was found to be an important situational factor that promoted employees’ IWB (Scott & Bruce, 1994; Afsar, Badir, & Saeed, 2014; To, Herman, & Ashkanasy, 2015). The role of leadership at workplace was characterized as a key agent of change in the organization (Krause, 2004; De Jong & Den Hartog, 2008; Amabile, 2012; Javed et al., 2017b) which is well established in the literature. However, in the current study we focused on a specific form of relational leadership, namely inclusive
leadership (Choi, Tran, & Kang, 2017). This perspective of leadership was more suitable for investigating innovative environments as it provided the lens for simultaneous investigation of both leadership and employee behavior in jointly determining IWB (Nembhard & Edmondson, 2006; Shore, Randel, Chung, Dean, Holcombe Ehrhart, & Singh, 2011; Choi, Tran, & Park, 2015).

Unlike the traditional ‘leader-centric’ approach (Martin, Thomas, Charles, Epitropaki, & McNamara, 2005; Lapierre, Hackett, & Taggar, 2006) in which the focus was on the leader’s attitude and behavior while assuming the follower’s characteristics to be homogenous (Heifetz & Heifetz, 1994; Drath, 2001) in the relational perspective, attention was paid to the characteristics of the leader, employees’ attitude and behaviors and their relationship with the leader (Maslyn, Maslyn, Schyns, Schyns, Farmer, & Farmer, 2017). In other words, the relational leadership approach created and motivated employees to mutually handle the complex challenges of IWB (Cox, Pearce, & Perry, 2003; Uhl-Bien, 2006; Carmeli, Reiter-Palmon, & Ziv, 2010; Schermuly, Meyer, & Dämmer, 2013). This was supported by a recent study (Javed et al., 2017b) which empirically examined and confirmed the relationship between relational inclusive leadership and IWB.

Furthermore, research showed IWB to be complex, nonroutine behavior where employees spoke up for new ideas, avoided traditional thinking and disagreed with superiors via challenging the status quo (Kanter, 1988; Kessel, Hannemann-Weber, & Kratzer, 2012). In such an environment it was understood that many of the new ideas were destined to fail (Mathisen, Einarsen, & Mykletun, 2012). Gong, Cheung, Wang, and Huang (2012) stated that employees’ voice for new improvement was also rejected because it was perceived as deviant behavior at work setting. Consequently, leaders considered innovative employees as disturbance creators (Miceli, Near, & Dworkin, 2009). These employees faced the prospect of punishment like demotion or termination against their innovativeness (Ashford, Sutcliffe, & Christianson, 2009). Thus to handle complex process of IWB, employees sought psychological empowerment to engage in IWB (Knol & Van Linge, 2009; Afsar & Badir, 2016). Through psychological empowerment, employees experienced autonomy, means, competencies and feedback to showcase IWB (Ertürk, 2012; Battistelli, Montani, & Odoardi, 2013; Orth & Volmer, 2017).

Research on cognitive evaluation theory (CET) suggested that it was in fact intrinsic motivation (in this case psychological empowerment) that allowed individuals to feel autonomy, competency, meaning and feedback in their work (Deci, 1975; Ryan, 1982; Ryan, Mims, & Koestner, 1983; Deci, Connell, & Ryan, 1989), which in turn affected their IWB (Yidong & Xinxin, 2013; Javed, Khan, Bashir, & Arjoon, 2017a). CET framework explained that employees evaluated the external factors to behave in a certain way (Ryan, 1980, 1982; Deci & Ryan, 1985). Similarly, in the milieu of innovation, employees evaluated the external context to find support for their IWB. If employees found supportive ambiance, then they felt great motivation to show IWB (Yidong & Xinxin, 2013). Inclusive leaders provided a supportive external context by motivating employees to share their point of views regarding new changes (Choi, Tran, & Park, 2015). Inclusive leader exhibited attributes such as openness, availability and accessibility (Carmeli, Gelbard, & Gefen, 2010; Shore et al., 2011). In other words, inclusive leaders served as a supportive situational factor which had the potential to enhance the employees’ psychological empowerment. Furthermore, research studies also found that psychological empowerment enhanced the IWB (Singh & Sarkar, 2012; Afsar & Badir, 2016). Thus, psychological empowerment served as an important mediating mechanism in the relationship between inclusive leadership and IWB, which has received limited attention in the literature.

Recently, Javed et al. (2017b) called for more research to specifically examine the role of psychological empowerment in the relationship between inclusive leadership and IWB. In order to respond this call, the current study used the CET lens and examined psychological empowerment as a motivational mediating factor in the relationship between inclusive leadership and IWB. In summary, our study contributed to the IWB literature (1) by providing a more insightful understanding of how inclusive leadership enhanced psychological empowerment, (2) explored
the mediated mechanism of psychological empowerment in the relationship between inclusive leadership and IWB and (3) unlike past studies in this area that relied on the leader member exchange theory, the current study used a new theoretical CET framework for the investigation of direct and indirect effects of inclusive leadership on IWB.

