

1 *Type of the Paper (Article.)*

2 **The Role of Inclusive Leadership Behaviours on** 3 **Innovative Workplace Behaviour with Emphasis on** 4 **the Mediator Role of Work Engagement**

5 **Dheyaa Falih Bannay**^{1,*}, **Mohammed Jabbar Hadi al-Thalami**² and **Ahmed Abdullah Al-**
6 **Shammari**³

7 ¹ Management and Economics college, University of Warith Al-anbiyaa . Karbala , Iraq;
8 diaa.alwan@uowa.edu.iq.

9 ² Al-Furat Al-Awsat Technical University, Technical Institute / Karbala. Iraq; Mo.1968m@yahoo.com.

10 ³ University of Karbala - Faculty of Administration and Economics – Department of Business Management;
11 Ahmed.a@uokerbala.edu.iq.

12 * Correspondence: diaa.alwan@uowa.edu.iq ; Tel.: +964-7804830061

13 **Abstract:** (1) Background: Work creativity, manifested in innovative workplace behaviour (IWB)
14 and employee work engagement, is fundamental to maintain firms' sustainability and
15 competitiveness. In this regard, this study aims at investigating the supporting effect of innovative
16 leadership on IWB and employee engagement through maximising employee vigour, dedication
17 and absorption. (2) Methods: The study data were collected from questionnaires administered to
18 150 respondents working in mobile phone companies in southern and central Iraq. The statistical
19 analyses were conducted through the Statistical Package for the Social Sciences (SPSS) and Smart
20 PLS. In analysing the measurement model and testing the proposed hypotheses, the study results
21 revealed that inclusive leadership and work engagement were intimately connected to IWB; (3)
22 Results: Work engagement played a mediating role between inclusive leadership and IWB. The
23 questionnaire data indicated that inclusive leadership behaviours, such as openness, accessibility
24 and availability, motivated the subordinates to be engaged in IWB.; and (4) Conclusions: To
25 promote IWB, company leaders then need to effectively engage their followers by taking pride and
26 satisfaction in employee output, which might aid employee workplace and IWB engagement.

27 **Keywords:** innovative; inclusive leadership behaviour; work engagement; innovative workplace
28 behaviour

29 **1. Introduction**

30 Global activities have taken place over the past century initiating a dynamic change within global
31 economic competition, globalisation of the labour force, the internationalisation of business and
32 transactions, and advancing information and communications technology. Such changes necessitate
33 innovative participation in order to maintain viability, through the supply of innovative solutions
34 within the present and the globalised competitive environment. The recent literature on employee
35 empowerment, motivation and integration in accelerating innovative efforts has concentrated
36 attention upon innovation and originality. Thus to maintain competitiveness the organisation needs
37 innovative leadership to strengthen, in the long term, innovative workplace behaviour (IWB) [1].
38 Although previous studies have indicated that concerns regarding innovation were not restricted to
39 research and development professionals, employee performance across various sectors needs to be
40 open to innovation in order to preserve sustained success for the individual organisation [2]. This
41 approach was more conducive to investigating innovative environments, as it offered an
42 opportunity for in-depth scrutiny of leadership IWB, unlike the traditional view of focusing on
43 leaders, their attitudes, and their behaviours. However, in the relational perspective the leader's
44 personality traits, along with employees' behaviours and relations with their leader, are integral to
45 understanding this dynamic. In other words, the relational leadership mechanism stimulated
46 employees into reciprocally dealing with the challenges posed by innovative workplace behaviour.

47 This claim is supported by a recent study [3] which emphasised the positive relationship between
48 relational, inclusive leadership, and IWB.

49 Thus research has been undertaken into the determinants of IWB, among which knowledge sharing,
50 human resources, management practices, innovative environments, absorption, as well as perceived
51 innovation work requirements, were at the main focus of study. Leadership as a determinant has
52 been postulated as the motive that most influences innovation and creativity within companies.
53 Innovative leadership enacts inclusiveness, openness, uniqueness, and support. Insights into how
54 leadership forges IWB can be gained by an analysis of the relevant literature. Yet, empirical studies
55 investigating the inclusive leadership-innovative performance connection are sparse [4].

56 Recent literature has suggested that leadership is integral to the promotion of employee integration
57 and engagement, as the leader's role is a stimulus for employee satisfaction and for the creation of a
58 healthy environment [5]. Recent research suggests that interest in the impact of different kinds of
59 leadership on employee work engagement is crucial in maintaining sustainable relations. Such
60 leadership includes ethical leadership [6], authentic leadership [7], transformational leadership [8],
61 and inclusive leadership [9]. Yet the empirical evidence of such impacts is limited. The concern of
62 leadership to fulfil employee needs is fundamental in maximising optimum employee engagement.
63 For this reason inclusive leadership will ultimately shape employee integration and engagement as
64 it essentially revolves around satisfying employee needs. In fact various studies indicate that
65 transformational, ethical, paternalistic and charismatic leadership each have a great influence on
66 employee innovation¹. Nevertheless, these studies have been concerned with the importance of
67 leadership characteristics, such as personality traits and charismatic attitudes to enhance IWB, while
68 the main role of the relationship between leaders and workers, and its subsequent impact on
69 innovative work behaviour has been relatively under-researched. This study investigates the
70 relationship between innovative leadership (IL) and IWB. It also evaluates the mediating role of
71 work engagement within the conceptual framework of this relationship.

