The Effectiveness of Humble Leadership to Mitigate Employee Burnout in the Healthcare Sector: A Structural Equation Model Approach

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Abstract: The discussion on employee burnout (BOT) has existed in academic literature for a long time. While BOT was identified as a personal issue, there is a lack of a system approach solution. In this regard, a milestone was achieved in 2019 when the World Health Organization (WHO) introduced a new definition of BOT, recognising it as an occupational phenomenon, thereby placing a greater responsibility on organisational leadership to manage it. Since then, different leadership models have been proposed by scholars to reduce the effect of BOT in an organisation. Humble leadership (HL), as a people-first approach, has recently gained importance in organisational management literature. Studies have indicated that HL significantly influences different employee outcomes. However, research on the significance of HL to mitigate BOT of employees was scarce—similarly, on the underlying mechanisms of how and why. While HL has the potential to reduce BOT in an organisation, little or no research has studied it. Acknowledging these knowledge gaps, the basic aim of this study is to enrich the existing body of knowledge by proposing HL as an effective organisational management strategy to reduce the effect of BOT in the healthcare sector. The study introduces two mediators, work engagement (WREN) and subjective wellbeing (SUBW), to explain the underlying mechanism between HL and BOT. The conditional indirect role of altruism (ALM) was also tested. The data were obtained from hospital employees by employing a survey method (questionnaire, n = 303). Structural equation model (SEM) was considered for testing the hypothesised model to study the interrelationships between variables. The results confirmed that the manifestation of HL in an organisation reduces BOT significantly, and WREN and SUBW mediate this relationship. The study also demonstrates the buffering effect of ALM in the above-proposed relationships. The empirical findings offer multiple contributions in theory and practice, among which the most important one was to realise the profound importance of HL in reducing the effect of BOT in healthcare management.

Keywords: humble leadership; employee wellness; burnout; public health

1. Introduction

The literature on human psychology and enterprise management indicates that burnout (BOT) is a critical issue that brings various personal and organisational disruptions [1,2]. At a personal level, BOT affects employees negatively, for instance, with sleep deprivation [3], poor digestion [4], aches, and pain [4]. Not only is the physical health of burned-out employees at stake, such employees face different psychological issues as well, which include, but are not limited to, depression [5], stress [6], and emotional exhaustion [7]. In addition to the above adverse effects on individuals, BOT can be associated
with hypothalamus–pituitary–adrenal axis dysregulation [8]. Research also suggests that burned-out individuals receive a change in brain structure that may include a decreased level of the grey matter of the amygdala in the human brain [9].

While the personal disruptions of BOT are countless, it has several negative consequences at an organisational level. For example, past research shows that an organisation where employee BOT is a common phenomenon is expected to lose its social fabric, thereby facing lower productivity [10] and poor employee engagement [11]. Similarly, evidence suggests that burned-out employees are less likely to control different emotional stressors in limbic networks [12].

Although BOT has been recognised as an epidemic in enterprise management literature, and both theoretical and empirical research rates it as a critical issue, most of the previous literature on employee BOT lies with the investigation approach and identifies BOT as an individual issue [13,14]. Equally essential to mention here is that BOT causes huge financial expenses in the global economy, which are more than the annual profit of different multinationals, including Apple [15].

In this regard, a milestone was achieved in 2019 when the World Health Organization (WHO) introduced a new definition of BOT. According to WHO, BOT has been recognised as an occupational phenomenon antecedent of unmanaged chronic work-related stress [16]. Since adding this new definition to the BOT lexicon, different behavioural scientists have indicated that managing BOT at an individual level is a mere effort of fixing oval shapes into round holes. Specifically, Rothstein [17] shared his concerns that assuming BOT as a personality issue is misleading. The same problem was shared by Jennifer [18], who believed that an organisational attempt to fix BOT by pursuing different personal band-aid explanations was meaningless. Hence, considering the new definition of WHO, a system approach to deal with the BOT epidemic is necessary, rather than applying personal-based solutions. This places responsibility on organisational management, highlighting the role of leadership in dealing with the plight of BOT in an organisational milieu.

Perhaps this is one of the reasons that the recent literature on leadership styles and organisational management started to realise the role of leadership in reducing employees’ BOT. To this end, different leadership models have been proposed by various scholars [19,20]. However, we tend to extend this debate in a humble leadership (HL) framework. We are in line with the definition by Owens and Hekman [21], who proposed that HL is a person who not only acknowledges his/her own mistakes and limitations but recognises the strengths and contributions of the followers. Additionally, such a leader guides and supports followers, especially in difficult times, by providing them with the needed resources. We expect an effective HL can reduce employees’ BOT for two reasons. First, among the different characteristics of HL, the three most relevant characteristics are openness, appreciation of others (employees), and willingness to perceive oneself accurately [21].

From this viewpoint, HL respects employees’ efforts and desires and is open to everyone to discuss new solutions and feedback, thereby developing a workplace environment characterised by unity, commitment, and accomplishment [22]. All these factors are essential to improve employees’ mental health, ultimately reducing the threat of BOT. Second, the literature recognised HL as a people-first leadership style in which a leader pays attention to the concerns of others [23,24]. Indeed, Afshan, Kashif [25] indicated that HL, as a bottom-up management approach, observes and listens to employees’ issues and increases interactions with the followers. Thereby, HL builds a supportive environment in a workplace where employees face fewer conflicts and, hence, are more resilient in fighting against BOT. Although the past literature documents several employee outcomes in an HL framework, how HL can reduce employee BOT remained an understudied area, with some exceptions [25]. We feel such a limited explanation is insufficient to advance the debate and reach a consensus; therefore, more research is required in this area. Therefore, the primary objective of this study is to investigate the relationship between HL and BOT.

Perhaps Avolio, Walumbwa [26] were the pioneers who emphasised the importance of using psychological mediators to explain the mechanism of human psychology in a leader-
ship framework. They further stressed that the manifestation of such psychological factors helps us understand a specific aspect of human psychology as an outcome of leadership. Subsequently, different leadership frameworks have identified different mediators [7, 27, 28]. Consistent with this research stream, this study proposes two psychological factors, work engagement (WREN) and subjective well-being (SUBW), to understand how HL reduces BOT in an organisational milieu.

