

RESEARCH ARTICLE

Emotional intelligence and work engagement: The Moderating effect of work-related psychological impact due to the COVID-19 pandemic

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ABSTRACT

Although emotional intelligence has been linked to employee engagement in the private sector, there is very little research regarding public sector employees. This study explores how emotional intelligence influences work engagement with work-related psychological impact acting as a moderator. The study adopts the cognitive–motivational–relational theory of emotions, which has a minimal research focus in developing countries. Using stratified random sampling, a self-designed questionnaire and interviews, data was gathered from public servants and analysed. The results showed that Emotional Intelligence (emotional management, emotional evaluation and emotional control) positively influences work engagement. Also, emotional management had the highest (positive) impact on work engagement among the three variables. Additionally, it was discovered that the psychological needs at the workplace negatively moderated emotions having positive effect on work engagement. Therefore, employees are encouraged to utilise their emotions to positively influence work engagement and reduce work-related psychological issues and reduce its negative effect on work engagement. Further, work-related psychological impact moderated the relationship between emotional intelligence and work engagement in this study. Theoretically, the use of the cognitive–motivational–relational in developing countries with regard to public sector frontline employees during and after the COVID-19 pandemic is unique.

Keywords: public sector; emotional intelligence; COVID-19; work engagement; psychological impact; Ghana

1. Introduction

For some decades now, research on Emotional intelligence (EI) has steadily risen as it has been recognised as an index of psychological well-being and a resource against the effects of burnout syndrome among employees^[1]. Several studies have acknowledged the unique roles played by EI in ensuring effective organisational leadership and enhanced work performance, such as organisational loyalty, turnover intention and staff contentment^[2–4]. Emotional Intelligence is also recognized as a significant influencer on employees' self-rated workplace behavioural results, including knowledge sharing and task execution^[5]. Yet, much research has not been carried out to investigate the connection between EI and work engagement for public sector employees^[4,6–8]. While^[7] found a positive association between EI and work engagement among public sector employees, more empirical evidence is needed for better understanding in this area. Other scholars including Selvi and Aiswarya^[9] and Shaikh et al.^[10] have also reported a significant connection between EI and work engagement among automobile sector employees and women working in non-governmental

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organisations. Additionally, Alotaibi et al.^[11] report a major positive influence on the connection between EI, leadership empowerment, emotional empowerment and work engagement among nurses. Thus, the EI of nurses influences the care service they provide and their mental welfare. Researchers^[7,12–14] have, nevertheless, reported a substantial connection between EI and work engagement in non-nurse study participants. However, the influence of EI on the work engagement of public workers in the literature is scarce.

Previous research has observed that employees can effectively manage their emotions at the workplace amidst chaos, anxieties, uncertainties and other challenges^[15] for instance, in the wake of the Covid-19 pandemic. As a result, this study posits that work-related psychological impacts of COVID-19 could affect the connection between EI and work engagement in public servants. The responsibilities of frontline public servants are becoming more challenging as they are required to exhibit EI in caring for and responding to their clients. This affects employees' performance-related outcomes and organisational effectiveness^[7]. To provide holistic customer service, public servants ought to understand the concerns of customers, show empathy and respond appropriately to their needs. Hence, EI is crucial to the work output of public servants. It is, therefore, pertinent to investigate how EI influences work engagement of civil servants. This stems from managing personal emotions and emotions of others to enhance the efficiency of both managers and employees^[16]. Several studies have focused on using the Cognitive–Motivational–Relational (CMR) theory of emotions in developed countries. However, its application in the context of developing countries is minimal and more specifically within the public sector. The present study, thus, examines the relationship between EI and WE with work-related psychological impact acting as a moderator, using the CMR theory of emotions as the theoretical foundation within the public sector.

Emotional Intelligence denotes mental capacities that allow individuals to perceive, appreciate, express and manage information aptly^[17]. It is known that emotionally intelligent individuals show work commitment and outperform those who are not^[18], associate with general psychological welfare and employee job contentment^[19]. Work engagement is, however, a positive attitude influenced by enthusiasm, commitment and focus^[20]. It shows an ongoing feeling or thought rather than something that is always happening^[21]. Demerouti et al.^[22] posit that dedicated employees are often very active (vigour), committed (dedication) and concentrated on work activities (absorption). Such employees are conscious of their work-related responsibilities and may succeed in providing excellent services^[23].