72 **2 Theoretical framework and research hypotheses**

73 **2.1 Inclusive leadership behaviours**

74 Inclusive leadership was initially studied in the Western Education domain and advocated that
75 people of various ethnic backgrounds and abilities should be educated inclusively [10]. Nembhard
76 and Edmonson [11] coined the term 'inclusive leadership' defining "leader inclusiveness" as the
77 verbal and behavioural performance of leaders to motivate and appreciate employee contribution.
78 Hollander [12] defines inclusive leadership as a win-win situation for leaders and subordinates alike
79 with the aim of a beneficially mutual relationship. He emphasised the role of subordinates in this
80 relationship as well as their own conception of appropriate leadership. Building on Hollander's
81 concept of leadership [12], Carmeli et al. [13] developed their notion of inclusive leadership defined
82 as a "leaders' ability to exhibit openness, accessibility, and interaction with followers". This
83 approach has been widely adopted in subsequent studies on inclusive leadership [14]. Based on this
84 model inclusive leaders demonstrate that they are individuals with unbiased judgments. They are
85 leaders who manifest this behaviour, learn, support, lead and motivate their followers in
86 reproducing IWB [15]. Inclusive leaders are more apt to show concern for followers' expectations
87 and feelings, leading them to be more supportive of their subordinates [2,12]. Specifically, inclusive
88 leaders share their visions about organisational infrastructure with employees whose ideas are being
89 implemented. For this reason employees feel empowered and engaged with their leaders, which
90 leads them to be more responsive in their behaviour, and to demonstrate conduct exceeding their
91 average output (for instance, IWB).

92 Inclusive leadership stands for positive interaction with employees. In this interaction inclusive
93 leadership is marked by three characteristics: openness, readiness, and accessibility, which Carmeli
94 et al. [13] have outlined. Inclusive leadership meets employee expectations in a positive way,
95 providing effective support [15]. As Choi et al. [9] postulate, the openness, accessibility and
96 readiness of inclusive leadership enhance employee satisfaction, along with expanding knowledge

97 frames and expertise. Accordingly employees are motivated to contribute to innovative operations,
98 and inclusive leaders support employee participation in decision-making processes, to support
99 “inclusive culture”. Through active decision making and contributions, employees willingly support
100 and implement progressive ideas. Inclusive leadership enables solid connections and reliable
101 support of employee inputs and outputs without having to depend on individual output.

102 Recent case studies demonstrate the impact of inclusive leadership on employee contribution to
103 innovative missions[16], moral and organisational commitments, overall work contribution [11],
104 well-being and behaviour [12]. Further important factors are employee empowerment and team
105 performance [14]. Backed by recent scholarship [12] a positive relationship between inclusive
106 leadership and IWB has been proved conclusively [16].

107 They similarly found that a positive relationship between inclusive leadership and IWB of
108 communication companies personnel in Vietnam. Javed et al., [3] conducted a study to examine the
109 relationship between inclusive leadership and IWB, and between the supervisor and the
110 subordinate. The findings underscored the fact that inclusive leadership positively shaped IWB. In
111 fact, IWB is crucial to organisations’ success, given their eminent concern with overall organisational
112 improvement [17]. For this reason, various researchers concentrated on employee IWB through
113 organisational hierarchies. IWB encompasses irregular conduct that is susceptible to create,
114 disseminate, and access novel ideas. Employees exhibiting IWB are proactive in their job
115 performance. They tend to exceed ordinary organisational measures and to challenge their leaders.
116 They are in need of a supportive workplace in their respective organisations to enhance their job
117 autonomy. When supported by their leaders, subordinates feel more incentivised to be creative [18].
118 Previous research findings indicated that employees, being involved in creative activities, had solid
119 connections with their leaders, which led them to face the challenges of creating, disseminating and
120 accessing unique ideas. On this basis, therefore, the first hypothesis is formulated:

121 *Hypothesis (H) 1: There exists a positive relationship between inclusive leadership and IWB.*

122
123

2.2 Work Engagement

124 Work engagement is traditionally defined as a state of mind characterised by being “positive,
125 dedicated, absorbed and vigorous” in the workplace. Within the framework of broaden-and-build
126 theory, positive impact expands action, cognition and attention, resulting in augmenting work
127 resources. Thus work engagement is defined as the criterion of employee proactivity, commitment
128 in their workplace, as well as a method of physical, intellectual and moral self-expression while
129 accomplishing their missions. Employees, proactively and intensely engaged in their work, are
130 sincerely, physically and emotionally enmeshed in their roles [19]. Work engagement is also about a
131 positive and absorbed state of mind marked by employee enthusiasm, and engagement [20]. In this
132 regards, employee engagement leads to enhancing customer satisfaction, increasing productivity as
133 well as profitability, and augmenting earnings per share, rather than increasing turnover,
134 absenteeism or service failure. Based on different studies, paramount evidence underlines the
135 magnitude of employee engagement role in customer engagement market [21].