Similarly, the literature highlights the role of personal values in guiding/shaping or influencing human behaviour. Values have been a part of academic discussion for a long time. However, it was also emphasised that the value framework of individuals only provides a general guideline [29] and, hence, requires a certain context to guide/shape or influence a specific outcome. This implies that instead of examining the direct impact of personal values on a particular individual outcome, it is more important to assume the moderating or mediating role of personal values. This set of arguments also receives support from the work by Zasuwa [30] and Marbach, Lages [31]. Following this, we propose the conditional indirect role of altruism (ALM) between the mediated relationship of HL and BOT via WREN and SUBW. ALM, as a personal value, focuses on the well-being of others [32] and has been related to employees’ BOT [33, 34]. The literature also supports that the ALM of a person is influenced by social contexts, including leadership (HL, in this study) [35, 36]. Therefore, it will be worthwhile to investigate the indirect role of ALM in the above-proposed relationship.

This study chooses the healthcare system of Pakistan, a lower-middle-income country in South Asia. This sector and country have been selected for the following reasons. First, studies have consistently reported that the plight of BOT exists more in healthcare employees than in other segments [2, 37–39]. Various challenges, including irregular and long working hours, demanding working conditions, traumatic incidents, etc., are reasons for increasing pressure on employees in this sector. Therefore, reducing employees’ BOT in this sector is worthwhile. Second, from a financial aspect, the healthcare system worldwide faces resource scarcity. Pragmatically, this issue is more intense in poor and lower-middle-income countries because such countries are in more acute conditions than rich countries [40, 41]. However, most studies on BOT were conducted in developed or high-income countries, leaving the terrain of developing and emerging countries unattended. A third reason to consider the healthcare sector of a developing country is that studies have shown that a specific leadership style produces different results in different cultures [42, 43]. Therefore, replicating the results of leadership studies from dissimilar cultures may have consequences, highlighting the need to conduct studies concerning a specific culture.

Altogether, this study contributes to the existing body of knowledge. First, this study intends to enrich the literature on human psychology and enterprise management from leadership, especially HL and BOT perspectives, which were less focused on previously. In the second place, this study proposes a robust model to understand the HL-BOT relationship. This robustness is because this study considers different psychological factors (mediators) and personality factors (moderators) to explain BOT in the leadership framework in a unified model. Considering that human psychology is difficult to understand because different factors shape it, it is crucial to consider different psychological and personality-related factors in a unified model. However, such an explanation of BOT in a unified model, at least to the best of our knowledge, did not exist. In third place, this study attempts to advance the debate on BOT in a leadership framework in the healthcare context of a lower-middle-income country. Previously, the context of HL was not applied to a healthcare system; if used, it was not the case in lower-middle-income countries.

2. Theory and Hypotheses

We draw on the theory of conservation of resources (CNR) to support the logical arguments and to propose the hypothesised relationships. Hobfoll [44] was the founder of CNR, who believed that individuals are likely to obtain, build, and protect resources (both
personal and contextual) that they feel are worthwhile to fight against uncertain situations. Extending his view, behavioural scientists Halbesleben, Neveu [45] proposed two forms of resources: personal and contextual. Halbesleben and colleagues believed both types of resources are essential in protecting a person in uncertain situations. In this regard, when a person believes he or she has inadequate resources or resources have been lost while facing an uncertain situation, this feeling of resource loss or insufficiency increases the risk of a person being burned out. From the perspective of contextual resources, leadership scholars are convinced that in an organisational milieu, an effective corporate leader may be regarded as a hub of contextual resources [46,47]. To this end, a leader’s humbleness can also be considered a base for various contextual resources for the employees. Specifically, as a people-first approach, an HL intends to promote the wellbeing of employees even at the risk of their gains.

Additionally, a leader’s humbleness develops a working environment characterised by trust, respect, and openness by allowing employees to share their concerns and involving them in the organisational decisional process [48]. HL not only shows a concern for the well-being of employees but as a people-first approach. He or she does not leave his/her team alone in difficult times. Instead, HL provides the necessary support to his or her team, which improves employees’ morale. An employee with high morale is expected to show greater resilience to combat BOT. The previous literature on HL also supports this argument [25,49].

Similarly, the contextual resources provided by HL in an organisation justify why employees are under the supervision of HL; employees are better engaged and show more commitment. Indeed, previous scholars have argued that a humble manager keeps the morale of his/her team high by appreciating and encouraging them when they achieve some goal or task [49,50]. This appreciation and encouragement infuse positive energy among employees, which reduces feelings of resource depletion and improves their engagement. In addition, as a people-first leader, HL emphasises fostering the wellbeing of employees in an organisation. For this purpose, HL takes different initiatives for the welfare of employees, such as providing them with greater work flexibility, helping them achieve organisational tasks, guiding them on how to do a job, and arranging different training sessions to improve the skill sets of employees [51]. Such supportive actions inculcate this healthy feeling among employees that their leadership is concerned with their wellbeing, which, in return, fosters SUBW and reduces the fear of resource depletion.

Moreover, the focus of ALM and HL are the same because employees with high altruism and a leader under the philosophy of humbleness show concern for benefiting others with his/her actions. Indeed, in the presence of a humble manager, we expect that there will be an increase in employees’ altruism, which becomes a personal resource that provides employees with more zest to serve humanity in a healthcare organisation. The increased level of zest due to altruism may help employees not be mere victims of BOT. BOT on the part of employees occurs when valuable resources of employees are lost or consumed [52]. Various forms of BOT consist of employee exhaustion, frustration, lower level of accomplishment, depersonalisation, and cynical attitudes [53,54]. Reasonably, an increased level of BOT may lead employees toward negative situations where they may decide to quit an organisation [55]. The literature on organisational management has argued that an effective leader can significantly influence employees’ psychology and behaviour [56,57]. From the perspective of humbleness, Vera and Rodriguez-Lopez [58] indicated that HL is a great strength through which a leader can influence different employee outcomes. Specifically, past researchers have suggested that a leader’s humbleness can directly or indirectly affect employee performance. For example, in a recent study, Wang, Liu [59] indicated that the humbleness in a leader positively enhances employees’ task performance by improving the relational energy of employees with HL. Similarly, scholars like Qin, Chen [60] concluded that a leader’s humbleness boosts employees’ psychological entitlement, which then reduces the deviant workplace behaviour of employees.
Additionally, it was mentioned that humbleness in a corporate leader significantly enhances team performance via a team collective promotion focus by a humble leader [61]. As a people-first approach, HL applies a bottom-up management approach by carefully listening to and observing employees’ concerns. Specifically, HL shows a genuine concern for the betterment of employees [62]. Moreover, a leader’s humbleness assures employees that their leadership will back them in difficult times. With this, employees believe they will receive the necessary support from their leader, giving them extra energy to face uncertainty and recover from it successfully [49]. Humbleness in a leader can undoubtedly influence/shape employees’ psychology positively. At the same time, leadership humbleness can be linked to effectively managing the risk of BOT. Reflecting this, the study by Afshan, Kashif [25] indicated that a corporate leader with a humble approach to employee management has a sense of relief on the part of employees as an outcome of a leader’s humbleness. This sense of relief provides them with extra energy, which helps employees to resist the epidemic of BOT.