In this study, we extend previous research by exploring the relationship between EI and employee work performance outcomes by investigating how EI impacts employee work engagement for public sector employees. We also examine the moderating role of work-related psychological impact in the EI–work engagement relationship. Our study contributes to the EI -work engagement literature by studying EI as an ability or skills that could have positive effect on work engagement. Thus, employees' expertise to guide their thinking and actions by managing their emotions through emotional regulation, self-awareness, monitoring and the interpretation of their emotions and that of others can enhance work engagement. Consistent with the CMR theory, individuals with high EI have high cognitive abilities that is critical for effective task performance at the workplace. By predicting a positive significant association between EI and work engagement, this study highlights the essential role of EI in employee work engagement. In addition, we focus on work-related psychological impact as a moderator in the EI-work engagement link, indicating that emotions are largely influenced by environmental and biological factors. Thus, employees' abilities to sufficiently control their emotions and the emotions of others in the workplace can have positive effect on how engaged they are with their work.

The subsequent sections highlight literature on EI, work engagement, and work-related psychological impact. Also, is presentation of the methodology used, data analysis and discussion of results. Implications

and areas for further studies are discussed to conclude the paper.

2. Literature review

2.1 Emotional intelligence

Employees are expected to show intelligence, a necessary personality quality of individuals in the workplace in all areas of their lives, including personal emotions. EI has, therefore, gained prominence in organisational research because it is a well-thought-out individual difference characteristic^[24]. EI is also a significant indicator of an individual's knowledge, skills and abilities at the workplace and has significant positive effects on leadership^[25].

There are varying views on the concept of Emotional Intelligence. According to Meisler^[26] despite the varied definitions, it appears that the most widely used and recognised is by^[27]. They postulate that Emotional Intelligence constitutes observing, understanding and differentiating individual sentiments and that of others and utilising this awareness in one's thoughts and behaviour^[26]. Goleman^[28] described it as the varied competencies that enable an individual to effectively control personal emotions, self-motivate and recognise emotions in others to help maintain social affiliations. Mayer and Salovey^[29] later described the ability model as the ability to perceive and understand emotions to enable people to recognise how emotions can affect thinking and behaviour. Hence, EI can be seen as a theoretical construct that encompasses how emotions are controlled and understood.

EI comprises four different magnitudes; understanding and projecting self-emotions (self-emotional evaluation), appreciating the emotional needs of others (others' emotional evaluation), management of self-emotion (emotional management) and utilizing emotion to enhance performance (use of emotion)^[27,29]. Self-emotional evaluation refers to how an individual can naturally show emotions. People who possess a high degree of this ability can effectively recognise personal psychological needs more than others. Evaluation and acknowledgement of other people's emotions describe how an individual can effectively acknowledge other people's emotions. Thus, individuals who can read the emotions of others tend to be more familiar with their emotions and able to self-manage. Managing self-emotion denotes a person's ability to control their emotions and this help improve work. Using emotions to improve work output describes how people use their emotions to help them do things efficiently^[3,30].

Despite extensive debates over the concept of EI, in addition to its theories^[31], majority of researchers have modified and utilised the measures^[27,29]. Similarly, this study uses the multidimensional constructs based on^[3] conceptualisation that EI as a set of skills possessed by individuals to effectively manage emotions such as understanding, expressing and regulating emotional needs^[30].

2.2. Work engagement

Work engagement denotes desirable work attitudes characterised by enthusiasm (vigour), dedication and focus (absorption)^[20]. According to Schaufeli et al.^[20], vigour is ability to put in much energy and focus on work, even when things are tough. On the other hand, dedication is feeling proud, inspired, and enthusiastic about one's work while considering it important and challenging. Absorption denotes a cognitive state where individuals are devoted and committed to their jobs^[21,32]. Staff who are engaged, thus, work with dynamism and exhibit dedication and commitment when performing their assigned tasks. Kahn^[33] presented three main circumstances for work engagement. First, psychological meaningfulness which includes feeling appreciated, valuable, creative and independent. Secondly, safety which reflects in one being assertive. Lastly, availability which involves having the necessary physical, emotional and psychological resources to do a job^[34].