136 Work engagement is considered as an organisational necessity that is gradually fundamental for
137 organisational success. In fact, it influences central organisational outcomes such as exhaustion, job
138 satisfaction, organisational commitment, and organisational citizenship conduct. Engaged
139 employees are proactive in and enthusiastic about their respective roles, which guides them to be
140 happily engaged in their work and to be willing to embark on initiatives [22]. The managerial style
141 that is oriented to individual and collective participation (in the process of decision-making) is
142 exceedingly significant to work engagement [23]. Different studies demonstrated that accessible,
143 inclusive leaders provide their followers with opportunities to advance their skills, knowledge, and
144 capacities. In their turn, these opportunities shape job-related and personal resources to promote
145 work engagement feelings. In the most recent literature, it has been indicated that leadership is
146 integral to employee engagement since the leader’s role incentivises employee performance and
147 satisfaction, by creating a healthy and convenient environment for work engagement. The leader’s

148 concern, then, to satisfy employee needs is central for employee engagement. Put differently,
149 inclusive leadership is suitable to strengthen employee engagement as it aids in developing
150 workplace relationships at all the organisational hierarchies, in order to accomplish work missions
151 for joint benefit. Inclusive leadership will forge work engagement because it is distinguished by its
152 core focus on meeting employee needs, whereas other leadership kinds diverge in this regard [5]. In
153 fact, work engagement is positively connected with leadership. Inclusive leaders, identified by
154 openness, readiness and accessibility, provide their followers with functional resources motivating
155 them to be engaged in their organisational work via entire moral and physical engagement [24]. In
156 the same vein, Choi et al. [9] stressed that inclusive leadership is positively related to work
157 engagement through diverse factors:

158 First, in the context of the social interaction theory, inclusive leaders, signalled by their openness,
159 accessibility and readiness, offer utilitarian resources for their subordinates. Perceiving the reception
160 of these resources stimulates a similar response from employees, who entirely invest their
161 personalities in their missions and allocate more substantial cognitive, emotional and material
162 resources for the organisation. That is why, as positive feedback on receiving practical resources,
163 employees become more engaged in their work.

164 Second, inclusive leaders challenge and encourage their followers to provide greater contributions
165 to their organisations. Providing support motivates followers to overcome their job necessities.

166 Third, through being open, accessible and ready, leaders boost employee job satisfaction, which
167 could positively impact employee engagement. In this regard, thus, the second hypothesis is
168 proposed.

169 *H2: There is a positive relationship between inclusive leadership and work engagement.*

170 **2.3 Innovative Workplace Behaviour**

171 Innovative Workplace Behaviour (IWB) is the individual's conduct to initiate and deliberately
172 integrate (within the workplace, the group, or organisation) novel and functional ideas, acts,
173 products, and procedures[25]. This claim parallels that of Janssen [26] advocating that IWB is
174 exemplified in the role of an employee who intentionally creates and applies new ideas for the sake
175 of their work, group, or organisational profit [27]. Shanker et al. [28] postulated that IWB has a
176 decisive role in the work environment as they are required by organisations to promote their
177 flexibility, responsiveness, and effectiveness, because of the unpredictable nature of the business and
178 the intensive obligation required to face the challenges posed by national and international
179 competition.

180 Leadership is central to induce a change within organisations and the work environment. When the
181 leader manifests supportive conduct to novel ideas, subordinates regard that as organisational
182 support to buttress IWB [29]. One of the unique techniques leaders invest, to support their followers,
183 is that they are held accountable of ultimate outcomes [12] and creative operations, irrespective of
184 the failure that might be engendered by the new ideas. This is why, within the framework of
185 inclusive leadership, subordinates are relaxed and exempted from assuming any risks associated
186 with IWB. Swaroop and Dixit [30] identified the intimate connection between employee creativity
187 and IWB, since this latter may encompass a whole range of innovative demeanours. It ranges from
188 gradual ameliorations to introducing novel ideas that may moulder operations and organisations at
189 all levels, along with developing a new product [31]. Although novel and rare ideas are generally
190 confined to research and development professionals, gradual ameliorations and small-scale
191 suggestions are far-reaching and may emanate from employees in diverse domains. Some studies
192 [32, 33] mentioned that work engagement has a considerable impact on IWB when examined via
193 social interaction theory. It is hypothesised that employees, with greater contributions in their work,

194 are presumably enthusiastic, and engaged, which may guide them to be creative. Thus the third
195 hypothesis states:

196 *H3: There exists a positive relationship between work engagement and IWB.*

197 Successful organisations tend and need to support innovative work behaviour, benefit from creative
198 employees, and manage the volatile nature of the workplace. IWB denotes the exploration and
199 application of novel and original ideas by employees while accomplishing their roles to upgrade
200 their own performance, along with that of the group and the organisation. Past studies found that
201 leadership was an operative for creativity and originality within organisations, and leaders had
202 differing techniques to contribute to employee creativity [34]. Initially, leaders could be a role model
203 for their followers. Through showing IWB, leaders could supply the necessary resources for creative
204 efforts. Instantly, they allow more time for their followers to think and search for solutions to IWB.
205 Leaders can equally motivate their subordinates to have substantial participation in creative
206 activities. Furthermore, the relational support that leaders offer boosts employee IWB. Finally,
207 leaders could pave the way for a supportive climate for innovative work behaviour, where they
208 could monitor all its dimensions and aid inventions.