Similarly, scholars have argued that HL can bring effectiveness to an organisation by fostering positive employee outcomes and curbing adverse outcomes [63]. Brian [64] mentioned that an HL inculcates positive energy among employees by praising them, supporting them, and asking them to provide feedback to solve a workplace problem. Hence, the contextual resources provided by an HL may reduce BOT among employees. Other scholars have also argued in favour of HL reducing employees’ BOT [65]. Specifically, Owens [66] proposed that HL, in the context of health care, creates different relational outcomes with employees by, for example, a supportive working context, empowering employees, involving them in organisational decision making, and effective task allocation. Such relational support by HL influences different employee outcomes including job authenticity, well-being, and lessened job burnout. In addition, by referring to CNR, we believe that a leader’s humbleness serves as a base of a contextual resource that provides an added support to the employees while fixing an uncertain situation. Hence, we expect that:

**H1:** The manifestation of a humbler leader in an organisation may negatively predict burnout.

HL has been previously associated with different employee outcomes [67,68]. HL can significantly foster the WREN level of employees [69]. We use the definition by Kahn [70] to conceptualise WE. According to Kahn, WREN is “a person’s self-connection with his or her job or work by integrating physical, cognitive and emotional resources”. While the positive outcomes of engaged employees have been recognised in the previous literature [71,72], the literature also indicates the adverse consequences for an organisation associated with disengaged employees [73]. Past literature suggests that engaged employees are less likely to face the risk of BOT [74,75]. Specifically, a recent study carried out by GALLUP on 2442 employees showed that employees with a higher level of WREN have improved mental health. Thus they are less likely to face a highly stressed situation. Thereby, such employees are less prone to burnout [76].

Interestingly, leadership scholars believe that an effective leadership style can significantly improve the WREN of employees [77,78]. Specifically, HL influences the WREN of employees positively. Extending this debate, Owens and Hekman [21] have argued that one of the characteristics of HL is to match an employee’s strength with a specific job task. Moreover, such leaders also involve employees in the organisational decisional process, increasing followers’ engagement. Consistent with the previous studies, we expect HL will improve the WREN level of employees, which then mediates between HL and BOT. Therefore:

**H2:** The manifestation of a humble leader in an organisation improves the work engagement level of employees.

**H3:** Work engagement will mediate between humble leadership and burnout.

With increasing attention in the recent literature on positive employee psychology and especially the sustainability of employee psychology, leadership scholars are more
interested in understanding how an effective leader can enhance employee wellness [79]. Theoretically, employee wellness includes organisational interventions or programs to promote employees’ health (both physical and mental) [80]. Employee wellness not only brings different benefits to an organisation, but the literature also establishes a negative link between employee wellness and BOT [81]. A similar finding was shared by Erin [82], who indicated that prioritising employee wellness reduces employees’ BOT.

Effective leadership is critical among different organisational interventions to promote the SUBW of employees. Even though every individual is self-responsible for his or her wellness, in an organisational milieu, leadership is essential in improving employees’ wellness perceptions [83]. Shanafelt, Sloan [84] believed that organisational awareness regarding the issues of employees and recognition of their problems might be critical in raising their wellness level. Specifically, a leader’s humbleness can inculcate this feeling among employees that their leadership is genuinely concerned about their wellness [85]. Moreover, we refer to the work of Erin [82], who found that 80% of organisations believed that they support their employees by promoting their physical and mental health. However, only 46% of employees perceived that their organisation was supportive. This highlights the critical role of a leader. In line with the previous research that rates leadership as an essential predictor of SUBW of employees, we argue that an HL tends to provide employees with adequate support and a work environment in which employees are less likely to face conflicts and conflict ambiguities. At the same time, HL invites employees to partake in the organisational decisional process to reach an effective solution to a problem [85]. When employees are provided with a supportive environment by their leadership, their perception of SUBW improves, which is expected to reduce BOT. Therefore:

**H4:** The manifestation of humble leadership in an organisation may promote employees’ subjective well-being.

**H5:** Subjective well-being of employees mediates between humble leadership and burnout.

The study by Simmons [86] mentions that ALM is an act of an individual in which he or she shows a willingness to help others without expecting any reward or benefit. Academically, the concept of ALM was defined by Podsakoff, MacKenzie [87], who argued that ALM involves the process of helping others in different circumstances and occasions. Applying the concept in an organisational milieu, ALM means employees or leaders assisting coworkers or followers who are overworked or need help for other reasons [36]. Research shows that individuals with a higher level of ALM show more energy and commitment to complete a job task. Such people face less risk of being burned out because their altruistic preference provides them with an added energy source [33,88]. The work of Owens and Hekman [21] indicated that a leader’s humbleness is one of the organisational virtues that positively spur ALM among employees. Van Dierendonck and Patterson [89] mentioned that the humbleness of a leader, as a people-first approach, entails a focus on employees. Specifically, Carnevale, Huang [90] provided statistical evidence that humbleness in leadership may significantly urge employees to help others. Because such leaders (HL) employ a people-first approach, they infuse a feeling of trust and help among employees, which they reciprocate positively. Nielsen and Marrone [48] believed that humbleness might strengthen helpfulness among employees. Because past literature discusses a positive relation between ALM and WREN [91,92] and between ALM and SUBW [93] and because HL enhances ALM of employees, we propose the following:

**H6:** Altruism moderates the mediated relationship between humble leadership and burnout via work engagement.

**H7:** Altruism moderates the mediated relationship between humble leadership and burnout via subjective well-being.
3. Research Method
3.1. Unit of Analysis, Sample, and Procedure

Hospital employees were invited to participate in this survey; therefore, the unit of analysis was “individuals.” To proceed with the data collection process, we selected two large cities in Pakistan: Karachi and Lahore. The former is the provincial capital of Sindh province, whereas the latter is the capital of the province of Punjab (the largest in Pakistan concerning population). The two cities were selected to serve the purpose of this survey because both cities constitute a huge umbrella of hospitals (public and private). The public health stats in both cities are poor because of different social and environmental situations, so massive patient traffic must be attended to by the staff of various hospitals regularly. The fully loaded situation in most hospitals, followed by low, poor physician-to-patient and nurse-to-patient ratios, are some of the critical issues giving rise to the risk of BOT among employees. Being in the list of lower-middle-income nations, the health facility index of the country is poor (154th out of 195 countries) [94]. A formal request was sent to different hospitals (public and private) to facilitate the process of data collection. Hospitals with positive responses were then approached (four in Lahore and two in Karachi). The sampled employees included both males and females. Moreover, employees with managerial ranks and nonmanagerial ranks were included in this study. Specifically, the data collection activity was carried out between March and May 2022.

