Employee stress management and well-being while working from home during the pandemic: the role of involvement HRM practices, self-efficacy and hope

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Abstract: Researchers have highlighted that as work from home (WFH) mechanisms have progressed during pandemic COVID-19, there is a likelihood that occupational stress levels may arise considerably. Mental health of the employees may be deteriorated due to work related stress. Hence, it remains eminent to explore during pandemic, how involvement human resource management would affect on stress levels of the employees. Perceived work-based self-efficacy, employee stress management and hope were estimated as mediating constructs among involvement HRM practices and mental well-being of employees. In his regard, it was endeavoured to collect primary data through structured questionnaire from the sales staff of telecommunication sector of Pakistan using non-probability convenience sampling. Data estimation was conducted using covariance-based structural equation modelling (CB-SEM) on AMOS 25.0. The results affirmed theoretically established associations.

Keywords: COVID-19; mental well-being; MWB; hope; occupational stress; employee; involvement human resource management; self-efficacy.

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1 Introduction

Employee stress is defined as an "unpleasant emotional experience associated with elements of fear, dread, anxiety, irritation, annoyance, anger, sadness, grief, and depression" [Motowidlo et al., (1986), p.618]. Researchers have expressed widespread concern that employee stress can rise during COVID-19 pandemic, as *work from home* (WFH) can result in social isolation, longer work hours, work-life imbalance, lack of recreational opportunities and job insecurities (Holmes et al., 2020; Tuzovic and Kabadayi, 2020). COVID outbreak also comes with its unique stressors (e.g., threat of contagion) which can elevate employees' psychological distress and depression levels (Hamouche, 2020). Evidence-based approaches are required to examine how pandemic related employment practices impact employee mental health (Giorgi et al., 2020; Tuzovic and Kabadayi, 2020).

'Stress' research can refer to a state (distress), stimulus (stressors), adaptation (strain), physical reaction or a set of coping behaviours (stress management) (Rutter, 1981). This study focuses on employees' coping and work stress management, which may have resulted from WFH during the pandemic. Coping is defined as continual efforts deployed to manage and alleviate the stressors experienced by an individual (Orzechowska et al., 2013). Stress coping and management are a feature of the environment and an individual's personal characteristics (Rutter, 1981). This study focuses on both the environment and the individual factors in the role they play to improve employee stress and mental well-being (MWB) while working from home.

Starting with the environmental factors, human resource management (HRM) practices practices can be enacted by organisations as part of a preventative or curative strategy to support employees cope with and manage occupational stress (Murphy, 1995; Weinberg et al., 2010). This study aims to examine the impact of involvement HRM practices (IHRMP) (Demo et al., 2012) on how well employees manage stressors, keep a good work-life balance and take out time to relax while working from home. The study also aims to further examine how employee stress management (ESM) scores impact their overall MWB levels during the pandemic.

1.1 WFH, the good and the not so good

WFH concept is not new and did not always come with its present-day negative connotations. WFH originated as early as the 1970's and is commonly referred to as telecommuting or teleworking, which involves using various telecommunication technologies to connect to work (van Meel, 2011). Telecommuting was suggested as a means to "facilitate flexibility and a strong work–family balance while reducing the environmental impacts of mobility" [Belzunegui-Eraso and Erro-Garcés, (2020), p.1]. Research findings on WFH have been a quite contradictory as it can be both beneficial

and harmful to employee stress levels. For instance, studies suggest that WFH reduces employee stress relative to regular employees (Fonner and Roloff, 2010; Konradt et al., 2003). Many reasons are offered for this effect; for instance, *improved perceptions of autonomy, reduced work-family conflict and increased flexibility* as important intermediaries of the relationship between WFH and lowered employee stress levels (Gajendran and Harrison, 2007).