Several studies have noted antecedents of employee WE and their effects^[32,35,36] and two key antecedents include job resources (organisational antecedents) and personal resources (individual antecedents)^[32,37]. Organisational antecedents include clear expectations, encouragement rewards, leadership^[38], autonomy^[39] and performance feedback^[32,38]. Personal resources, which are the individual antecedents, on the other hand, include curiosity, self-esteem, self-efficacy^[38], optimism^[32,38], self-efficacy^[38] and emotional intelligence^[9,40].

The absence of these organisational and individual antecedents can cause employees to be disengaged. Work disengagement is characterised by “the disconnection of individuals from their work roles to protect themselves physically, mentally and/or emotionally from real or perceived threats”^[38]. Disengaged workers distance themselves from their jobs, mentally and emotionally, withdraw and defensive when faced with work-related challenges^[33], and exhibit incivility at the workplace^[38,41]. Engaged employees will, however, put in enough effort and connect to their work to achieve positive outcomes^[20,42], have mental resilience and a sense of fulfilment^[34]. Thus, the personal resource of employees and their emotional intelligence play significant roles in work engagement, especially where it has a psychological impact.

2.3. Conceptualising emotional intelligence (EI) and its value on employee engagement

Salovey and Mayer^[27] propounded EI and described it as how individuals can study and understand personal emotions and the emotional needs of others. Mayer and Salovey^[29] revised the definition as the capacity to manage and understand one’s emotions, as well as the emotions of others, in a way that leads to positive growth. An advanced level of EI has a significant influence on employees, such as enhanced self-efficacy, commitment^[43] work engagement^[44], organisational commitment and organisational citizen behaviours (OCB)^[45-47]. This consequently enhances employee engagement^[9].

Employees’ work engagement refers to a positive work-related state of mind, which includes vigour, dedication and absorption^[48]. Some researchers have affirmed that highly engaged personnel manage personal emotions to help relate and work well with others^[7,9] thus, usually outperform less-engaged workforce^[36,49]. Also, researchers^[50-52] have affirmed that emotionally intelligent employee is more engaged with their work. Thus, if employees can monitor and understand their emotions, and the emotions of others, they can be highly involved and make a significant impact in their line of duty^[53].

Theoretically, this relationship is explained from the Cognitive–Motivational–Relational (CMR) theory of emotions^[54]. According to this theory, emotions involve a person’s relationships with their environment and the things happening in it. Negative emotions are caused by harmful or unpleasant things, while positive emotions come from beneficial or enjoyable things. The theory posits that there are three features of emotions: cognitive (an individual’s awareness and assessment of events in their surroundings), relational (emotions involving individuals and their environment that can transform periodically) and motivational (emotions involving an individual’s objectives). Thus, the emotions of an individual are determined by the relationships with their environment, which could change with time^[54].

It has been recognised that engagement is influenced by the environment and its cognitive evaluation, which subsequently results in emotions^[54,55]. Relating the theory to WE, people who possess high EI can keep track of personal emotions and the emotions of others. Also, they can differentiate these emotions and use the information gathered to guide their actions and thoughts^[27]. Therefore, possessing high levels of cognitive abilities by individuals will require the acknowledgement of their work environment and emotional evaluation, which align with what the CMR theory posits. It is important for people to understand and control their emotions, and emotions of others to make decisions^[40]. The present study, therefore, argues that when individuals are emotionally intelligent, it results in a more enthusiastic and dedicated workforce. EI has a positive influence on WE of civil servants as a result of perceived organisational support^[7]. We adopt theories

and research to posit that work engagement is affected by an individual's EI and hypothesise:

H1a: Emotional Intelligence is positively associated to work engagement.

Individual capabilities such as employees' EI are critical antecedents of employees' engagement according to conservation resources theory^[56]. When employees are emotionally intelligent, their emotions (resources) are effectively managed to gain positive emotions, including creativity^[57], satisfaction, commitment and positive work relationships^[58]. Effective understanding of emotions, recognition of your emotions and others and expressing these emotions naturally (self-emotional appraisal) result in cognitive resilience. It can, thus, be hypothesised that:

H1b: Self-emotion assessment positively impacts work engagement.