3.2. Data Collection Instrument and Measures

A printed version of the questionnaire (paper-pencil method) was used in this survey as a data collection instrument. This questionnaire was the adapted one. The adapted instrument was presented to field experts for expert opinion [95–98]. Once the experts verified the suitability of our instrument (questionnaire), we were able to produce it for the respondents. A five-point Likert scale was used to record respondents’ perceptual ratings. A three-wave data collection strategy was followed in this survey. Each time was separately managed with an interval of two weeks. This was purposefully done to reduce social desirability and respondents’ fatigue and to limit the potential issue of common-method variance (CMV). The ethical consideration given in the Helsinki Declaration was also observed to maintain ethical standards [99–102].

This analysis had five major variables: HL, BOT, WREN, SUBW, and ALM. HL was the predictor variable in this analysis, which we measured by using a nine-item scale from the study of Owens, Johnson [103]. This is a reliable scale to measure employees’ perceptions of HL (illustrated items were “Our leader is empathetic and takes others’ concerns as their own” and “Our leader shows that he/she is kind and caring and is open to advise of others”). BOT was the criterion variable we measured using a seven-item scale. Sample items from this scale were “I feel worn out at the end of the working day” and “I am exhausted in the morning at the thought of another day at work”. These items were taken from Kristensen, Borritz [104].

The two intervening variables (WREN and SUBW) were measured using the ultra-short WREN scale (UWES-3). This scale consisted of three items and was recently developed by Schaufeli, Shimazu [105]. An illustrated statement from this scale was, “I am enthusiastic about my job.” Similarly, the other intervening variable (SUBW) was measured by considering the scale of Lyubomirsky and Lepper [106]. Among the four items from this scale, a sample statement was, “In general, I consider myself a thrilled person.”

Lastly, this analysis’s interacting variable (ALM) included three items, which we adapted from Dotson, Dave [107]. An example item was, “I became a healthcare professional to help others.” All variables showed significant inter-item consistency (α) values (HL = 0.90, BOT = 0.86, WREN = 0.78, SUBW = 0.86, ALM = 0.79). Appendix A includes the complete list of survey items.
3.3. Sample Size and Data Cleaning

An a priori sample size calculator was used to decide this study’s minimum recommended sample size [108]. This application’s major strength lies in its special application designed to estimate study-specific sample size, especially for structural equation model (SEM) [109]. Specific to this study, we provided some input information to this application (for example, the number of observed (26) and latent (6) variables, effect size (we set it on medium), and significance level (we set 0.05)). Based on this input information, the calculator indicates that the minimum recommended size for this analysis should be 246. To achieve a sample size beyond 246, we distributed 500 questionnaires initially. As was expected, we did not receive all the questionnaires back from the respondents, which is a common issue with studies following a survey design for data collection. After the three successive waves of data collection, we received a final set of 338 questionnaires. These questionnaires (which we received from respondents) were then scrutinised (data cleaning, outliers, etc.). The scrutiny process revealed that 33 questionnaires did not meet the scrutiny criteria (either these were identified as responses with missing information or as outliers). After deleting such responses, a final dataset containing 305 valid answers (61%) was identified as helpful in the data analysis process. Important to mention here is that we applied a Mahalanobis technique for outlier identification. We refer to Tables 1 and 2 for further details on data cleaning and outliers. Concerning the socio-demographic stats of our sample, male respondents were almost 60% in this survey. The ages of most respondents were between 18 and 45 years (nearly 88%), and the experiences of employees were between 1 and 10 years (91%).

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<th>Table 1. Data cleaning stats.</th>
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<th>Table 2. Outliers.</th>
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4. Results

4.1. Preliminary Analysis

We carried out different statistical tests in the preliminary data analysis phase. In this vein, first, we carried out a common latent factor (CLF) test to detect any manifestation of CMV in the dataset of this analysis. For this reason, two measurement models were developed containing an original hypothesised model (five-factor) and a model that included a latent factor. This CLF-contrasted model was assessed by comparing it with the original model. The model with a CLF was developed so that the latent factor was
permitted to influence all of the observed variables (the items). This exercise aimed to see if the CLF-contrasted and originally hypothesised models differed significantly. A significant difference occurs if the standardised factor loadings ($\lambda$) of the original model are substantially different (>0.2) from those of a CLF-contrasted model. However, in the current analysis, no such significant difference existed, meaning that the manifestation of a CLF into the measurement model did not produce any difference (although slight differences existed <0.2) in $\lambda$-values, indicating that CMV was not a critical issue in this study.

Next, to verify the validity and reliability of our variables, we calculated the average variance extracted values of our variables separately. For such calculations, the $\lambda$-values of a specific variable were considered again with the help of the following formula.

$$AVE = \frac{\sum_{i=1}^{k} \lambda_i^2}{\sum_{i=1}^{k} \lambda_i^2 + \sum_{i=1}^{k} \text{var}(\varepsilon_i)}$$  \hspace{1cm} (1)

The AVEs for all variables were significant (>0.5), implying that the convergent validity of all five variables (HL, BOT, WREN, SUBW, and ALM) was significant. Pragmatically, the AVEs varied from 0.54 (ALM) to 0.61 (HL). Hence, the convergent validity was acceptable in the light of statistical evidence.

Later on, in the preliminary data analysis stage, we calculated each variable’s composite reliability by using the formula below (Equation (2)).

$$\text{Composite reliability} = \frac{(\sum \lambda_i)2}{(\sum \lambda_i)2 + \sum \text{var}(\varepsilon_i)}$$ \hspace{1cm} (2)

The empirical investigation showed that the composite reliability of all five variables was significant (>0.7), confirming that there was no issue in claiming that the reliability for all variables was significant. Specifically, the highest composite reliability value was 0.93 (HL), and the lowest was 0.78 (ALM). Table 3 summarises all these results.