**Literature Review and Hypotheses Development**

**Inclusive leadership and IWB**

Nembhard and Edmondson defined inclusive leadership as ‘words and deeds by a leader or leaders that indicate an invitation and appreciation for others’ contributions’ (2006: 947). The word inclusive means coming to the table by any means, being a respected contributor and being fully accountable for contribution to the greatest results. In this inclusiveness, the concept which prevailed is that ‘everyone matters’ (Roberson, 2006) with their access to information and resources (Mor-Barak & Cherin, 1998). The concept of inclusive leadership was first coined by Nembhard and Edmondson (2006), and they stated that inclusive leader shaped a situation where ‘voices are genuinely valued’ (p. 948). Leaders’ inclusiveness captured attempts by leaders to include others in discussions and decisions in which their voices and perspectives might otherwise be absent (Nembhard & Edmondson, 2006). Inclusive leaders promoted a supportive climate with high objectivity to all individual employees (Hollander, 2009). Whether treating crises, attending to inequities, or reducing conformist pressures, inclusive leaders started with respect for others, recognition of their input and responsiveness to them. The necessary quality of responsibility in both directions was also enduring as a basis for leader–follower relations, which engendered legitimacy as well as approval (Hollander, 2012).

Nembhard and Edmondson showed that inclusiveness was directly concerned with situations characterized by power dissimilarities, which promoted behaviors that asked and acknowledged others’ views (Nembhard & Edmondson, 2006). Inclusive leaders emphasized shared benefits where leaders and employees focused on mutual goals which were the essence of leaders–followers quality relationship (Graen & Uhl-Bien, 1995; Schriesheim, Castro, & Cogilser, 1999; Dulebohn, Bommer, Liden, Brouer, & Ferris, 2012). Leaders’ inclusiveness invited employees in the decision-making process to promote an inclusive culture (Edmondson, Kramer, & Cook, 2004; Nembhard & Edmondson, 2006). Therefore, employees having input in the decisions and discussions, openly spoke, promoted and implemented new ideas (Dorenbosch, Engen, & Verhagen, 2005; De Jong & Den Hartog, 2010). Leaders, who demonstrated the characteristics of inclusive leadership, initiated a quality relationship which promoted fairness of input and output to all employees without relying on one person’s capabilities (Hollander, 2012). Therefore, in a quality-based relationship with leaders’ characteristics of inclusive leadership, employees experienced an effort–reward fairness, which encouraged them to meet job demands reflective of IWB (Janssen & Van Yperen, 2004; Reuvers, Van Engen, Vinkenburg, & Wilson-Evered, 2008). IWB is defined as ‘the intentional introduction and application within a role, group or organization of ideas, processes, products or procedures’ (West & Farr, 1990: 9).

IWB is also different from creativity (Dörner, 2012). Creativity means only generation of new ideas (Amabile, 1988, 1996), whereas IWB means not only creation of new ideas but also promotion and implementation of useful ideas (De Jong & Den Hartog, 2007; De Jong & Den Hartog, 2010). Inclusive leaders with their practical inclusion in the work activities showed their availability to employees (Ryan, 2006; Janakiraman, 2011), which encouraged employees to develop, promote and implement new and useful ideas (Basu & Green, 1997; Carmeli, Reiter-Palmon, & Ziv, 2010; Altunoğlu & Gürel, 2015). Inclusive leaders exhibited concerns about the interests, expectations and feelings of their followers, and were willing to provide assistance (Carmeli, Gelbard, & Gefen, 2010; Choi, Tran, & Park, 2015). Specifically, inclusive leaders gave serious consideration to employees’ ideas. Employees therefore felt energized and more committed to their leaders so that employees were more likely to reciprocate by displaying extra-role...
behavior such as IWB (Pless & Maak, 2004; Piccolo, Greenbaum, Hartog, & Folger, 2010; Walumbwa, Cropanzano, & Goldman, 2011). In this context, social exchange theory supported the relationship of inclusive leadership and IWB. Based on the social exchange theory, it can be implied that supportive and inclusive attributes of leadership made employees feel obliged to repay to the leader and organization. Lin and Liu (2012) explicated that desire to reciprocate led the employees to involve actively in problem solving that required creative idea generation. Inclusive leadership in social exchange perspective encouraged positive social exchanges that developed cognitive thinking and motivation to engage in creative performance (Choi, Tran, & Park, 2015).