Positive emotions create safe workplace to accomplish one's vision and goals^[59]. An antecedent to employees' engagement is a safe working environment^[7,60,61] and how to achieve goals^[5]. Thus, when an individual is emotionally intelligent and, therefore, able to utilize their emotions, they succeed in achieving their vision and engaged. It is, therefore, hypothesised that:

H1c: The use of emotion has a positive impact on work engagement.

Emotion management denotes how employees can control their emotions as they interact with people at the workplace^[62,63]. It is the intrinsic and extrinsic processes an individual goes through that influence their emotions when achieving their goals^[64]. Individuals become satisfied when they control and manage their emotions successfully (EI Satisfaction). They tend to have job satisfaction, work commitment and positive work relationships^[49]. It can, therefore, be hypothesised that:

H1d: Regulation of emotion has a positive impact on work engagement.

2.4. Work-related psychological impact

Generally, psychological impact refers to the way environmental and/or biological factors affect a person's societal and/or emotional life. Specifically, work-related psychological impact may manifest as stress, anxiety, depression and insomnia^[65,66]. When employees control their emotions and the emotions of those around them effectively, they work more efficiently and passionately towards common goals^[27]. This implies EI has a positive influence on employees' commitment. Nevertheless, stress negatively impacts employees' commitment^[67-69]. Again, studies have proven that anxiety and depression negatively influence employee commitment^[70,71]. Since stress, anxiety and depression are all forms of workplace psychological impact, it can be hypothesised that:

H2: Work-related psychological impact moderates the positive effect of Emotional Intelligence on work engagement

3. Materials and methods

3.1. Participants

A cross-sectional descriptive method was employed to gather quantitative data. Stratified random sampling was utilised to identify frontline public sector workers. 245 copies of the designed questionnaire were distributed to nine organizations, and 201 returned answered. However, after a revision of the answered copies, a total of 194 were useable. A majority of the sample, 124 (63.9%) were females and 70 (36.1%) males. Data were collected using a self-report anonymous questionnaire. The questionnaire included a cover page which presented the study's purpose and assured participants of confidentiality. In addition, 10 participants were randomly selected from each organisation and interviewed to share how the COVID-19 pandemic

influenced their psychological experiences.

3.2. Measures

3.2.1. Emotional intelligence

The Wong and Law Emotional Intelligence Scale was employed to assess emotional intelligence^[3]. Three dimensions—personal evaluation, emotion management and emotional utilization, with four items each, were employed to measure emotional intelligence. Answers were rated on a five-point Likert scale, which ranged from ‘strongly disagree’ = 1 to ‘strongly agree’ = 5. High scores indicated high emotional intelligence. Sample items are “I have good understanding of my own emotions; and “I am able to control my temper and handle difficulties rationally”.

3.2.2. Employee engagement

The Utrecht Work Engagement Scale (UWES) adopted from^[21] was utilized to measure WE. The UWES comprises three sub-scales characterised by the features of WE—vigour, dedication and absorption with three items measuring the individual subscale. Sample items are “I feel bursting with energy at the workplace”, “I find the work that I do meaningful and purposeful”, and “When I am working, I forget everything else around me”. Participants responded on a five-point Likert scale, ranging from ‘strongly disagree’ = 1 to ‘strongly agree’ = 5. High scores indicated greater WE.

3.2.3. Work-related psychological impact

Work-related psychology impact was assessed employing a four-item scale designed by Morassaei et al^[65]. Responses were based on a five-point Likert scale ranging from ‘strongly disagree = 1’ to ‘strongly agree’ = 5. Sample items include “I have experienced work-related stress due to COVID-19” and “I have experienced work-related anxiety due to COVID-19”.

4. Results

4.1. Structural equation modelling

IBM SPSS and AMOS version 26 were employed in the data analysis. The results of the measurement model showed excellent fit indices (Chi-square = 308.59, df = 209, CMIN/DF = 1.48, RMSEA = 0.051, CFI = 0.95, pclose = 0.46). Also, all the composite reliabilities and AVEs were above 0.7 and 0.50, respectively. Thus, convergent validity was met (**Table 1**). All HTMT values were below 0.85, therefore, discriminant validity was met (**Table 2**).