What we did next in the phase of our preliminary data analysis was to confirm if our originally hypothesised model best fits the dataset or not. We prepared four measurement models to decide on such an empirical criterion (Table 4) [110,111]. Among these models, only model-1 was the originally hypothesised model (five-factor). In contrast, all other models were alternate models developed with different compositions (Table 4). We considered different model fit indices to decide on the superiority of a specific model. For instance, the goodness of fit index $\rightarrow$ GFI, Tucker Lewis index $\rightarrow$ TLI, incremental fit index $\rightarrow$ IFI, comparative fit index $\rightarrow$ CFI, root mean square error of approximation $\rightarrow$ RMSEA, and chi-square $\rightarrow$ $\chi^2$ values were observed against their standard values. In this regard, a one-factor model (model-4) poorly fitted to the data because all model fit indicators were poor (GFI = 0.47, TLI = 0.50, IFI = 0.50, CFI = 0.51, RMSEA = 0.196, and $\chi^2/df = 9.06$), indicating that this was not the appropriate model. Model-2 and model-3 produced mixed results, although some of the model fit indicators were good; however, $\chi^2/df$ were indeed poor (especially in model-3), implying that there was not a good fit between theory and data. Nevertheless, the originally hypothesised model produced excellent results because all model fit indicators were superior to all other models (GFI = 0.96, TLI = 0.96, IFI = 0.97, CFI = 0.96, RMSEA = 0.044, and $\chi^2/df = 1.99$). These statistical results confirmed that there was an exemplary match between this measurement model and the statistical data.

In the last phase of the preliminary data analysis, we performed a correlation analysis to see the nature of the association betwixt different variables. The results produced mixed values, indicating that some variable pairs were positively related and some had a negative relation. However, all cases produced significant results ($p < 0.05$ or 0.01), providing initial support to the theoretical statements of the hypotheses. An example where a positive relationship existed was between HL $\leftrightarrow$ ALM = 0.39. In contrast, the association between HL $\leftrightarrow$ BOT was negative ($-0.42$). Moreover, no relationship was within the critical range (0.8 to 1), indicating the non-manifestation of multicollinearity. We also reported discriminant validity results in Table 5 (diagonal values), which showed that the items of one variable did not match with the items of any other variable.
Table 3. Validity and reliability.

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<tr>
<td>AVE</td>
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</tr>
<tr>
<td>CR</td>
<td>0.74</td>
<td>0.55</td>
<td>0.45</td>
</tr>
<tr>
<td>( \sum \lambda^2 )</td>
<td>0.82</td>
<td>0.67</td>
<td>0.33</td>
</tr>
<tr>
<td>Items</td>
<td>9</td>
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<tr>
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<tr>
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<td>0.86</td>
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<tr>
<td>AVE</td>
<td>0.63</td>
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<tr>
<td>CR</td>
<td>0.72</td>
<td>0.52</td>
<td>0.48</td>
</tr>
<tr>
<td>( \sum \lambda^2 )</td>
<td>0.73</td>
<td>0.53</td>
<td>0.47</td>
</tr>
<tr>
<td>Items</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WREN</td>
<td>0.60</td>
<td>0.82</td>
<td>0.67</td>
</tr>
<tr>
<td></td>
<td>0.82</td>
<td>0.67</td>
<td>0.33</td>
</tr>
<tr>
<td></td>
<td>0.77</td>
<td>0.59</td>
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</tr>
<tr>
<td>AVE</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>CR</td>
<td>0.73</td>
<td>0.53</td>
<td>0.47</td>
</tr>
<tr>
<td>( \sum \lambda^2 )</td>
<td>0.73</td>
<td>0.53</td>
<td>0.47</td>
</tr>
<tr>
<td>Items</td>
<td>7</td>
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<tr>
<td>NREM</td>
<td>0.57</td>
<td>0.70</td>
<td>0.49</td>
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<td></td>
<td>0.70</td>
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<td></td>
<td>0.75</td>
<td>0.56</td>
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<tr>
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<td></td>
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<tr>
<td>CR</td>
<td>0.75</td>
<td>0.56</td>
<td>0.44</td>
</tr>
<tr>
<td>( \sum \lambda^2 )</td>
<td>0.75</td>
<td>0.56</td>
<td>0.44</td>
</tr>
<tr>
<td>Items</td>
<td>4</td>
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<tr>
<td>ALM</td>
<td>0.54</td>
<td>0.76</td>
<td>0.58</td>
</tr>
<tr>
<td></td>
<td>0.76</td>
<td>0.58</td>
<td>0.42</td>
</tr>
<tr>
<td></td>
<td>0.71</td>
<td>0.50</td>
<td>0.50</td>
</tr>
<tr>
<td>AVE</td>
<td>0.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CR</td>
<td>0.71</td>
<td>0.50</td>
<td>0.50</td>
</tr>
<tr>
<td>( \sum \lambda^2 )</td>
<td>0.74</td>
<td>0.55</td>
<td>0.45</td>
</tr>
<tr>
<td>Items</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: \( \lambda \) = item loadings, CR = composite reliability, \( \sum \lambda^2 \) = sum of the square of item loadings, E-Variance = error variance.

4.2. Main Analysis

In the main data analysis part, we tested the hypothesised relationships (Figure 1) by applying structural equation mode (SEM) [101,112]. We performed this analysis mainly in AMOS software; however, the PROCESS macro developed by Hayes [113] was also used to estimate different equations. In this regard, we followed this macro’s major guidelines of model-7. Before performing this main analysis, we confirmed the major assumption of the estimation strategy; for example, the normality of the data was confirmed by assessing the skewness and kurtosis values. Moreover, the predictor and interacting variables (HL and ALM) were mean-centred in SPSS Software. The same software was used to generate an interaction term (HL_x_ALM). To calculate the conditional indirect effect of ALM between the mediated relationships, we developed different equations using the user-defined estimand in the AMOS application [114]. Finally, the bootstrapping option was enabled using a larger bootstrapping sample (we used 5000 samples) [115].
Table 4. Model fit comparison, alternate vs. hypothesised models.