Furthermore, inclusive leaders provided employees an emotional support, which increased trustworthiness. As such, inclusive leaders showed that they were principled individuals who made unbiased judgments (Nembhard & Edmondson, 2006; Ryan, 2006; Hollander, 2009). Such behavior encouraged employees to show IWB (Gumusluoglu & Ilsev, 2009). One of the critical ways through which inclusive leaders demonstrated support to employees was that an inclusive leader took responsibility for ultimate results, especially when new ideas resulted in failure (Nembhard & Edmondson, 2006; Hollander, 2012). Therefore, employees were encouraged to take risks in IWB in the presence of inclusive leadership. Researchers empirically found the positive relationship between inclusive leadership and IWB. For instance, Choi, Tran, and Kang (2017) examined and found the positive relationship between inclusive leadership and innovative behavior in employees of telecommunication companies in Vietnam. More recently, Javed et al. (2017b) examined the relationship between inclusive leadership and IWB among supervisor–subordinate dyads in textile industry of Pakistan. Their findings confirmed that inclusive leadership positively influenced IWB. The authors argued that employees involved themselves in the innovative activities when they had quality relationship with their leaders that motivated them to take risks for generation, promotion and implementation of unique ideas. Thus, we hypothesized the following relationship.

Hypothesis 1: There is a positive relationship between inclusive leadership and IWB.

**Inclusive leadership and psychological empowerment**

Thomas and Velthouse (1990) argued that empowerment was a multifaceted concept that included four set of cognitions that were meaning, competence, self-determination and impact. Spreitzer (1995) further affirmed this conceptualization and defined psychological empowerment as ‘a form of intrinsic motivation that reflects a proactive orientation toward and sense of control over work that is manifested in four cognitions: meaning, competence, self-determination and impact’ (Spreitzer, 1995: 1444); meaning referred to the extent to which values and beliefs of an employee fit with the demands of the job (Hackman & Oldham, 1980). The second facet of psychological empowerment was competence, closer to the idea of self-efficacy, which reflected the belief of an individual in herself about how successfully she could perform any activity or skill at workplace (Ioannidou, Karagiorgos, & Alexandris, 2016). The next cognitive class of psychological empowerment was self-determination that referred to the control and autonomy over initiation, regulation and continuance of any behavior at workplace (Deci, Connell, & Ryan, 1989). The final facet of psychological empowerment was impact that reflected the personal belief about how much one could affect the strategic, administrative, operative and organizational output at workplace (Ioannidou, Karagiorgos, & Alexandris, 2016).

Spreitzer showed that psychological empowerment encouraged the decentralized decision-making in organization that authorized the lower level employees to actively play their role in the decision-making process (Spreitzer, 1995). In this context, inclusive work environment may be considered most suitable because in such workplace environment voices were heard and
respected, diverse ideas and perspectives were valued, and employees were encouraged to make their useful contribution to organization (Pless & Maak, 2004). The role of leader was highly significant to build and nourish a specific environment at workplace. Presenting the inclusive leadership theory, Hollander (2009) emphasized that leaders’ effectiveness lay in the empowerment of their followers and enabling two-way influences through promoting the followers’ autonomy, skills and responsibility. Inclusive leaders were considered open to listen and respond to their followers’ opinions, shared vision and valued their contributions to organization (Choi, Tran, & Park, 2015). So, the feelings of empowerment emerged among them (Liden, Wayne, & Sparrowe, 2000; Nishii & Mayer, 2009).

Inclusive leaders delegated power to employees (Nishii & Mayer, 2009) where employees enjoyed great autonomy to decide their work activities on their own. Inclusive leader valued the inclusion of employees at work setting (Salib, 2014), and employees having value of being included experienced greater empowerment (Randel et al., 2017). Thus, inclusive leader cultivated a supportive external setting, which was also supported by the notion of CET (Deci, 1975), and consequently, employees felt internal motivation in the form of psychological empowerment. Considering inclusive leadership as one of the most important supportive situational factor, it may deeply influence the meaningfulness and impact of the job through leveling the self-determination and competence of employees that consequently heightens the intrinsic motivation of employees. More recently, Randel et al. (2017) also proposed the relationship between inclusive leadership and psychological empowerment.

Hence, considering the claims of past researchers, the following hypothesis is formulated:

Hypothesis 2: Inclusive leadership positively affects psychological empowerment.

**Psychological empowerment and IWB**

Amabile (1988) showed that idea generation at workplace was influenced by numerous intrinsic motivators such as meaning, feeling of competence, self-determination and impact that were likely to boost the ability of idea implementation and useful suggestion for change, resulting in an innovative work environment (Seibert, Wang, & Courtright, 2011). Past research has investigated whether innovation nurtured in an organization where employees had autonomy, control and sense of ownership in the daily conduct of their work and ideas (Amabile, Conti, Coon, Lazenby, & Herron, 1996). Researchers maintained that employees worked more innovatively if they had freedom and choice of how to accomplish a particular given task (Amabile & Gitomer, 1984; Sun, Zhang, Qi, & Chen, 2012). Javed et al. (2017a) explained that innovative idea generation was a nonroutine task where an individual had to go beyond their standard operating procedures by the sense of psychological empowerment and conviction that was provided by all the support and means to execute such ideas. Furthermore, Alge, Ballinger, Tangirala, and Oakley (2006) emphasized that empowered employees had more freedom to generate unique ideas and were more confident that their ideas would be valued in organization. Empowered employees also felt less constrained and bound by others and rules (Amabile, 1988). A sense of empowerment enabled the employees to make a positive contribution at workplace (Block, 1987; Randolph, 1995).