Table 1. Validity analysis.

Variables	CR	AVE	MSV	MaxR(H)	UOE	WRP	EEV	EED	EEA	SEA	ROE
1) Use of emotions	0.876	0.639	0.52	0.88	0.799						
2) Work-related psychological impact	0.874	0.701	0.038	0.959	-0.006	0.837					
3) Vigour	0.76	0.619	0.273	0.833	0.401***	-0.196*	0.787				
4) Dedication	0.872	0.632	0.273	0.892	0.430***	-0.042	0.523***	0.795			
5) Absorption	0.74	0.500	0.269	0.766	0.364***	-0.03	0.408***	0.518***	0.7		
6) Self-emotion appraisal	0.781	0.544	0.323	0.789	0.428***	0.02	0.135	0.184*	0.176*	0.738	
7) Regulation of emotion	0.852	0.591	0.52	0.866	0.621***	0.064	0.334***	0.268**	0.359***	0.569***	0.769

Source: Authors’ field survey;

Note: *** $p < 0.001$.

Table 2. HTMT analysis.

Variables	1	2	3	4	5	6	7
1) Use of emotions	-	-	-	-	-	-	-
2) Work-related psychological impact	0.032	-	-	-	-	-	-
3) Vigour	0.387	0.214	-	-	-	-	-
4) Dedication	0.456	0.013	0.514	-	-	-	-
5) Absorption	0.345	0.05	0.443	0.485	-	-	-
6) Self-emotion appraisal	0.459	0.026	0.184	0.241	0.175	-	-
7) Regulation of emotion	0.713	0.02	0.337	0.279	0.337	0.597	-

Source: Authors' field survey.

4.2. Analysis of structural model

The structural model shows a positive and significant connection between emotional intelligence (use of emotions, self-emotional evaluation, and emotional management) and work engagement, thus, lending support to hypothesis H1a, H1b and H1c. This implies that employees with high EI have a corresponding high work engagement. Out of the three independent dimensions, the use of emotions positively impacted work engagement, followed by self-emotion assessment and management of emotion. Also, work-related psychological impact negatively moderated the positive influence on use of emotion on work engagement. However, the moderating effects of work-related psychological impact on the effects of self-emotional assessment and management of emotion on WE were, however, not statistically significant. Therefore, hypothesis H2 is partly supported.

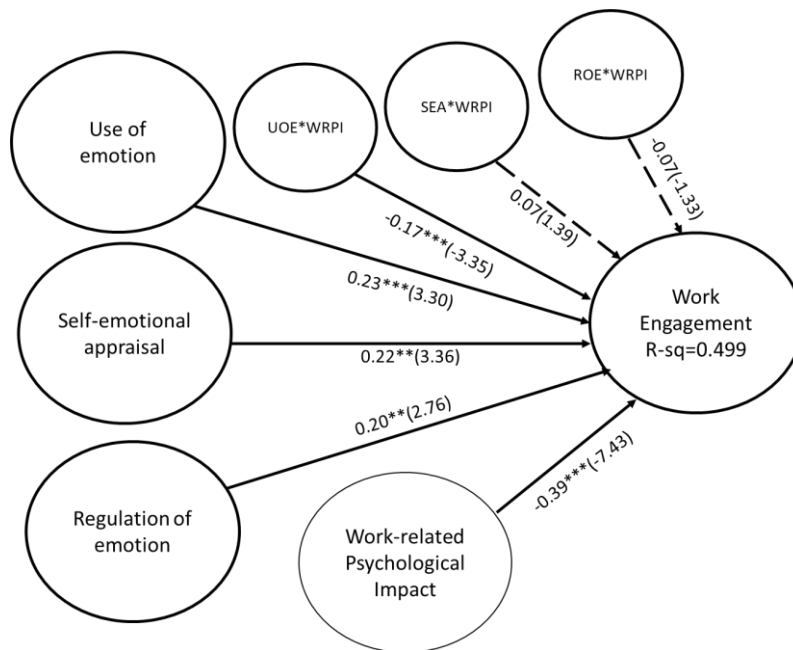


Figure 1. Structural model analysis.