<table>
<thead>
<tr>
<th>Model</th>
<th>Composition</th>
<th>$\chi^2$/df (&lt;3)</th>
<th>$\Delta \chi^2$/df -</th>
<th>RMSEA (&lt;0.08)</th>
<th>GFI (&gt;0.9)</th>
<th>TLI (&gt;0.9)</th>
<th>IFI (&gt;0.9)</th>
<th>CFI (&gt;0.9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HL, BOT, WREN, SUBW, ALM (Model-1)</td>
<td>1.99</td>
<td>–</td>
<td>0.044</td>
<td>0.96</td>
<td>0.96</td>
<td>0.97</td>
<td>0.96</td>
</tr>
<tr>
<td>2</td>
<td>HL + WREN + SUBW, BOT, ALM (Model-2)</td>
<td>4.89</td>
<td>2.90</td>
<td>0.057</td>
<td>0.78</td>
<td>0.77</td>
<td>0.77</td>
<td>0.79</td>
</tr>
<tr>
<td>3</td>
<td>HL + WREN + SUBW, BOT+ ALM (Model-3)</td>
<td>7.22</td>
<td>2.33</td>
<td>0.102</td>
<td>0.52</td>
<td>0.53</td>
<td>0.52</td>
<td>0.55</td>
</tr>
<tr>
<td>4</td>
<td>HL + BOT + WREN, SUBW + ALM (Model-4)</td>
<td>9.06</td>
<td>1.84</td>
<td>0.196</td>
<td>0.47</td>
<td>0.50</td>
<td>0.50</td>
<td>0.51</td>
</tr>
</tbody>
</table>

Table 5. Correlations and discriminant validity.

<table>
<thead>
<tr>
<th>Construct</th>
<th>HL</th>
<th>BOT</th>
<th>WREN</th>
<th>SUBW</th>
<th>ALM</th>
</tr>
</thead>
<tbody>
<tr>
<td>HL</td>
<td>0.78</td>
<td>-0.42</td>
<td>0.47</td>
<td>0.56</td>
<td>0.39</td>
</tr>
<tr>
<td>BOT (2.79, 0.38)</td>
<td>0.79</td>
<td>-0.41</td>
<td>-0.33</td>
<td>-0.36</td>
<td>0.44</td>
</tr>
<tr>
<td>WREN (2.84, 0.40)</td>
<td></td>
<td>0.77</td>
<td>0.59</td>
<td>0.44</td>
<td>(3.26, 0.48)</td>
</tr>
<tr>
<td>SUBW (2.53, 0.33)</td>
<td></td>
<td>(2.53, 0.33)</td>
<td>0.75</td>
<td>0.32</td>
<td>(3.33, 0.53)</td>
</tr>
<tr>
<td>ALM (3.26, 0.48)</td>
<td></td>
<td></td>
<td>(3.26, 0.48)</td>
<td>0.74</td>
<td>(3.33, 0.53)</td>
</tr>
</tbody>
</table>

Notes: values in parenthesis = mean and standard deviation, bold values = discriminant validity, $p < 0.001$.

Figure 1. The hypothesised model of this study.

After addressing all the above issues and verifying major estimation assumptions, we tested the hypothesised relationships by developing a structural model. First, we evaluated direct effects to verify H1, H2, and H4. The output of this analysis showed that H1, H2, and H3 were all statistically significant and, hence, accepted (beta values for H1 = -0.43, H2 = 0.51, H4 = 0.55, $p < 0.05$ with non-zero CI-values).

The indirect relationships (HL -> WREN -> BOT and HL -> SUBW -> BOT) were also significant because the mediation effects were statistically accepted (beta values H3 = -0.32, and H5 = -0.37, $p < 0.05$ with non-zero CI-values). The conditional effect of ALM between
HL → WREN and HL → SUBW was also observed at three different levels (for example, at mean and ± 1 SD). The conditional effect of ALM showed that ALM significantly moderates between HL → WREN (−0.28) and HL → SUBW (−0.31). Thus, it was confirmed that there is a conditional indirect effect of ALM, which was significant, providing support to accept H6 and H7. Please refer to Table 6 for direct, indirect and conditional effects.

### Table 6. Direct, indirect, and conditional effects.

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Estimates (SE)</th>
<th>t/z</th>
<th>p-Value</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>(HL → BOT)</td>
<td>−0.43(0.062)</td>
<td>−6.93</td>
<td>****</td>
<td>−0.64, −0.40</td>
</tr>
<tr>
<td>(HL → WREN)</td>
<td>0.51(0.072)</td>
<td>7.08</td>
<td>****</td>
<td>0.38, 0.67</td>
</tr>
<tr>
<td>(HL → SUBW)</td>
<td>0.55(0.079)</td>
<td>6.96</td>
<td>****</td>
<td>0.42, 0.77</td>
</tr>
<tr>
<td>Indirect effect</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(HL → WREN → BOT)</td>
<td>−0.32(0.044)</td>
<td>−7.27</td>
<td>****</td>
<td>−0.48, −0.25</td>
</tr>
<tr>
<td>HL → SUBW → BOT</td>
<td>−0.37(0.049)</td>
<td>−7.55</td>
<td>****</td>
<td>−0.50, −0.28</td>
</tr>
<tr>
<td>Conditional indirect effect</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of ALM betwixt HL → WREN → BOT</td>
<td>−0.28(.036)</td>
<td>−7.78</td>
<td>****</td>
<td>−0.37, −0.22</td>
</tr>
<tr>
<td>Conditional indirect effect</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>of ALM betwixt HL → SUBW → BOT</td>
<td>−0.31(.034)</td>
<td>−9.11</td>
<td>****</td>
<td>−0.39, −0.29</td>
</tr>
</tbody>
</table>

Notes: ****, Shows level of significance at 99 percent level of confidence.

5. Discussion

The empirical evidence supports the theoretical assumption of our hypothesis that the manifestation of HL in a hospital reduces the BOT threat on hospital employees (−0.43). A leader’s humbleness is a critical factor for a leader through which they can influence different employee outcomes. Specifically, as a people-first approach, HL supports the followers by listening to and observing their concerns. In addition, HL focuses on improving employees, energising them and motivating them to go beyond their job’s formal boundary lines. Hence, they are expected to face difficult situations energetically. Therefore, they face less BOT risk. At the same time, a leader’s humbleness infuses this feeling among the employees that they will receive support from their leadership, especially in a crisis. Employees with the faith that they will be provided with the needed support by their leader have the extra energy to face uncertainty and recover from it successfully. More specifically, humbleness in a leader can undoubtedly influence/shape the positive psychology of employees. Hence, HL can be considered a valued resource that can reduce the effect of BOT. This is also in line with CNR because a leader’s humbleness serves as a base of a contextual resource that provides added support to the employees while fixing an uncertain situation. This finding also supports the extant literature [25,49]. In line with CNR, we believe that a leader’s humbleness serves as a base of a contextual resource that provides added support to the employees while fixing an uncertain situation. HL not only shows a concern for the well-being of employees but, as a people-first approach, they do not leave their team alone in difficult times. Instead, HL provides their team with the necessary support, improving employees’ morale. An employee with high morale is expected to show greater resilience to combat BOT.