Employees who had a sense of meaningfulness and determination were intrinsically motivated toward creative idea generation. Furthermore, other attributes of psychological empowerment such as competence, control, autonomy and belief to make an impact drove the employees to implement their ideas at workplace (Sinha, Priyadarshi, & Kumar, 2016). Therefore, it can be expected that psychological empowerment would be positively related to IWB. Furthermore, numerous researchers in the past had shown empirically that psychological empowerment enhanced IWB (Zhang & Bartol, 2010; Seibert, Wang, & Courtright, 2011; Singh & Sarkar, 2012;
Çekmecelioglu & Özbag, 2016). So on the basis of researchers’ arguments, the following hypothesis is proposed:

Hypothesis 3: Psychological empowerment positively affects IWB.

**Mediating role of psychological empowerment**

Considering the hypothesized links of psychological empowerment with inclusive leadership and IWB, the mediating role of psychological empowerment between inclusive leadership and IWB was also examined in this research. CET provided the support for mediation of psychological empowerment. CET is a prominent theory in the field of psychology which explained that intrinsic motivation allowed an individual to feel competent and self-determined (DeCharms, 1968). CET framework explained that intrinsic task motivation in employees was first engendered by meaning and impact. Furthermore, feeling of competence and self-determination enhanced the employees’ task-relevant motivation (Deci, Connell, & Ryan, 1989). Our argument is that employees’ observation of inclusive leadership can enhance their task motivation which may be shaped by psychological empowerment. Furthermore, Deci and Ryan (1985) explained that individuals at workplace experienced either supportive situational factors or nonsupportive situational factors, which affected psychological empowerment differently. For example, supportive informational aspects of specific situation influenced the intrinsic motivation through facilitating internal locus of causality and competence. However, controlling aspects negatively influenced internal motivation and positively affected extrinsic compliance through facilitating external locus of causality.

Inclusive leadership served as supportive informational factor, where the leader invited and appreciated others’ contribution (Nembhard & Edmondson, 2006). This created a sense of psychological empowerment (Dewettinck & van Ameijde, 2011). The ‘words and deeds’ of a leader appreciated the contribution of others in the decision-making process, whereby employees were motivated to raise their voice (Nembhard & Edmondson, 2006; Bowers, Robertson & Parchman, 2012). Inclusive leaders paid sufficient attention to new opportunities to have better work processes, showed openness for constructive dialog on desired objectives, explored new ways to efficiently achieve those particular objectives, showed availability for employees’ consultation, emphasized their presence, showed readiness to hear the request of employees and encouraged employees to access the current and emerging issues (Carmeli, Reiter-Palmon, & Ziv, 2010). These characteristics of a leader stimulated employees’ psychological empowerment (Jung & Sosik, 2002; Parry & Proctor-Thomson, 2002; Jung, Chow, & Wu, 2003; Masood & Afsar, 2017) which motivated employees to not only generate new ideas but also promote and implement useful ideas (Parker & Axtell, 2001; Dvir, Eden, Avolio, & Shamir, 2002; Tierney & Farmer, 2004; Chen & Aryee, 2007; Knol & Van Linge, 2009; Afsar, Badir, & Saeed, 2014; Sinha, Priyadarshi, & Kumar, 2016). Following this line of research, the following relationship is hypothesized.

Hypothesis 4: Psychological empowerment mediates the relationship between inclusive leadership and IWB.

**Methodology**

**Sample and procedure**

The data were collected under a study program which aimed to look at the relationship between inclusive leadership and IWB with the mediating role of psychological empowerment in employees of the information technology and cargo companies in two different countries: United Kingdom and Canada. These companies were selected because they were facing high pressure in a complex, changing environment, where they had a high focus on innovation (Bellingkrodt &
Wallenburg, 2015; Brunswicker & Vanhaverbeke, 2015; Huang, Lin, Wu, & Yu, 2015; Love & Roper, 2015). Therefore, employees working in these companies had innovative jobs where they were expected to exhibit IWB (Chapman, Soosay, & Kandampully, 2002; Su, Cui & Hertz, 2010; Sakchutchawan, 2011; Ünay & Zehir, 2012; Akram, Lei, & Haider, 2016; Afsar, Badir, Saeed, & Hafeez, 2017).