On the other hand, the telecommuting withdrawal model (TVM) explains why employees working from home become disillusioned with remote working, become stressed or attempt to refrain from it (Fireman, 2002). Three factors play a role in TVM which cause employee disillusionment from remote working (Fireman, 2002): *community*, which describes an employees' desire to interact with fellow workers in a social setting provided by the employer; *compulsion*, which make an employee feel that remote working was not an option, but a forced alternative necessitated by circumstances outside of his/her control; lastly *comfort*, which the employees' overall perceptions of visible and accessible support (or lack thereof) offered by management for remote workers.

Two out of three components of the TVM model suggest that WFH during the pandemic may not a pleasant experience for employees. The first issue to arise is *choice vs. compulsion* as traditionally, people opted for WFH because such work suited their preferences or circumstances (Stephens and Szajna, 1998). WFH during COVID is not a choice but a form of work-isolation that has been forced upon employees (Belzunegui-Eraso and Erro-Garcés, 2020). The phrase used by governments all over the world to enforce this isolation is a 'lockdown'. Working at home under such duress can reduce the feeling of control over one's work choices. The argument for WFH reducing stress is built on the idea that increased autonomy and control acts as an intermediary between the two (Gajendran and Harrison, 2007). According to the job demand-control model (Karasek, 1979), the feeling of having less control over one's work relative to the demands can itself give rise to high stress among employees. Since, WFH during lockdown is an imposition and not a choice, the demand-control model suggests that this lack of control can increase stress levels among employees.

As WFH is a compulsion and not a voluntary choice taken by the employees, it can also connect with the second issue, *which is community vs. isolation*. A workplace fulfils important social functions where bonds and networks are formed, acculturation processes integrate individuals, where employees become engaged and work becomes meaningful (van Meel, 2011). WFH can result in a loss of valuable social functions that a workplace provides and make people feel stressed as a result (Jackson and van der Wielen, 2002). The fact that WFH is a compulsion during the pandemic might worsen the feeling of isolation, as workplace community is also part of one's identity (Fireman, 2002). Social isolation is considered the most important challenge to the benefits of WFH (Allen et al., 2015). 60% of employees in a poll of 11383 people find remote working socially isolating (Reaney, 2012), and WFH can make them feel left out and shunned (Grenny and Maxfield, 2017), and result in increased stress levels, loneliness and irritability (Mann and Holdsworth, 2003; Song and Gao, 2020).

Some preliminary research on WFH and employee stress during COVID-19 has shown that WFH has increased perceived stress and burnout levels among employees (Hayes et al., 2020), specifically work-family conflict and social-isolation were found to be significant predictors of increased employee stress (Galanti et al., 2021). While

decision to WFH might be a *compulsion* for employees and employers and the loss of *community* may be an inevitable outcome of such compulsion, one factor remains in organisational control is the *comfort* facet. The comfort aspect of the TVM model is concerned with employees' overall perceptions of visible and accessible support offered by management for remote workers. This study proposes that if employees receive such visible and accessible support during their WFH endeavours, their ability to manage stress during the pandemic will be bolstered significantly.

A pertinent question arises, how can employees experience such *comfort or perceptions of visible and accessible support* while working from home. Since WFH has almost eliminated face to face human contact, both employees and organisations must adjust to a virtual environment of working. WFH presents unique challenges to tried and tested managerial practices, which have been traditionally linked with worker well-being, productivity and organisational performance (see Carnevale and Hatak, 2020; Collings et al., 2021; Hamouche, 2021). This research proposes that employee perceptions of *comfort* can be enhanced by IHRMP, as they can make employees believe that they are supported and cared for (Demo et al., 2012). This study aims to examine if IHRMP practices are still valid in helping WFH employees manage their work stress during the pandemic. Secondly, this study aims to explore the intermediary mechanisms through which involvement HRM helps employee manage their work stress and ultimately, improve their overall well-being.

2 Literature review and hypothesis

A review of the constructs deployed in the study and their theoretically proposed relationships are detailed below.