A second finding that this study highlight is the role of employees’ WREN as an outcome of HL to explain why HL can reduce the effect of BOT of employees by improving their WREN (−0.32). Pragmatically, HL improves the WREN of employees. Engaged employees are less likely to face the risk of BOT because engaged employees show better resilience to fight against the plight of BOT. A leader’s humbleness heightens the level of WREN among employees because such leaders match an employee’s strength with a specific job task. When there is a match between employees’ strengths and a job task, it is expected that they will feel less fatigue and more commitment to completing a job task.

Additionally, HL involves employees in an organisational decisional process, which gives them this feeling that their employer is engaging them even in organisational de-
decisions. This feeling makes them psychologically more powerful and leaves a good impression on their mental health, reducing the risk of BOT. Therefore, not only do HL directly influence employees’ WREN (0.51), but such leaders can mitigate the BOT of employees through the mediating effect of WREN. Previous research also supports this argument [77,78]. Additionally, by referring to CNR, we argue that the contextual resources provided by HL in an organisation justify the reason why employees are under the supervision of HL, namely, employees are better engaged and show more commitment. Indeed, previous scholars have argued that a humble manager keeps the morale of their team high by appreciating and encouraging them when they achieve some goal or task [49,50]. This appreciation and encouragement infuse employees with positive energy, reducing feelings of resource depletion and improving their engagement.

Our theoretical assumption regarding the mediating effect of SUBW was also supported by empirical evidence (−0.37). Specifically, a leader’s humbleness can inculcate this feeling among employees that their leadership is genuinely concerned about their wellness. Here we are in line with the work by Erin [82], who believed that realising this perception on the part of employees is crucial—that their employer is concerned with their wellness. A leader’s humility intends to provide employees with adequate support and a work environment, eventually improving their perception of wellness. As an antecedent of HL, employees’ wellness perception provides added support to enhance BOT. This finding is in line with the previous literature [116,117].

Moreover, concerning CNR, as a people-first leader, HL emphasises fostering the well-being of employees in an organisation. For this purpose, HL takes different initiatives for the welfare of employees—for example, providing them with greater work flexibility, helping them in achieving an organisational task, guiding them on how to do a job, and arranging different training sessions to improve the skill sets of employees [51]. Such supportive actions inculcate this healthy feeling among employees that their leadership is concerned with their wellbeing, which, in return, fosters SUBW and reduces the fear of resource depletion.

Lastly, our findings confirm that ALM provides a buffer between the indirect relationship of HL and BOT via WREN (−0.28) and SUBW (−0.31). In this regard, employees with a higher level of ALM show more energy and commitment to complete a job task. Such people face less risk of being burned out because their altruistic preference provides them with an added energy source. From the perspective of HL, a leader’s humbleness is one of the organisational virtues that positively spur ALM among employees. Specifically, as a people-first approach, HL focuses on employees’ betterment, and such a leader is always available to help the employees in an organisation. Employees positively reciprocate their leader’s helping behaviour and are expected to practice the same on their part, thereby improving their level of ALM. Therefore, employees with better ALM are more engaged [33] with an improved level of SUBW [118,119]. Indeed, from the perspective of CNR, the focus of ALM and HL is the same because employees with high altruism and leaders under the philosophy of humbleness show concern for benefiting others with their actions. Indeed, in the presence of a humble manager, we expect that there will be an increase in employees’ altruism, which becomes a personal resource that provides employees with more zest to serve humanity in a healthcare organisation. The increased level of zest due to altruism may help employees not be mere victims of BOT.

5.1. Contributions to Theory

Our research highlights the vital role of HL in a healthcare context of a lower-middle-income country. Our study offers several contributions to the existing body of knowledge in the domain of employees’ BOT. In this regard, the current literature acknowledges the critical role of an effective leadership style in reducing employee BOT risk. However, the BOT phenomenon in an HL framework, especially in a lower-middle-income country perspective, was not explored earlier, although, recently, the role of a leader’s humbleness in improving BOT was highlighted [120]; however, these authors, too, ignored the healthcare
sector, where BOT occurs at a higher rate than other segments. Therefore, extending this debate on how and why HL reduces workers’ BOT in a certain hospital organisation was essential.

The second contribution of our study to advance the theory is the importance of BOT from a financial viewpoint. We significantly extend this debate from the perspective of lower-middle-income countries. To this end, it has already been realised that BOT in a sector has a substantial financial cost. For example, estimates show that employees’ BOT in health care costs around USD 190 billion annually [121]. The financial aspect of BOT is critical in the healthcare sector because, at a global level, the healthcare system faces financial constraints. Specifically, the issue is more severe in lower-middle-income countries because such countries are in more acute conditions than rich countries [40,41]. However, most studies on BOT were conducted in developed or high-income countries, leaving the terrain of developing and emerging countries unattended.

Nevertheless, another critical contribution of our study to the theory landscape is to propose a robust model to explain the underlying mechanism of BOT in a leadership framework. We feel the current theoretical model is robust because it attempts to explain the underlying mechanism of BOT with the help of psychological and personality-related factors in a unified model. Considering the complex nature of human psychology, it was essential to understand the underlying mechanism of BOT in an HL framework with the help of mediators and moderators. However, such an approach to understanding the HL–BOT mechanism was not emphasised previously. Specifically, our work extends the theoretical framework by Wang, Owens [122], who highlighted that a leader’s humbleness might increase the relational energy among employees; however, perhaps they missed establishing a link to how this relational energy may reduce BOT among employees.

5.2. Contribution to Practice

Our study also provided different essential insights to the hospital management and administration on managing BOT, an epidemic in the healthcare sector. For this purpose, we suggest promoting humbleness among hospital managers because, as a people-first approach, humbleness in a leader focuses on the betterment of employees, which ultimately improves their relational energy, thereby reducing BOT. From a mental-health perspective, engagement and employees’ wellness are profoundly important because they serve as valued resources to win the battle against BOT. When employees under the kind supervision of HL see that their leader is genuinely concerned for their wellbeing, it enhances their engagement level and improves their wellness perceptions.