In order to recruit participants and to control for social desirability bias (i.e., the tendency of survey respondents to answer questions in a manner that will be viewed favorably by others), the following procedure was adopted. The author attended the work sites and briefly presented the subject of the study. The author contacted the human resource department directors and explained to them the purpose of data collection. During the face-to-face meetings, the lead author offered them a cover letter indicating that participation was voluntary and responses were to be kept confidential. The cover letter indicated that the lead author did not know any of the subjects. In addition to a statement of confidentiality, the following specific instructions were provided with the questionnaire: ‘Please take several minutes to complete the enclosed questionnaire. There are no right or wrong answers to these questions, so your candor is strongly encouraged. All responses are strictly anonymous and will be only reported in aggregate. Moreover, the researcher has no means whatsoever to identify any of the respondents. Please also remember that participation in filling up this questionnaire is voluntary.’ After understanding the purpose of research, the directors carefully read the cover letter and gave approval for data collection in their particular firms.

Data were collected in time lags (time 1 and time 2). In time 1, employees filled the questionnaires regarding predictor (inclusive leadership) variable and demographic variables (department, gender, age, education, experience, hierarchical level and time spent with leadership). After a month, in time 2, the same respondents filled questionnaires regarding mediator (psychological empowerment) and dependent (IWB) variables. To match the respondents of time 1 and time 2, in time 1 respondents were asked to write the name of their job ID. The lead author explained the reason to them that in time 2 after 1 month, the respondents will be visited again for additional questions. The technique of job ID was really appreciated by respondents, because these techniques confirmed their anonymity. Of the distributed 500 questionnaires, 411 were received. The final sample was 390, and 21 responses were discarded due to missing data. The overall response rate was 78%. Table 1 shows the demographic characteristics of employees.

**Measurement**

All the study variables were measured on a 5-point Likert scale from 1 = ‘strongly disagree’ to 5 = ‘strongly agree.’

**Inclusive leadership**

The nine items of inclusive leadership were used from the study of Carmeli, Reiter-Palmon, and Ziv (2010). In this measure, three dimensions of inclusive leadership were used: openness, availability and accessibility. The respondents were asked to rate items for their direct supervisors. The sample items were: ‘The manager is open to hearing new ideas’ (openness); ‘The manager encourages me to access him/her on emerging issues’ (accessibility) and ‘The manager is ready to listen to my requests’ (availability). \( \alpha \) Reliability of the measure was 0.86.

**Psychological empowerment**

The 12 items for psychological empowerment developed by Spreitzer (1995) were used with four dimensions: meaning, competence, self-determination and impact. Employees rated the items for
Table 1. Demographic profile of respondents

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Department</strong></td>
<td></td>
</tr>
<tr>
<td>Administration</td>
<td>6.7</td>
</tr>
<tr>
<td>Human resource</td>
<td>2.3</td>
</tr>
<tr>
<td>Finance and accounts</td>
<td>5.4</td>
</tr>
<tr>
<td>Sale</td>
<td>19.0</td>
</tr>
<tr>
<td>Operation</td>
<td>27.0</td>
</tr>
<tr>
<td>Marketing</td>
<td>21.8</td>
</tr>
<tr>
<td>Information and technology</td>
<td>17.2</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>60.3</td>
</tr>
<tr>
<td>Female</td>
<td>39.7</td>
</tr>
<tr>
<td><strong>Age (years)</strong></td>
<td></td>
</tr>
<tr>
<td>&lt; 25</td>
<td>8.5</td>
</tr>
<tr>
<td>25–30</td>
<td>29.7</td>
</tr>
<tr>
<td>31–34</td>
<td>31.8</td>
</tr>
<tr>
<td>35–40</td>
<td>19.5</td>
</tr>
<tr>
<td>41–44</td>
<td>7.9</td>
</tr>
<tr>
<td>45–50</td>
<td>2.1</td>
</tr>
<tr>
<td>51–54</td>
<td>7.9</td>
</tr>
<tr>
<td>≥ 50</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>Qualification</strong></td>
<td></td>
</tr>
<tr>
<td>Intermediate</td>
<td>3.8</td>
</tr>
<tr>
<td>Bachelors</td>
<td>52.1</td>
</tr>
<tr>
<td>Masters</td>
<td>43.3</td>
</tr>
<tr>
<td>Doctorate</td>
<td>0.8</td>
</tr>
<tr>
<td><strong>Experience (years)</strong></td>
<td></td>
</tr>
<tr>
<td>&lt; 5</td>
<td>65.4</td>
</tr>
<tr>
<td>6–10</td>
<td>22.6</td>
</tr>
<tr>
<td>11–15</td>
<td>4.6</td>
</tr>
<tr>
<td>&gt; 15</td>
<td>7.4</td>
</tr>
<tr>
<td><strong>Hierarchical level</strong></td>
<td></td>
</tr>
<tr>
<td>Entry level</td>
<td>72.6</td>
</tr>
<tr>
<td>Middle level</td>
<td>21.5</td>
</tr>
</tbody>
</table>
their psychological empowerment. The sample items were: ‘The work I do is very important to me,’ ‘I am self-assured about my capabilities to perform my work activities,’ ‘I have significant autonomy in determining how I do my job’ and ‘I have significant influence over what happens in my department.’ The $\alpha$ reliability of the measure was 0.81.