2.1 IHRMP and ESM

IHRMP encourage worker participation, discretion, control over their work, and provide opportunities for growth and development (Boxall and Macky, 2014). Vandenberg et al. (1999) suggested that Involvement HRM has a positive impact on worker's well-being through two routes; cognitively, workers are encouraged to deploy their skills and abilities well, while another motivational path improves worker satisfaction and affective states (Boxall and Macky, 2014). Many theories are offered to explain why IHRMP lead to an improvement in employee well-being. For instance, the demands-control model of stress (Karasek, 1979) is deployed to explain how involvement HRM can help employees cope with stress (Macky and Boxall, 2008). Stress rises when demands are perceived to exceed the control one believes to exert over one's work (Karasek, 1979). Increased discretion, participation and control over work reduces worker's psychological strain, and enables them to cope with work demands in a better manner (Karasek et al., 1989). Being supportive, participative and empowering in nature, IHRMP can help employees cope with stress better by improving a perception of job control and lowering job demands (Macky and Boxall, 2008).

This study is based on the conceptualisation by Demo et al. (2012) who characterise IHRMP to reflect an organisation's commitment "to create an affective bond with its employees, contributing to their well-being at work, in terms of acknowledgement, relationship, participation and communication" (p.400). Perceived organisational support

(POS) framework is especially relevant to the model presented by Demo et al. (2012), as POS is strongly driven by employee perceptions of supportive, favourable and caring HRM practices (Eisenberger et al., 2020). POS is based on employees' "global beliefs concerning the extent to which the organization values their contributions and cares about their well-being" [Eisenberger et al., (1986), p.501].

POS framework can help explain how IHRMP can help employees cope with and manage their stress levels. Employees have an inherent need to be praised, cared for, and to receive work-related and emotional support from the organisation (Eisenberger et al., 1986). POS fulfils employees' socio-emotional needs by giving rise to a sense of being affiliated to, approved of, trusted by, favoured by, and taken care of by their organisation (Rhoades and Eisenberger, 2002). This makes POS an important psychological resource for employees which helps them deal with their job demands and stressors (Zeng et al., 2020). According to conservation of resource (COR) framework (Hobfoll, 1989), having access to psychological and emotional resources from the organisation can help in effective coping and management of work stressors (Erdem et al., 2017). Involving and supportive HRM practices are an important source of POS levels (Eisenberger et al., 2020), and enhance the perception of work resources, thus enabling employees to cope better with work stress (Macky and Boxall, 2008).

In light of the above argument, it is expected that IHRMP will assist employees manage their stress in a better manner while WFH during the pandemic, as this relationship is underlined by the POS framework.

H1 IHRMP have a direct and positive impact on employee's stress management levels.

2.2 IHRMP, self-efficacy and ESM

Self-efficacy is the conviction that one has the capability to successfully meet the difficult demands of a situation and execute behaviours to perform particular tasks well (Bandura, 1977, 1986). As such, self-efficacy has proven to be a powerful motivational predictor of how someone would perform any task in any situation (Heslin and Klehe, 2006). People with a strong sense of self-efficacy cope well with the demands of the situation and when faced with difficulty and mounting obstacles, they persist and try harder (Lee and Bobko, 1994). While self-efficacy can be a dispositional and generalised construct which predicts task performance over many domains, Bandura (1977) recommends a more specific construction of self-efficacy when it is being examined in different contexts. Since this study is conducted in the work-context, it examines occupational self-efficacy which is application of Bandura's self-efficacy construct in a work setting (Schyns and von Collani, 2002).

Self-efficacy is considered an important determinant of suitable and good adaptive behaviours during crisis situations (Avery and Park, 2016; Park and Avery, 2019). In organisational contexts, self-efficacy is a key determinant of a productive adaptation to organisational change (Holt et al., 2007), as it provides employees with the conviction that they can perform well despite the rising demands of a changing work setting (Jimmieson et al., 2004). In the same vein, this study proposes that increased self-efficacy can also help employees adjust well to the forced WFH during the pandemic. Especially, self-efficacy can provide them with the coping resources to deal successfully with the rising demands and challenges to their productivity and well-being. Therefore, it is

important to examine how employees' self-efficacy can be increased during such difficult and challenging times.