Note: *** $p < 0.001$; ** $p < 0.01$; dotted line means path is not significant.

Source: Authors' field survey.

4.3. Moderation analysis

The negative moderating effect of work-related psychological impact on the use of emotions (emotional intelligence) and work engagement is illustrated in **Figure 1**. It can be observed that the two slopes are not parallel, thus, showing evidence of moderation. The moderation is negative because the low work-related

psychological impact has a higher effect on work engagement than its corresponding high work-related psychological impact.

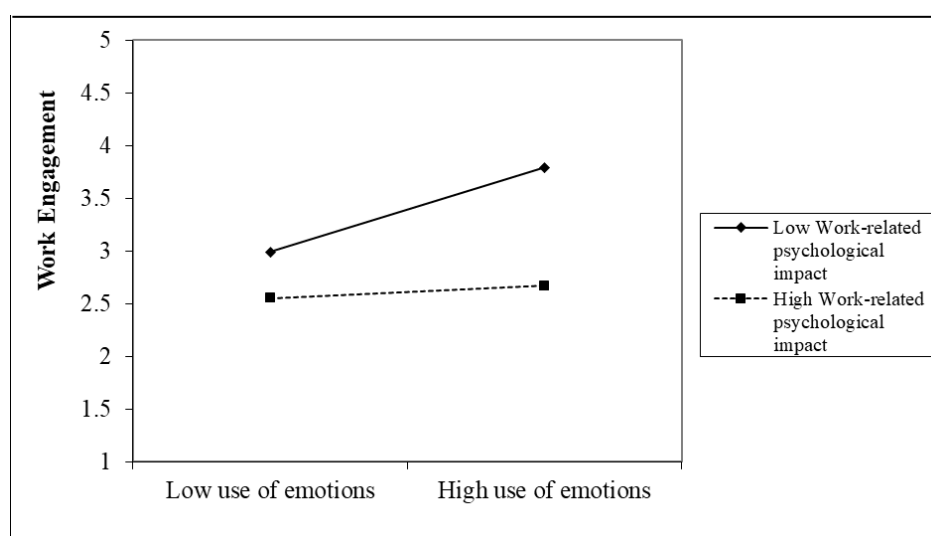


Figure 1. Moderating effect of work-related psychological impact on emotional intelligence (use of emotions) and work engagement. Source: Authors’ field survey.

5. Discussion

This research examined the connection between EI and work engagement drawing on the CMR theoretical perspective. The findings of this study revealed that EI (use of emotions, self-emotional appraisal, and regulation of emotion) is significantly positively related to work engagement, which is consistent with previous studies on EI and work engagement^[7,40,72,73]. Thus, high emotional intelligence leads to corresponding high work engagement. This has two consequences. First, it suggests that EI is vital to employee work engagement. Therefore, emotionally intelligent employees, who understand their emotions and use their emotions effectively, will be more engaged. This confirmed the results of previous studies^[9,40,74]. EI as a dexterity can assist individuals to manage emotional needs, self-appraise and utilise personal emotions effectively to successfully build relationships with others^[9,75,76]. This corroborates a study by Extremera et al.^[77] on Spanish professionals, indicating that high emotional intelligence can enable an employee to have a lot of energy, show dedication at work and be fully absorbed in their tasks.

The results also revealed that, out of the three variables, utilising emotions had the most positive influence on work engagement. The emotions of a worker represent a “momentarily state, a relatively short and intense episode in constant modification in accordance with rapid changes in situational factors”^[78]. This highlights the importance of emotions as personal resources which workers draw from to influence their work engagement. Consequently, employees who fail to use personal emotions in relationships are likely to have challenges that can negatively affect their engagement^[79]. Therefore, managers in public sectors should ensure that employees develop high levels of abilities and skills to self-appraise, regulate and use their emotions.