Healthcare employees often face demanding situations, due to which the risk of employees being burned-out in this sector is huge; however, the manifestation of a leader’s humbleness reduces this threat significantly. A leader, under the philosophy of humbleness, establishes an effective bottom-up management mechanism to make the employees more resourceful so that they do not have this feeling that their resources have been lost while fixing a difficult workplace situation.

Another important key point to hospital management is realising an HL framework from a financial perspective. Lower-middle-income countries face resource inadequacy compared to high-income nations. The increasing level of BOT creates further threats as huge financial resources have been lost in this sector because of employees’ BOT. However, the manifestation of an HL is equally crucial from this aspect too. As a people-first approach, HL provides backing to the employees in hard times, which motivates and energises them, reducing the likelihood that they will easily be the victim of BOT when exposed to challenging situations.

5.3. Potential Limitations and Possible Guidelines for Future

Despite several significant contributions to theoretical and practical landscapes, our research is not without potential limits, which we would like to highlight here. We want to emphasise that this study considered only two cities for data collection. Even so, the
consideration of Karachi and Lahore in this study was not without logic. We still suggest including more cities in the future to have greater generalizability. Another critical issue that we would like to highlight is the sampling technique in this study.

Provided that because of different policy and security rationales, most hospitals were reluctant to share any statistics of employees (although we still appreciate their kind cooperation in the data collection), making it impossible for us to have any sampling frame. Due to this issue, we could not apply a probability sampling technique. To address this limitation, we suggest that future scholars incorporate this limitation by applying a probability sampling technique (if possible). A third limitation is also the reflection of the above point (non-availability of employees’ stats), which lies with the issue of sample representativeness. Although we invited employees from different departments, ranks, and genders to make our sample more representative, in the absence of employees’ stats and how many employees served a department, etc., however, the issue of sample representativeness still exists (though with a lesser intensity); therefore, in future studies, better measures should be taken to avoid this issue.

6. Conclusions

As a people-first approach, our study proposes that the manifestation of HL in a hospital organisation can be negatively linked with BOT among employees. This finding is of utmost importance for healthcare organisation management, which is at higher risk of BOT than other sectors. Hence, we recommend that a hospital administration promote the HL style of leadership more and more. To do this, there should be a special policy consideration for raising the awareness among hospital managers that to deal with the epidemic BOT, a leader’s humbleness could be an effective strategy. Hospitals may take different steps to promote this leadership style. For example, we suggest other learning sessions for managers where they not only realise the importance of this leadership style for effective organisational management. Moreover, in such sessions, they should learn how HL may reduce BOT risk among employees under their supervision.

Similarly, hospital administrators need to know that not only is the direct role of HL essential to reduce the effect of BOT, but such a leader can improve employees’ BOT by improving WREN and the wellness of employees. Equally important here is to highlight the importance of ALM, which provides a buffering effect to reduce further the likelihood of employees being burned out. Although studies have shown that ALM is a fundamental concern of most hospital employees because they joined a caregiving profession with a zest to serve humanity, in the presence of HL, ALM improves on a different level, thereby reducing BOT risk. Overall, we conclude if BOT is an epidemic in healthcare management, an effective leadership style such as HL may be an effective strategy.

Author Contributions: Conceptualisation, Y.W. and S.A.; methodology, Q.F. and S.S.; validation, U.C.; formal analysis, S.A.; writing—original draft preparation, Y.W. and S.A.; writing—original, review and editing, R.Y.M.L.; project administration, R.Y.M.L. All authors have read and agreed to the published version of the manuscript.

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Institutional Review Board Statement: The present research was approved by the Institutional Review Board of the Pakistan Kidney and Liver Institute and Research Centre (RC 26/131 DATED: 02 December 2021).

Informed Consent Statement: Informed consent was obtained from each respondent.

Data Availability Statement: Data will be available on demand.

Conflicts of Interest: The authors declare no conflict of interest.
Appendix A. Survey Items

Humble Leadership
Our leader actively seeks feedback, even if it is critical.
Our leader admits it when he or she does not know how to do something.
Our leader acknowledges when others have more knowledge and skills than himself or herself.
Our leader is empathetic and takes other’s concerns as their own.
Our leader often compliments others on their strengths.
Our leader shows appreciation for the unique contributions of others.
Our leader shows a willingness to learn from others.
Our leader shows that he/she is kind and caring and is open to the advice of others.
Our leader shows that he/she is open to listening to the ideas and problems of others.

Burnout
I feel worn out at the end of the working day.
I feel my work is emotionally exhausting.
I feel that every working hour is tiring to me.
I am exhausted in the morning at the thought of another day at work.
I don’t have enough energy for family and friends during leisure time.
My work frustrates me.
I feel burnt out because of my work.

Work Engagement
At my work, I feel bursting with energy.
I am enthusiastic about my job.
I am immersed in my work.

Subjective Wellbeing
In general, I consider myself a very happy person.
Compared to most of my peers, I consider myself happier.
Some people are generally very happy. They enjoy life regardless of what is going on, getting the most out of everything. To what extent does this characterisation describe you?
Some people are generally not very happy. Although they are not depressed, they never seem as happy as they might be. To what extent does this characterisation describe you?

Altruism
I deeply feel a calling to be a healthcare professional.
I became a healthcare professional to help others.
I enjoy caring for patients.

References


39. Li, B.; Li, R.Y.M.;Wareewanich, T. Factors Influencing Large Real Estate Companies’ Competitiveness: A Sustainable Development Perspective. *Land* 2021, 10, 1239. [CrossRef]
71. Ahmad, N.; Ullah, Z.; AlDhaen, E.; Han, H.; Scholz, M. A CSR perspective to foster employee creativity in the banking sector: The role of work engagement and psychological safety. *J. Retail. Consum. Serv.* 2022, 67, 102968. [CrossRef]


77. Simmons, R.G. Presidential address on altruism and sociology. *Am. J. Health Promot.* 2018, 32, 1789–1799. [CrossRef]


83. Van Dierendonck, D.; Patterson, K. Compassionate love as a cornerstone of servant leadership: An integration of previous theorising and research. *J. Bus. Ethics* 2015, 128, 119–131. [CrossRef]

84. Simmons, R.G. Presidential address on altruism and sociology. *Sociol. Q.* 1991, 32, 1–22. [CrossRef]