IHRMP practices are supportive, caring, informative, participating and empowering in nature (Demo et al., 2012). This study theorises that IHRMP can have a positive impact on employees' work-based self-efficacy while WFH during the pandemic. This effect is underlined by the job demands-control model and POS. IHRMP can improve perceptions of job control and lower job demands (Macky and Boxall, 2008), and perceptions of job-control have a positive impact on employees' perceived self-efficacy (Axtell and Parker, 2003; Sonnentag and Spychala, 2012). POS framework also explains why IHRMP can improve employees' work self-efficacy. Supportive and caring practices are an important source of POS (Eisenberger et al., 2020). POS provides an assurance to employees that organisational support (material and emotional) is available during the time of need; this perception reinforces their self-efficacy as they feel they have the support to meet difficult challenges (Eisenberger and Stinglhamber, 2011; Vogt and Murrell, 1990). By meeting employee needs for approval, esteem and resource availability, POS can "enhance employees' self-efficacy and encourage the use of higher-level skills" [Eisenberger et al., (2020), p.2.11]. Based on the above discussion, it is expected that IHRMP will result in enhanced work-based self-efficacy among employees, especially with regards to WFH during the pandemic.

H2 IHRMP have a direct and positive impact on employees' work-based self-efficacy.

People high in efficacy see most work demands as exhilarating challenges but employees with low efficacy perceive most work demands not as a challenge, but a threat (Leiter, 1992). This threat perception is primarily responsible for the experience of toxic stress according to demand-control model and COR (Hobfoll, 1989; Karasek, 1979). Demands are appraised as threats (or stressors) by people in fear of their capacity to do harm, while challenge are seen by people as exciting events containing potential for growth and development (Lazarus and Folkman, 1984). Challenge appraisal gives rise to positive emotions while threat appraisal increase negative ones (Biggs et al., 2017a). However, threat perception is converted into exciting challenges (bearing the possibility for gain and growth), when people feel they possess greater capability and resources compared with the demands of the situation (Tomaka et al., 1993).

Self-efficacy is based on the conviction that one has the capability and the situational control to cope with difficult demands presented by one's circumstances (Bandura, 1986). Perceptions of greater situational control lead people with high self-efficacy set and attempt greater challenges for themselves (Bandura and Wood, 1989). Low self-efficacy causes employees to feel excessively stressed because they perceive most demands are threatening rather than challenging, and compared to demands their perception of resources is low (Leiter, 1992). Self-efficacy is a vital determinant of healthy coping behaviours, resilience in the face of difficulties and how successfully one will manage stressors arising from demanding situations (Bandura, 1977; Biggs et al., 2017a). Specifically in the time of organisational change, employee stress can arise because of uncertainty and role-confusion (McHugh, 1997); self-efficacy is linked with reduced employee stress levels specially in the time of change and uncertainty (Jimmieson et al., 2004).

Based on the above discussion, it is expected higher work-based self-efficacy will have a direct and positive impact on employees' stress management levels while WFH during the pandemic.

H3 Employees' work-based self-efficacy has a positive impact on employees' stress management levels.

2.3 The mediating influence of self-efficacy on the relationship between involvement HRM and employee stress

The impact of HRM practices on employee well-being occurs through a causal chain of variables (Boxall et al., 2011). Therefore, there is a to "continue to develop the theory on the mediating variables linking HRM to performance and that linking HRM to employee well-being" [Boxall et al., (2016), p.109]. While the present study has argued that IHRMP can reduce employee stress, the question remains how such effect can take place. This study has suggested the following hypothesis thus far. First, IHRMP can improve the ESM. The second hypothesis argued that IHRMP practices improve employee self-efficacy, and the third hypothesis suggested that employee self-efficacy improves ESM scores. These relationships were theoretically underpinned and explained by job demands-control and POS framework (Eisenberger et al., 1986; Karasek, 1979). These relationships present the theoretical possibility that self-efficacy mediates the relationship between IHRMP and employees' self-efficacy.