**IWB**

The nine items of IWB developed by Janssen (2000) were used. The sample items were: ‘creating new ideas for difficult issues’ (idea generation); ‘acquiring approval for innovative ideas’ (idea promotion) and ‘transforming innovative ideas into useful applications’ (idea realization). The self-reported measures for IWB were used due to the following reasons. First, employees’ cognitive representation of IWB is more subtle for employees than supervisors, this is because employees have more information on the context, history and background of their work (Jones & Nisbett, 1987). Second, IWB is a self-awareness process and discretionary in nature. It is possible that IWB is not observed by others and therefore a misalignment is possible in the way individuals perceive their innovativeness (Ford, 1996). Finally, it might be possible that supervisors miss some employees’ genuinely innovative behavior, and only notice the gestures they used to impress the supervisor (Organ & Konovsky, 1989). In light of these reasons, we adopted Janssen’s approach (2000) and collected self-reported data for employees’ IWB. The $\alpha$ reliability of this measure was 0.82.

**Control variable**

Through one-way analysis of variance, we found significant difference in IWB across departments ($F = 2.26, p < .05$), insignificant across gender ($F = 1.18, p > .05$), age ($F = 1.44, p > .05$), qualification ($F = 0.93, p > .05$), experience ($F = 0.24, p > .05$), hierarchical level ($F = 0.35, p > .05$) and time spent with leadership ($F = 1.84, p > .05$). Moreover, as we collected data in three countries, we checked the effect in IWB across United Kingdom and Canada. The results of one-way analysis of variance showed insignificant difference in IWB across countries ($F = 0.95, p > .05$). Thus, department was only the control variable in this study.

**Results**

**Measurement model**

**Common method variance**

Harman single factor analysis was used to check the presence of common method variance. One factor solution in exploratory factor analysis indicated that it explained only 25.2% loading,
which showed the absence of common method variance (Podsakoff & Organ, 1986; Woszczynski & Whitman, 2004). These results allowed us to run measurement model and test the hypotheses.

Structural equation modeling using analysis of moment structures was used to test the hypotheses. Before hypotheses testing, confirmatory factor analysis was used to justify the measurement model (Anderson & Gerbing, 1988), which consisted of three latent variables: inclusive leadership, psychological empowerment and IWB. The combination of different fit indices: model $\chi^2$, incremental fit index (IFI), comparative fit index (CFI), Tucker–Lewis index (TLI) and root mean square error of approximation (RMSEA) were used to assess the model fit. The overall measurement model provided an excellent fit to the data: $\chi^2/df = 1.64$; IFI = 0.94; TLI = 0.93; CFI = 0.94; RMSEA = 0.04 (Steiger, 1990; Hinkin, 1998) in Table 2. These confirmatory factor analysis results showed that three-factor model had satisfactory discriminant validity.

**Descriptive statistics and correlation**

Table 3 shows the descriptive statistics, bivariate correlations and the alpha reliabilities. Inclusive leadership was significantly correlated with psychological empowerment ($r = 0.45$, $p < .01$), IWB ($r = 0.33$, $p < .01$) and in the expected directions. Psychological empowerment was significantly correlated with IWB ($r = 0.54$, $p < .01$) and in the expected direction.

**Tests of hypotheses**

With acceptable discriminant validities established, the hypothesized model was tested. The department was used as control variable. Hypothesis 1 stated that inclusive leadership positively affected IWB. We tested model 1 to examine the direct effect of inclusive leadership on IWB without introducing the mediator. Results supported this effect as indicated by the regression coefficient and associated significance level ($\beta = 0.35$, $p < .01$) and model fit indices ($\chi^2/df = 1.52$; IFI = 0.96; TLI = 0.95; CFI = 0.96; RMSEA = 0.03). In order to test Hypotheses 2, 3 and 4, we analyzed model 2 where we introduced the mediator using 5,000 bootstrap 95% confidence interval. This hypothesized model produced better fit indices ($\chi^2/df = 1.45$; IFI = 0.95; TLI = 0.94; CFI = 0.95; RMSEA = 0.03).

Hypothesis 2 stated that inclusive leadership positively affected psychological empowerment. Results supported this effect as indicated by the regression coefficient and associated significance level ($\beta = 0.44$, $p < .01$). Hypothesis 3 stated that psychological empowerment positively affected IWB. Results supported this effect as indicated by the regression coefficient and associated significance level ($\beta = 0.55$, $p < .01$). In order to test Hypothesis 4, we analyzed the indirect effect between inclusive leadership and IWB through psychological empowerment using 1,000 bootstrap 95% confidence interval. The indirect effect of inclusive leadership on IWB was also significant but reduced in size ($\beta = 0.26$, $p < .01$), confidence interval between 0.18 and 0.40. Therefore, Hypothesis 4 was supported with partial mediation case. The results are shown in Tables 4 and 5.