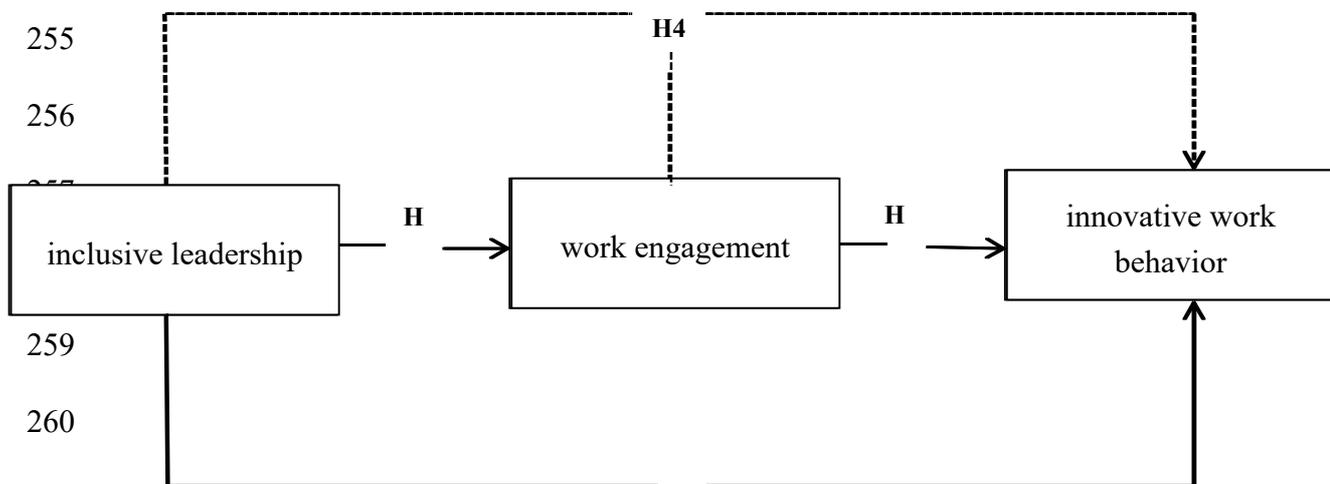
209 Although in the business and management literature, there is some compelling evidence that
210 connects all kinds of leadership and IWB, only a few studies have investigated this connection. Javed
211 et al. [2] aiming at examining the relationship between inclusive leadership and IWB. Its sample was
212 based on employees from cargo and the information technology companies. The research aim was to
213 scrutinise the mediating role of psychological empowerment in the relationship between inclusive
214 leadership and IWB. A second example is Schonoos' [34] study that examined the mediating role of
215 knowledge sharing between inclusive leadership and IWB. The study sample, based in the
216 Netherlands, comprised 292 respondents, who worked 12 hours or more per week. In the third
217 study [4] the mediating role of the psychological contract in the relationship between inclusive
218 leadership and IWB was investigated on a sample of 15 Chinese companies. Irrespective of these
219 studies, researchers concur that there is a lack of research addressing work engagement as a volatile
220 mediator in the relationship between inclusive leadership and IWB. For this reason, the present
221 study addresses work engagement as a shifting mediator, since it crucially affects organisational
222 success, along with paramount organisational outcomes akin to exhaustion, job satisfaction,
223 organisational commitment, and organisational citizenship conduct. In this context, research
224 findings displayed the leading and positive role of work engagement in promoting employee trust
225 in the leader [35]. Employees, engaged as proactive, energetic and satisfied agents in their work, are
226 liable to take [22]. Employees and organisations can obtain advantage from proactive subordinates
227 as organisations count on employee proactivity to maintain their competitiveness in a shifting
228 market. When leaders supply an efficient work environment to accommodate greater employee
229 contribution, employees have the propensity to produce more creative ideas for themselves, their
230 group and their organisation [35]. Research findings accentuate that it is central to study the
231 mediating role of work engagement that corresponds with the hypothesis entertained in this study
232 where inclusive leadership is implicitly connected with IWB (Figure 1), hence the following
233 hypothesis:

234 *H4: Work engagement will be the mediator in the relationship between inclusive leadership and IWB.*

235 **3. Data and Methodology**

236 Collecting data in this study aimed at charting the relationship between inclusive leadership
237 and IWB, by focusing on the mediating role of work engagement for a sample of employees in the
238 communication domain in southern and central Iraq (Asia Seel Company- Zen Iraq). The reason for
239 selecting the research sample from these companies was that employees had regularly face
240 unpredictable work nature and innovative technologies, which necessitated a high concentration
241 level and creativity. The data collection method was selected and based on a questionnaire,

242 including two groups. The first group addressed demographic changes, while the second research
 243 changes. To this end, inclusive leadership behaviours (ILB) questionnaire [13] was deployed to
 244 inspect employee responsiveness to innovative leadership behaviours. One of the questionnaire
 245 items is “the manager is ready to listen to my needs”. Answers were ordered according to Likert
 246 5-point scale: 1 equals “never”, 5 “most of the time”. Respondents’ data on work engagement (WE)
 247 was analysed by using the UWES 9 scale [37]. It included nine questionnaire items and responses
 248 were organised according to Likert 5-point scale. An example of the items is “when I wake up in the
 249 morning, I feel I want to work”. Moreover, a 6-item questionnaire was used for IWB [38], using
 250 Likert 5-point scale, ranging from “I strongly disagree” to “I strongly agree”. One of the
 251 questionnaire items is “this employee invents ideas for intricate matters”.



258
259
260
261 **Figure 1** H1 research model

262 Note: The dashed line represents the indirect effect of Inclusive leadership on innovative work
 263 behaviour the mediator has been introduced in the model.

264 4. Results

265 1. Respondents

266 Upon receiving the approval of the human resources manager, an explanation of nature and the
 267 aim of the questionnaire was offered to the study participants. Respondents were approached to
 268 provide, within their capacities, honest replies to the questionnaire items. This procedure aimed at
 269 limiting the potential impact of employee hesitation and bias towards social desirability [36]. The
 270 questionnaires were administered along different periods of time to control the potential impact of
 271 common bias in data collection procedures [36, 37]. In the first time frame, the questionnaire was
 272 directly administered to the study respondents. In the second time frame, the questionnaire was
 273 administered to the respondents by the human resources managers, without the researchers’
 274 interference. The final sample obtained from both time frames included 150 questionnaires out of
 275 205. The response rate reached 73%, which could be considered as acceptable for paper-based
 276 questionnaires in the Asian workplace. The responses examined of 150 questionnaires were obtained
 277 from 113 males and 37 females. The age range of most of the respondents was from 35-44 years old,
 278 representing 36%. Forty-eight respondents held university degrees, 6 MAs, and 77 the baccalaureate
 279 level. Table 1 displays the demographic profile of the participant sample.