The theoretical explanation for the mediating effect of self-efficacy in the relationship between IHRMP and stress management levels comes from job demand-control model and POS theory. Supportive and caring HRM practices can have a positive impact on employee self-efficacy as such practices convey perceptions of POS (Eisenberger et al., 2020). Self-efficacy construct is based on the perceptions that one has the necessary capability and resources to perform well (Leiter, 1992), and perceptions of resources is a coping mechanism helps people manage their stress (Lazarus and Folkman, 1984). High Efficacy beliefs also determine if employees see demands posed by difficult situations as not threatening and emotionally negative, but challenging and emotionally positive (Leiter, 1992). Thus, self-efficacy is a great coping resource for people (Bandura, 1977) as it predicts "the occurrence, generality, and persistence of coping behavior" (p.203), and "how long they will sustain effort in dealing with stressful situations" (p.194). Moreover, self-efficacy perceptions are a profound and significant contributor of coping with change related stress (Jimmieson et al., 2004).

This associational chain clearly shows that a). IHRMP can have a positive impact on self-efficacy, which in turn has a positive impact on ESM levels. Since self-efficacy is one of the most important coping resources which can help employees manage their stress levels, and since work-related self-efficacy can be greatly improved by IHRMP, it is expected that work-based self-efficacy will mediate the relationship between IHRMP and employees' stress management levels.

H4 Employees' work-based self-efficacy mediates the relationship between involvement HRM and ESM levels.

2.4 ESM and overall MWB

The World Health Organization (WHO) considers mental health to be the firm basis of overall well-being and necessary for effective functioning of individuals and communities (WHO, 2004). The hedonic view suggests that human well-being lies in attainment of pleasures and avoidance of pain, while the eudaimonic view recommends

that well-being is dependent on feeling useful and utilisation of one's skills and abilities (Ryan and Deci, 2001). Mental health and well-being is a multi-dimensional construct which is measured in various different ways (Ruggeri et al., 2020). The present study deploys WHO-5 to provide a snapshot view of the overall mental health of people. WHO-5 well-being index is a measure specifically commissioned by the WHO as a measure of current mental health (over previous two weeks) (WHO, 1998). WHO-5 is derived from various established well-being measures, which has demonstrated sound psychometric properties in many studies and is a robust measure of short-term mental health (Sischka et al., 2020; Topp et al., 2015).

In order to explain how employee stress at work can impact overall MWB, this study utilises the spillover model (Staines, 1980). The spillover hypothesis states that "emotions and behaviors experienced and developed in work activities can spillover to the home environment" [Sok et al., (2014), p.458]. Sok and colleagues further show a supportive organisation culture can increase positive spillover from work-life to home and reduces employee strain. Thus, job related stresses and feeling of well-being at work have a potential to impact context-free, general mental wellness of employees (Kelloway and Barling, 1991; Kopp et al., 2008; Shigemi et al., 1997). Stress management and coping is also linked with improved mental health (Moreno Fortes et al., 2020; Tyler and Cushway, 1992; Wang et al., 2017). Based on this discussion, it can be theorised that employees' stress management scores will have a direct and positive impact on overall MWB of WFH employees during the pandemic.

H5 Employees' stress management levels have a direct and positive impact on overall MWB.

2.5 Employee stress and hope, hope and MWB

Stress theory originally postulated two kinds of coping mechanisms (Lazarus and DeLongis, 1983; Lazarus and Folkman, 1984): *problem focused coping* (PFC) which deploy strategies to deal with the stressors directly and *emotion focused coping* (EFC) which is aimed at regulating negative emotions arising from stress (Biggs et al., 2017b). However, positive emotions also occur side by side during stressful periods which can help one find meaning and generate well-being in such times (Folkman, 2008). Following this, Folkman (2010) introduced a third category of coping mechanisms known as *meaning focused coping* (MFC), which are built on individuals regulating positive coping strategies during stressful periods, which ultimately improves their well-being.