### Table 2. Measurement model

<table>
<thead>
<tr>
<th>Models</th>
<th>Factors</th>
<th>$\chi^2$</th>
<th>df</th>
<th>RMSEA</th>
<th>IFI</th>
<th>TLI</th>
<th>CFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline model</td>
<td>Three factors</td>
<td>477.79*</td>
<td>291</td>
<td>0.03</td>
<td>0.94</td>
<td>0.93</td>
<td>0.94</td>
</tr>
</tbody>
</table>

*Note: CFI = comparative fit index; IFI = incremental fit index; RMSEA = root mean square error of approximation; TLI = Tucker–Lewis index. *$p > .05$. 

[https://doi.org/10.1017/jmo.2018.50](https://doi.org/10.1017/jmo.2018.50) Published online by Cambridge University Press
Discussion

The purpose of this study was to investigate the relationship between inclusive leadership and IWB with the mediating role of psychological empowerment. The results confirmed all hypothesized relationships: inclusive leadership and IWB, inclusive leadership and psychological empowerment, psychological empowerment and IWB, and finally mediating role of psychological empowerment.

The results indicated a positive relationship between inclusive leadership and IWB. Inclusive leadership as a form of relational leadership directly invited employees in decision-making, and allowed them to show participative behavior in work processes. Therefore, in an inclusive culture where employees experienced high support from their leadership, employees tended to risk disagreement with their leadership and challenged the *status quo* by showing IWB. Our findings are consistent with the previous studies, which found positive relationship between inclusive leadership and IWB (Choi, Tran, & Kang, 2017; Javed et al., 2017b).

Results depicted a positive relationship between inclusive leadership and psychological empowerment. There are numerous ways by which inclusive leadership enhances psychological empowerment. For instance, by direct invitation, inclusive leaders shared opportunities with employees to engage in a constructive and creative dialog. As a result, employees experienced a greater sense of meaning at work. Moreover, inclusive leaders with accessibility attribute served as a social model. As a result, employees learned important competencies to efficiently perform a given role. In an inclusive culture, employees received timely feedback of the ultimate out of work process, where they were clearly explained the impact of their effort on the production. Finally, inclusive leaders shared power with employees. As a result, employees decided their work processes on their own. Inclusive culture cannot be cultivated in an organization until employees are not empowered to state their opinions, views and ideas (Pless & Maak, 2004; Brown & Treviño, 2006; De Hoogh & Den Hartog, 2008; Piccolo et al., 2010).

The result showed a positive relationship between psychological empowerment and IWB. These findings are aligned with the studies of Singh and Sarkar (2012) and Masood and Afzar (2017). When employees experience efficacious belief via psychological empowerment, they challenge the existing work standards and generate innovative ideas (Zhang & Bartol, 2010).

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Table 3. Means, SD, coefficient α reliabilities and intercorrelations

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Inclusive leadership</td>
<td>3.08</td>
<td>0.91</td>
<td>(0.86)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Psychological empowerment</td>
<td>3.44</td>
<td>0.72</td>
<td>0.45**</td>
<td>(0.82)</td>
<td></td>
</tr>
<tr>
<td>3. Innovative work behavior</td>
<td>3.43</td>
<td>0.77</td>
<td>0.33**</td>
<td>0.54**</td>
<td>(0.82)</td>
</tr>
</tbody>
</table>

Note: *n = 390; *p < .05 and **p < .01. Correlation is significant at 0.01 levels (two-tailed); Correlation is significant at 0.05 levels (two-tailed); α reliabilities are given in parentheses.

Table 4. Path coefficients in the baseline model

<table>
<thead>
<tr>
<th>Structural path</th>
<th>Path coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inclusive leadership →</td>
<td>Innovative work behavior</td>
</tr>
<tr>
<td>Inclusive leadership →</td>
<td>Psychological empowerment</td>
</tr>
<tr>
<td>Psychological empowerment →</td>
<td>Innovative work behavior</td>
</tr>
</tbody>
</table>

Note: *p < .05, **p < .01, ***p < .001.
Innovative ideas are different from traditional old methods of job, and while exhibiting innovativeness, employees go beyond the standard operating procedure. Therefore, in the context of innovation, employees demand psychological empowerment which make them free from fear of other punishment or termination from the job (Javed et al., 2017b). This is perhaps because new ideas are not guaranteed to be successful but their failure should not be regarded as waste of resources.

Finally, the result of the current study confirmed psychological empowerment as a mediated mechanism in the relationship between inclusive leadership and IWB. Using CET framework, this study argued and confirmed that inclusive leadership served as supportive contextual factor, which enhanced employees’ internal empowerment. Consequently, employees showed greater willingness to exhibit IWB.