280

281 **Table 1.** Demographic profile of respondents

Characteristic		Percentage
Gender		
Male	113	75.3%
Female	37	24.7%
Age		
< 24	20	13%
25-34	49	33%
35-44	54	36%
45-54	27	18%
Education		
secondary	19	0.126%
Bachelor's	77	0.513%
Diploma	48	0.32%
M.A	6	0.04%
Tenure		
< 1	17	0.113%
2-5	47	0.313%
6-10	69	0.46%
> 11	17	0.113%
Department		
Administration	34	0.226%
Human resource	22	0.146%
accounts	12	0.08%
Sale	48	0.32%
Information and technology	34	0.226%

282 *4.2 Measurement Model Analysis*283 *4.2.1 Reliability and Validity Measurement*

284 Table 2 demonstrates the analysis results of Average Variance Extracted (AVE). Values greater than
285 5.0 indicated that the tested constructions corresponded to Convergent Validity [39]. The table
286 similarly presents the reliability analysis through Cronbach's Alpha and Composite Reliability. The
287 values were greater than 7.0, indicating that the research instrument used in this study had a high
288 value of internal consistency [40,41]. Figure 2 shows the results of factor loadings having the value
289 7.0, which is considered high in other factors. By reference to these results, it could be claimed that
290 the measurement paradigm of this study corresponds to reliability and validity criteria.

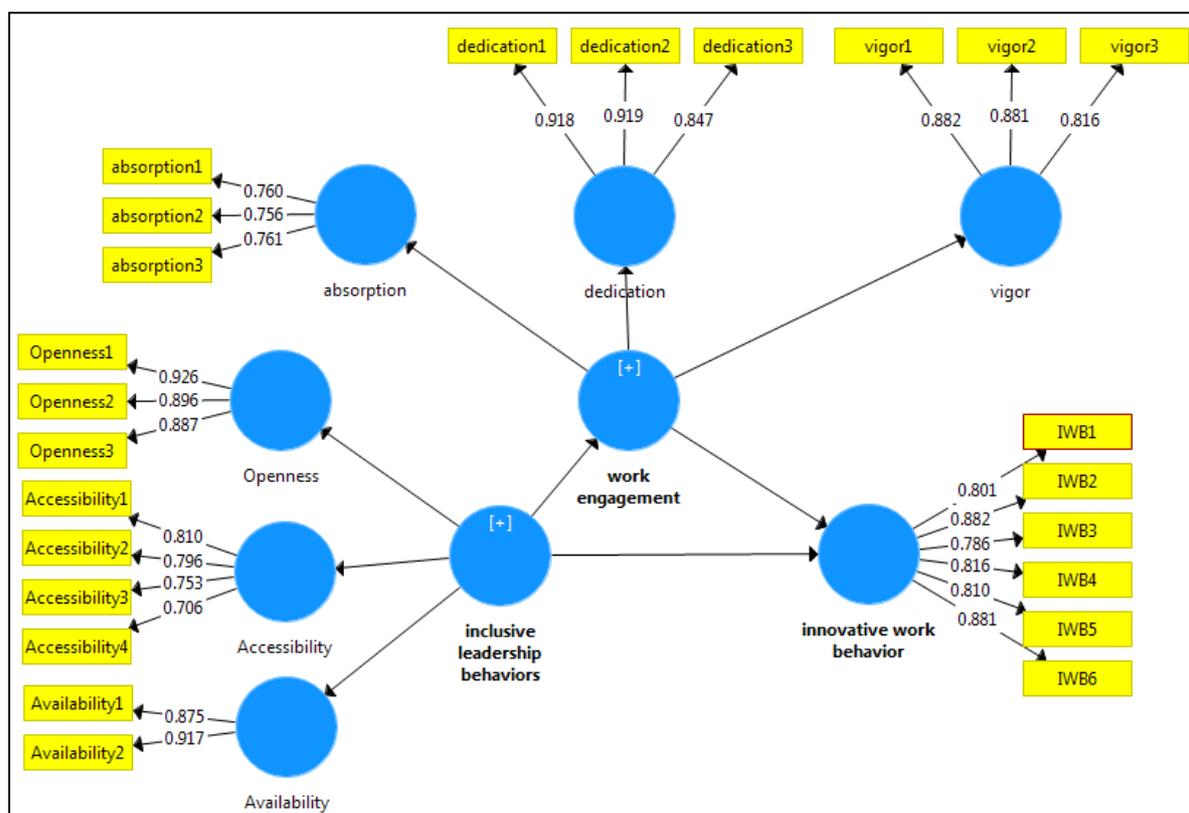
291

292 **Table 2.** The average variance extracted, Composite reliability and Cronbach alpha

Variable (Dimensions)	AVE	Composite reliability	Cronbach alpha
<i>Inclusive leadership behaviour</i>	0.816	0.930	0.887
Openness			
Accessibility	0.588	0.851	0.767
Availability	0.803	0.891	0.757
<i>Work engagement</i>	0.802	0.895	0.823
Vigour			
Dedication	0.576	0.924	0.876
Absorption	0.739	0.803	0.639
<i>Innovative workplace behaviour</i>	0.689	0.930	0.909

293 4.3 Descriptive statistics and correlation

294 Table 3 presents the results of descriptive statistics, including correlations, the mean and standard
 295 deviation values for inclusive leadership (M= 4.019, SD= .760), work engagement (M= 3.882, SD=
 296 .718), and IWB (M= 3.727, SD= .849). The Pearson correlation coefficient shows a positive and moral
 297 relationship between inclusive leadership and IWB ($r = .814, p < 0.1$), and a positive relationship
 298 between inclusive leadership and work engagement ($r = .851, p < 0.1$). It equally indicates the presence
 299 of a positive relationship between work engagement and IWB ($r = .814, p < 0.1$). These correlations
 300 were expected in the study hypotheses.