One prominent MFC mechanism identified by Folkman (2010) is hope, which is the belief that though the present times may be difficult, something positive will transpire in the future (Lazarus, 1999). Snyder et al. (1996) divided hope into two components, *agency* and *pathways.* Agency is the individual's perceived capacity for initiating the actions necessary to reach a goal, while pathways is "the perceived ability to generate routes to one's goals" [Snyder et al., (1996), p.321]. These two elements combined make hope a goal-directed state; in which people are energetic and motivated to work for a desired future (agency) and believe that they can figure out ways to get there (pathways). In other words, hope is comprised of cognitions (expectation of favourable outcome), emotions (anticipation of outcome and positive emotions) and motivation for action (Pleeging et al., 2021). In the same vein, hope is defined here as the cognition (that the

pandemic will be over), emotions (positive emotional outcomes related to the cognition) and motivation for action (taking actions to stay safe and well during the pandemic).

This study suggests that people who have been able to manage their work stress in a better manner will be more hopeful about the current crisis in general. COVID-19 presents increased disease threat and risk of contagion, infobesity, uncertainty, psychological and social issues arising from lockdowns and quarantine, disease stigma, financial insecurity and losses (Hamouche, 2020; Salari et al., 2020). Following this, WFH stress is a major challenge to mental health and well-being during the pandemic (Oakman et al., 2020). Thus, people who have managed their work stress well can be expected to experience more positivity and hope regarding the crisis. Put simply, such people who are more successful at managing their stress will have greater agency (the hope that one day this crisis will be over) and generate more pathways (working out how to achieve their desired goals) (Lopez et al., 2003).

An explanation for this assertion comes from the *feedback and feed-forward* mechanisms of hope theory (Edwards et al., 2007). When individuals grapple with a set of challenges and attain a degree of success, "the success feedback from overcoming the stressor reinforces the individuals' hopeful thinking" [Edwards et al., (2007), p.85]. This boost in hope is not localised or specific goal oriented, rather it is general and cross-situational in nature. Thus, people's beliefs that they have done well, or they are doing well while dealing with challenges, has a significant positive impact on one's hope in related or different contexts (Edwards et al., 2007; Snyder, 2002). Even Bandura (1977) suggested that performance accomplishments in one area increase generalised self-efficacy, "once established, enhanced self-efficacy tends to generalize to other situations" (p.195). Thus, it is expected that overcoming WFH challenges and managing work stress in a better manner can give rise an improved levels of hope regarding the pandemic.

H6 ESM will directly and positively influence hope.

How we perceive our future can have a great impact on our feelings in the present (Pleeging et al., 2021). Hope is a cognition, emotion and a motivational state which makes people believe in a bright future, invigorates people to work for such a future, all while maintaining good cheer during the effort (Peterson and Seligman, 2004). Hope is an antidote to stress and a significant contributor to MWB because of many reasons; hope increases perceived levels of control over a situation, creates a counter-balancing effect to anxiety and produces steadfastness of action during period of change and uncertainty (Folkman, 2010).

Folkman (2010) suggests that from a theoretical standpoint, hope impacts overall levels of well-being based on the broaden and build theory of emotions (Fredrickson, 2001). The broaden and build theory of emotions states that an experienced positive emotion can broaden and build thought-action repertoire (Fredrickson, 2001). In this way, positive emotions become generalised and build enduring resources which nullify the effect of negative emotions (Fredrickson, 1998), triggering upward spirals to improve general well-being and the possibility of feeling good in the future (Fredrickson and Joiner, 2002). Along the same lines, hope spreads from one specific aspect of life into other multiple facets of being (Edwards et al., 2007; Snyder, 2002). In conclusion, hope is comprised of cognitions (expectation of favourable outcome and resulting satisfaction), emotions (anticipation of outcome and positive emotions) and motivation for action,

which is shown to have a significant positive impact on people's well-being (Lee and Gallagher, 2018b; Pleeging et al., 2021). In the present context, people's hope regarding the pandemic is also expected to improve their MWB.