### Theoretical Implications

The current study has contributed to the literature on inclusive leadership in several ways. The direct relationship between inclusive leadership and IWB had already been established. However, the indirect relationship between inclusive leadership and IWB through mediating mechanism of psychological empowerment had not been studied in the past. Moreover, the current study confirmed the significant relationship between inclusive leadership and psychological empowerment, which is also an important contribution of this study. Our work supported the notion that a situational supportive factor (e.g., inclusive leadership) enhanced employees’ IWB (Tett & Guterman, 2000). Furthermore, the study lent support to the process view of inclusive leadership (Javed et al., 2017b) where positive impact of leadership empowered employees to show IWB.

### Managerial Implications

At the current time, the environmental complexity due to new technological changes has made it vital for organizations to be innovative in their work processes, products and services. Innovation is an everyday challenge for organizational members to successfully respond to the workplace issues, unexpected events, creation of new ideas to improve the work process and to produce and advance new products and services (Tsoukas & Vladimirou, 2001; Wierdsma, 2004; Tsoukas, 2009; Miettinen, Samra-Fredericks, & Yanow, 2009; Kocher, Kaudela-Baum, & Wolf, 2011). Innovation is the outcome of organizational practices like supportive managerial efforts, providing employees the freedom of rotation and flexible roles, which in turn encourage employees to bring innovative and novel ideas (Boer, Kuhn, & Gertsen, 2006). Other managerial efforts encourage employees’ participation in the innovation process (Kianto, 2008; Döös & Wilhelmsson, 2009; Yidong & Xinxin, 2013). Thus, managerial practices play an important role in organizational innovation via supporting employees’ IWB.

The current study has important managerial implications to boost employees’ IWB. Inclusive leadership was demonstrated to facilitate employees’ IWB through psychological empowerment. Inclusive leadership is a more powerful and relevant conducive leadership style for employees’ ideation, promotion and implementation (Carmeli, Reiter-Palmon, & Ziv, 2010; Javed et al.,

### Table 5. Results on the mediating roles of psychological empowerment with inclusive leadership and innovative work behavior

<table>
<thead>
<tr>
<th>Path coefficient</th>
<th>BC (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inclusive leadership → Psychological empowerment → Innovative work behavior</td>
<td>0.26** (0.18, 0.40)</td>
</tr>
</tbody>
</table>

Note: BC = bias corrected; 5,000 bootstrap samples; CI = confidence interval. *p < .05, **p < .01, ***p < .001.
This is because inclusive leadership exhibits openness to hear new ideas, show their availability when employees face challenges and more specifically demonstrate their accessibility to discuss emerging issues with employees. Consequently, employees can easily share and discuss the important problems they face while exhibiting IWB. Thus, it is important for managers to understand how to foster IWB in employees. This study recommends that managers can cultivate an inclusive leadership style by emphasizing openness, availability and accessibility in order to create conditions for employees to speak about new ideas and voice their opinions.

It is important to know how managers can cultivate the style of inclusive leadership. Following a study of Ryan (2006), the current study suggests the following ways through which a manager can bring his/her inclusive leadership style. First, the manager could show respect to employees, identify and praise the contribution of the employees. Second, managers attentively listen to employees. Third, they could provide timely and constructive feedback to the employees. Fourth, the managers could adopt a forward-looking perspective, instead of only focusing on the evaluation of a past performance. Fifth, managers could empower employees to independently decide their work activities. The final way to become an inclusive leader is to encourage open communication that positively affects employees’ loyalty and trust. In the presence of such characteristics in a leader, employees are more likely to exhibit innovation-related behavior (Choi, Tran, & Kang, 2017).

Moreover, generating new ideas is a trial and error process, where some of the new ideas generated by employees are likely to fail. Therefore, employees need psychological empowerment to forward their IWB. In the light of CET framework, we suggest that leader should cultivate supportive external context, which enhances employees’ internal motivation to take risks. In order to endorse employees’ state of mind with psychological empowerment, managers should translate a vision for continuous innovation by recognizing employees work for innovation, provide employees autonomy in their activities related to their particular job, help them in bringing greater clarity in their roles (Afsar, Badir, & Saeed, 2014) and accept the employees’ mistakes and failure to achieve desired objectives. Particularly, with regards to the last point regarding tolerating failure, managers with inclusive leadership style take the responsibility for failure (Hollander, 2012), therefore, encouraging employees to show more IWB.

Strengths, Limitations and Future Directions
The current study found support for all the hypothesized relationships and provided some methodological and theoretical strengths. In order to reduce potential effects of common methods and single-source bias, this study followed the instructions of Podsakoff, MacKenzie, Lee, and Podsakoff (2003). First, we collected data on inclusive leadership, psychological empowerment and IWB from different sectors (information technology and cargo companies). Second, we collected responses from employees in two time lags using a time lag of 1 month between them in order to promote a more effective understanding of the relationships among the constructs that comprise our study. Despite the strengths of the current study, there is a limitation that we used psychological empowerment in explaining the relationship between inclusive leadership and IWB. However, there are a number of other mediator variables that can be considered such as intrinsic motivation, trust in leadership and psychological ownership.

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