301

302

303

Figure 2. Structural model

304 **Table3.** Means, standard deviations ,and correlations between main variables

Variables	M	SD	1	2	3
1. Inclusive Leadership	4.019	0.760	1	.851**	.814**
2. Work Engagement	3.884	0.718	.851**	1	.814**
3. Innovative Workplace Behaviour	3.727	0.718	.814**	.814**	1

305 Note:N=150, **p<0.01,

306 *4.4 Tests of hypotheses*

307 This piece of research examined the impact of inclusive leadership on IWB through work
 308 engagement. To show the mediating role of work engagement, SPSS Macro Process was deployed,
 309 as indicated in table 4. Inclusive leadership represented an independent factor, while work
 310 engagement stood for the mediating factor, and IWB constituted a dependent factor. The statistics
 311 displayed that inclusive leadership is positively connected with IWB ($\beta = 0.325$, $P < .001$), supporting
 312 in this way H1. Inclusive leadership is remarkably connected with work engagement ($\beta = 0.867$, P
 313 $< .001$), in support of 2. Similarly, H3 is corroborated through the connection between work
 314 engagement and IWB ($\beta = 0.571$, $P < .001$). In order to test H4, bootstrapping was activated to test the
 315 correlation of bootstrapping samples with a 95% confidence interval (CI) on 500, as suggested by
 316 Preacher & Hayes (2018). Using Smart PLS software, an indirect impact of inclusive leadership on
 317 IWB through work engagement was evident. Hence H4 is also supported.

318 **Table 4.** Path Coefficients, Mean, STDEV, T-test, and P-Values

		β	Mean	Stdev	T-test	P
Direct effect	inclusive leadership behaviors -> innovative work behavior	0.325	0.314	0.085	3.828	0.000
	inclusive leadership behaviours -> work engagement	0.867	0.865	0.030	28.797	0.000
	work engagement -> innovative work behaviour	0.571	0.583	0.080	7.132	0.000
Indirect effect	inclusive leadership behaviours -> work engagement -> innovative work behaviour	0.496	0.505	0.073	6.748	0.000

319 **4. Discussion**

320 Companies, as well as researchers, allocate great attention to innovation as it is a persistent need for
 321 companies' sustainable work. IWB is of paramount importance in the communication and
 322 technology sector to promote the supplied service and company competitiveness, which has been
 323 underscored through the pandemic period (COVID-19). The main motive of this study was to
 324 examine the mediating role of work engagement between inclusive leadership and IWB for a sample

325 of employees in the communication domain in Southern and central Iraq. Relevant studies
326 emphasised the role of leadership in such economic turmoil.

327 The study findings indicated that the level of attention attributed to inclusive leadership behaviours
328 was higher than work engagement and IWB. The plausible factor leading to this result could be the
329 uneven gender distribution in the study sample. Generally, males would prefer inclusive leadership
330 behaviours in a workplace environment favouring creativity. This result is expected in the Iraqi
331 context, given that men are more interested in technology and communication than women. The
332 study findings also demonstrated a connection between inclusive leadership and IWB, which was
333 advocated by other studies [2,12, 34] underscoring the beneficial effect of inclusive leadership in
334 upgrading IWB. It was equally denoted that there exists a solid connection between inclusive
335 leadership and work engagement, confirming in this way the findings of Choi et al., [9] in claiming
336 that inclusive leadership and work engagement are connected in the context of study based on 246
337 employees in 6 service companies in Vietnam. Other researchers used differing mediating factors to
338 explicate the effect of inclusive leadership on IWB. These factors included psychological
339 empowerment, knowledge sharing and moral contract. In a similar context, Wang et al., [46] study
340 displayed the relationship between work engagement and IWB, and the moderate role of inclusive
341 leadership for a sample of 374 nurses in Chinese hospitals. Yet, the researchers believe that this
342 study is the first one deploying work engagement as a mediating factor to elucidate inclusive
343 leadership impact on IWB. Linear regression analysis results revealed that inclusive leadership and
344 work engagement were independent predictors for IWB. Such a fact justifies our suggestion to
345 company leaders to create an innovative environment, to support innovation, to stimulate
346 employees to express novel ideas, and to conduct more research to promote innovation capacities
347 within organisations.

348 5. Conclusions

349 This study revealed that employees in the communication domain in Iraq were concerned with
350 IWB. Inclusive leadership was characterised by a higher level of attention, in comparison with work
351 engagement and IWB. Not only were inclusive leadership and work engagement connected with
352 IWB, but they equally had paramount moral effects on IWB. Furthermore, work engagement played
353 a mediating role in the relationship between inclusive leadership and IWB. Subsequently, it is
354 fundamental to promote the notion of work engagement for communication employees and to
355 consider it as an intervening criterion to ameliorate IWB on the one hand and to enhance
356 cooperation, integration and leadership vision on the other hand.