Another major finding was that work-related psychological impact negatively moderated the positive influence of utilising emotion on work engagement. This implies that utilising emotions has a direct (positive) influence on work engagement. However, if there are related psychological issues, it impedes (negatively affect) work engagement. That explains why when emotions are utilised to ensure a level of stability in emotions, it improves the negative relationship between fear and engagement^[80]. Some factors that create and cause work-related psychological impact include teleworking, which causes loneliness, irritability, worry, guilt^[81], stress^[82], fear^[80] and anxiety^[83]. Thus, when workers experience loneliness, irritability, worry, guilt, stress and anxiety,

it will negatively affect them^[84]. In addition, the qualitative data revealed that COVID-19 had a negative psychological influence on the participants. This is illustrated in Extracts 1 to 4:

Extract 1:

With most colleagues getting infected with COVID-19, the workload on the remaining staff on duty increases leading to the stressing out [sic] of staff. Also, inadequate (personal protective equipment) PPEs created a lot of anxiety and fear among us, which affected me psychologically.

Extract 2:

Life is just not the same after the COVID-19 pandemic, as it looks like we may not be able to return to life before COVID, and for me, this stresses me.

Extract 3:

I have tried my best to adapt to the environment, even though I am scared it is not safe here, and you know if you don't feel safe and you are anxious, it will affect the effort you put into your job.

Extract 4:

I have experienced anxiety related to the COVID-19 pandemic and also fear that my family may contract it when I'm exposed to it, so when I go to work, I cannot even concentrate because of the fear.

Thus, these factors had a negative psychological impact on the respondents. This finding corroborates earlier findings that stress, and anxiety negatively impact the engagement level of employees^[80,85]. In explaining the results from the Cognitive–Motivational–Relational (CMR) theory of emotions^[54] personal resources are critical antecedents to employees' engagement. Therefore, if employees are emotionally intelligent (personal resource) and effectively deal with personal emotions and that of others, they are able to calm anxieties in other people and assist in the management of stress^[86,87]. This will reduce the negative relationship between stress and anxiety on their level of work engagement.

Managerial implications

The emotions of employees can have a significant impact at work for several reasons. For instance, such impacts are felt during changes like mergers, transfers and resignations. Management is encouraged to ensure employees control and utilise their emotions positively to increase their level of engagement for organisational success. This is backed by the finding that purports the use of emotions as the most significant dimension of EI with a high positive impact on employees' engagement. Also, managers have to implement policies and practices to create a conducive environment that reduces employees' stress levels caused by the COVID-19 pandemic. This is because work-related psychological impact negatively moderated the positive influence of the use of emotion on work engagement. It will increase employees' engagement level so they can work with vigour, dedication and commitment.

6. Limitations and future research

Despite the contributions of this study, the findings must be interpreted considering these limitations. First, data were collected from public sector employees, therefore, the generalisation of the findings must be done with caution. Future studies can also comparative research involving the private sector to help identify any (possible) difference in results. Second, the use of self-report to measure the study variables constitute another limitation. Even though self-reports are considered appropriate in certain situations, they limit the reliability of the survey instrument. Future studies should collect data from not only employees but also managers in the rating of the study variables.

7. Conclusion

Our study examined the relationship between EI and work engagement. It further tests the moderating effect of work-related psychological impact in the EI-work engagement relationship. The results of our study demonstrate that EI is positively related to work engagement. In addition, work-related psychological impact moderates the relationship between EI and work engagement. The findings of our study contribute to the EI literature by highlighting the role of emotions in employee work performance outcomes. Our findings are relevant to public sector organisations as it suggests that employees within the public sector must consciously use their emotions to develop and build positive and cordial relationships with their co-workers. This will ensure that they get engaged and work with vigour for organisational success. Similarly, management must be mindful of how EI impacts employees' work engagement. Further, because work-related psychological impact negatively moderated the positive effect of the use of emotion on work engagement, employees are encouraged to use their emotions for a direct influence on work engagement and ensure a reduction in work-related psychological issues to reduce its negative effect on work engagement.

Author contributions

Conceptualization, TOD and ES; methodology, TOD, ES and ODDZ; software, FF; validation, TOD, ES, ODDZ and FF; formal analysis, ES; investigation, TOD and ES; resources, TOD and FF; data curation, ES; writing—original draft preparation, TOD, ES, ODDZ and FF; writing—review and editing, ES and TOD. All authors have read and agreed to the published version of the manuscript.

Conflict of interest

The authors declare no conflict of interest.

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