357 Here, communication employees in different provinces were involved. They represent a
358 remarkable percentage in this regard (in Southern and Central Iraq). Therefore this study sample is
359 amply representative. The data were collected through questionnaires and personal interviews.
360 They were amassed over two time frames to eschew any potential bias. The gaps detected in this
361 study, such as limited internal consistency, could be attributed to the unequal gender distribution of
362 the respondents. Accordingly prospective studies will need to include a higher number of female
363 employees in the communication sector to explicate on a wider scale the mechanism of the
364 relationship between inclusive leadership, work engagement and IWB. It is pivotal and enriching to
365 have access to different sources of data (such as peer reports, and leaders' own reports) to minutely
366 comprehend the interactions between the study factors. This study demonstrated mediating roles of
367 some factors between inclusive leadership and IWB, which could be addressed further in future
368 research.

369

370 **Author Contributions:** Conceptualisation, X.X. and Y.Y.; methodology, X.X.; software, X.X.; validation, X.X.,
371 Y.Y. and Z.Z.; formal analysis, X.X.; investigation, X.X.; resources, X.X.; data curation, X.X.; writing—original
372 draft preparation, X.X.; writing—review and editing, X.X.; visualisation, X.X.; supervision, X.X.; project
373 administration, X.X.; All authors have read and agreed to the published version of the manuscript

374 **Funding:** This research received no external funding.

375 **Conflicts of Interest:** The authors declare no conflict of interest
376

377 **References**

- 378
- 379 1. Yi L, Uddin M, Das AK, Mahmood M, Sohel SM. Do transformational leaders engage employees in
380 sustainable innovative work behaviour? Perspective from a developing country. *Sustainability*. 2019
381 Jan;11(9):2485.
 - 382 2. Javed B, Abdullah I, Zaffar MA, ul Haque A, Rubab U. Inclusive leadership and innovative work
383 behavior: The role of psychological empowerment. *Journal of Management & Organization*. 2019
384 Jul;25(4):554-71.
 - 385 3. Javed B, Naqvi SM, Khan AK, Arjoon S, Tayyeb HH. Impact of inclusive leadership on innovative
386 work behavior: The role of psychological safety. *Journal of Management and Organization*.
387 2019;25(1):117-36.
 - 388 4. Qi L, Liu B, Wei X, Hu Y. Impact of inclusive leadership on employee innovative behavior: Perceived
389 organisational support as a mediator. *PloS one*. 2019 Feb 28;14(2):e0212091.
 - 390 5. Rodriguez JL. Inclusive Leadership and Employee Engagement: The Moderating Effect Of
391 Psychological Diversity Climate. Thesis Master of Science In Industrial Organizational Psychology,
392 California State University, San Bernardino
 - 393 6. Hassan A, Ahmed F. Authentic leadership, trust and work engagement. *International Journal of*
394 *Human and Social Sciences*. 2011;6(3):164-70.
 - 395 7. Den Hartog DN, Belschak FD. Work engagement and Machiavellianism in the ethical leadership
396 process. *Journal of Business Ethics*. 2012 Apr 1;107(1):35-47.
 - 397 8. Ghadi MY, Fernando M, Caputi P. Transformational leadership and work engagement. *Leadership &*
398 *Organization Development Journal*. 2013 Aug 23.
 - 399 9. Choi SB, Tran TB, Park BI. Inclusive leadership and work engagement: Mediating roles of affective
400 organisational commitment and creativity. *Social Behavior and Personality: an international journal*.
401 2015 Jul 17;43(6):931-43.
 - 402 10. Fang Y, Chen JY, Wang MJ, Chen CY. The Impact of Inclusive Leadership on Employees Innovative
403 Behaviors: The Mediation of Psychological Capital. *Frontiers in Psychology*. 2019;10:1803.
 - 404 11. Nembhard IM, Edmondson AC. Making it safe: The effects of leader inclusiveness and professional
405 status on psychological safety and improvement efforts in health care teams. *Journal of*
406 *Organizational Behavior: The International Journal of Industrial, Occupational and Organisational*
407 *Psychology and Behavior*. 2006 Nov;27(7):941-66.
 - 408 12. Hantula DA. *Inclusive leadership: the essential leader-follower relationship*. Milton Park: Taylor &
409 Francis Group. 2009.
 - 410 13. Carmeli A, Reiter-Palmon R, Ziv E. Inclusive leadership and employee involvement in creative tasks
411 in the workplace: The mediating role of psychological safety. *Creativity Research Journal*. 2010 Aug
412 12;22(3):250-60.
 - 413 14. Choi SB, Tran TB, Kang SW. Inclusive leadership and employee well-being: The mediating role of
414 person-job fit. *Journal of Happiness Studies*. 2017 Dec 1;18(6):1877-901.
 - 415 15. Lin H. The Effect of Inclusive Leadership on Employees' Procrastination. *Psychology*. 2018 Apr
416 20;9(04):714.
 - 417 16. Qi L, Liu B. Effects of inclusive leadership on employee voice behavior and team performance: the
418 mediating role of caring ethical climate. *Frontiers in Communication*. 2017 Sep 27;2:8.
 - 419 17. Fuller JB, Marler LE, Hester K. Promoting felt responsibility for constructive change and proactive
420 behavior: Exploring aspects of an elaborated model of work design. *Journal of Organizational*
421 *Behavior: The International Journal of Industrial, Occupational and Organisational Psychology and*
422 *Behavior*. 2006 Dec;27(8):1089-120.
 - 423 18. De Beer LT, Tims M, Bakker AB. Job crafting and its impact on work engagement and job satisfaction
424 in mining and manufacturing. *South African Journal of Economic and Management Sciences*.
425 2016;19(3):400-12.
 - 426 19. Okolo D. An exploration of the relationship between technostress, employee engagement and job
427 design from the Nigerian banking employee's perspective. *Management Dynamics in the Knowledge*
428 *Economy*. 2018;6(4):511-31.

- 429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
20. Schaufeli WB, Salanova M, González-Romá V, Bakker AB. The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness studies*. 2002 Mar 1;3(1):71-92.
 21. Menguc B, Auh S, Yeniaras V, Katsikeas CS. The role of climate: implications for service employee engagement and customer service performance. *Journal of the Academy of Marketing Science*. 2017 May 1;45(3):428-51.
 22. Russell MB, Liggans GL, Attoh PA. Job Characteristics and Employee Engagement: A National Study of FCS Extension Educators. *Journal of Family & Consumer Sciences*. 2018 Sep 1;110(3):24-31.
 23. Baran M, Sypniewska B. The Impact of Management Methods on Employee Engagement. *Sustainability*. 2020 Jan;12(1):426.
 24. Jalil T. Impact of inclusive leadership on project success with mediating role of work engagement and person job fit (Doctoral dissertation, Master's Thesis. Capital University of Science & Technology, Islambad, Pakistan).
 25. West MA, Farr JL, editors. *Innovation and creativity at work: Psychological and organisational strategies*. John Wiley; 1990.
 26. Janssen O. Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and organisational psychology*. 2000 Sep;73(3):287-302.
 27. Tri HT, Nga VT, Sipko J. Predicting overall Staffs' Creativity and Innovative Work Behavior in Banking. *Management & Marketing. Challenges for the Knowledge Society*. 2019 Jun 1;14(2):188-202.
 28. Shanker R, Bhanugopan R, Van der Heijden BI, Farrell M. Organizational climate for innovation and organisational performance: The mediating effect of innovative work behavior. *Journal of vocational behavior*. 2017 Jun 1;100:67-77.
 29. Hollander E. *Inclusive leadership: The essential leader-follower relationship*. Routledge; 2012.
 30. Swaroop P, Dixit DV. Creativity, Innovation and Innovative Behaviour at Work: Clearing the Conceptual Confusion. *International Journal of Engineering Technology, Management and Applied Sciences*. 2017;5.
 31. Christian MS, Garza AS, Slaughter JE. "Work engagement: A quantitative review and test of its relations with task and contextual performance": Erratum.
 32. Agarwal UA, Datta S, Blake-Beard S, Bhargava S. Linking LMX, innovative work behaviour and turnover intentions. *Career development international*. 2012 .
 33. Hakanen JJ, Perhoniemi R, Toppinen-Tanner S. Positive gain spirals at work: From job resources to work engagement, personal initiative and work-unit innovativeness. *Journal of vocational behavior*. 2008 Aug 1;73(1):78-91.
 34. Schoonus R. Inclusive leadership relationship to innovative work behavior: the mediating effect of knowledge sharing and the moderating effect of mindfulness.. 2018
 35. Li H, Sajjad N, Wang Q, Muhammad Ali A, Khaqan Z, Amina S. Influence of transformational leadership on employees' innovative work behavior in sustainable organisations: Test of mediation and moderation processes. *Sustainability*. 2019;11(6):1594.
 36. Podsakoff PM, MacKenzie SB, Lee JY, Podsakoff NP. Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology*. 2003 Oct;88(5):879.
 37. Lindell MK, Whitney DJ. Accounting for common method variance in cross-sectional research designs. *Journal of applied psychology*. 2001;86(1):114.
 38. Scott SG, Bruce RA. Determinants of innovative behavior: A path model of individual innovation in the workplace. *Academy of management journal*. 1994 1;37(3):580-607.
 39. Henseler J, Ringle CM, Sinkovics RR. The use of partial least squares path modeling in international marketing. In *New challenges to international marketing 2009* . Emerald Group Publishing Limited.
 40. Nunally J, Bernstein L. *Psychometric Theory*. New York: MacGrow-Hill Higher.
 41. Hair Jr JF, Sarstedt M, Hopkins L, Kuppelwieser VG. Partial least squares structural equation modeling (PLS-SEM). *European business review*. 2014 Mar 4.
 42. Preacher, K.J.; Hayes, A.F. Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behav. Res. Methods* 2008, 40, 879–891.
 43. Crisol Moya, E., Molonia, T., & Caurcel Cara, M. J. (2020). Inclusive Leadership and Education Quality: Adaptation and Validation of the Questionnaire "Inclusive Leadership in Schools" (LEI-Q) to the Italian Context. *Sustainability*, 12(13), 5375.

- 484
485
486
487
488
489
490
491
492
493
44. Li, H., Sajjad, N., Wang, Q., Muhammad Ali, A., Khaqan, Z., & Amina, S. (2019). Influence of transformational leadership on employees' innovative work behavior in sustainable organisations: Test of mediation and moderation processes. *Sustainability*, 11(6), 1594.
 45. Abdallah A, Abdallah S. Productive workplace behaviour at the governmental sector: the case of the UAE. *Journal of Advances in Management Research*. 2020. Ahead of print. <https://doi.org/10.1108/JAMR-05-2020-0088>
 46. Wang YX, Yang YJ, Wang Y, Su D, Li SW, Zhang T, Li HP. The mediating role of inclusive leadership: Work engagement and innovative behaviour among Chinese head nurses. *Journal of nursing management*. 2019 May;27(4):688-96.