H7 Hope is positively and directly associated with MWB.

2.6 The mediating influence of hope on the relationship between work stress management and MWB

This study has shown that ESM can improve their overall MWB levels. This hypothesis was constructed by utilising the spillover model (Staines, 1980), which states that employees' work stress or well-being can impact their general levels of well-being. Moreover, improved work stress management can lead to an increased level of hope about the pandemic. This was explained by the *feedback and feed-forward* mechanism, which suggests that success in one specific goal increases people's hopes about their capabilities in other goal pursuits (Edwards et al., 2007; Snyder, 2002). Since the pandemic poses great stressors and challenges to employees (Hamouche, 2020; Salari et al., 2020), being successful in managing them well can also make them more generally hopeful about the pandemic. Also, the study has theorised that improved levels of hope can lead to an increase in employees' MWB. Hope is a positive emotion whose impact on well-being is explained by the broaden and build theory of positive emotions (Chang et al., 2019; Folkman, 2010). Since employees' stress management is linked with improved hope and mental health, and hope in turn improves mental health, it is expected that hope mediates the relationship between stress management levels and mental health.

Hope is a character strength, a vital coping resource which can energise one during difficult times and make them believe that better days will come (Folkman, 2010; Lazarus, 1999; Peterson and Seligman, 2004). Hope is "a multidimensional dynamic life force that is characterized by a confident yet uncertain expectation of achieving good, which is realistically possible and personally significant" [Dufault and Martocchio, (1985), p.380]. Hope is bolstered with past or present successes while trying to achieve a specific goal, and then it is experienced as a generalised pleasant cognition and emotion in attempting to achieve other goals (Edwards et al., 2007; Snyder, 2002). It is no wonder that employee success in managing their stress can increase their hopes that one day the pandemic and its associated trials would be over, and such hope shall contribute to overall employee well-being. This dynamic force lies at the heart of the relationship between employees' stress management and MWB and can mediate this relationship as well.

H8 Hope mediates the relationship between work stress management and MWB.

3 Methodology

Data was collected of three hundred and two respondents working in the telecommunication sector of Pakistan. Specifically, sales department of the telecommunication organisations was targeted as stress level of the employees is substantial. The telecommunication sector of the country has been revamping its organisational hierarchy and structures for long-term sustainability. Khalid and Ali (2020) identified that due to insufficient facilities and weak health-care infrastructure,

COVID-19 would have serious repercussions on Pakistan. Javed (2020) highlighted that the pandemic affected Pakistan's economy adversely as the country had been already in economic turmoil. According to Wang et al. (2021), during pandemic, Pakistani respondents stood second in seven Asian countries in terms of stress, depression, and anxiety scale (DASS-21). Psychological distress increased immensely in Pakistan due to loss of jobs and low economic activity during pandemic COVID-19. Especially in the telecommunication industry, stress levels have been augmenting due to unavoidable circumstances. The data was collected through non-probability sampling strategy from the sales departments of telecommunication industry of Pakistan. 302 responses were found to be precise for data analysis as it did not have missing values or outliers. AMOS 25.0 was deployed for data estimation and statistical analysis. The assumptions of regression and criteria of structural equation modelling (SEM) were satisfied during statistical estimations.

4 Results

Data was estimated using SEM on SPSS 24.0 and AMOS 25.0. Before conducting SEM, it was necessary to configure that the data does not have any normality issues as it is one of the core and foremost assumption of regression. Consequently, conduction of exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) had to be done. Convergent validity and discriminant validity remains vital to be determined too. Once all the aforementioned aspects are fulfilled, subsequently, path analysis was conducted.

4.1 Data normality

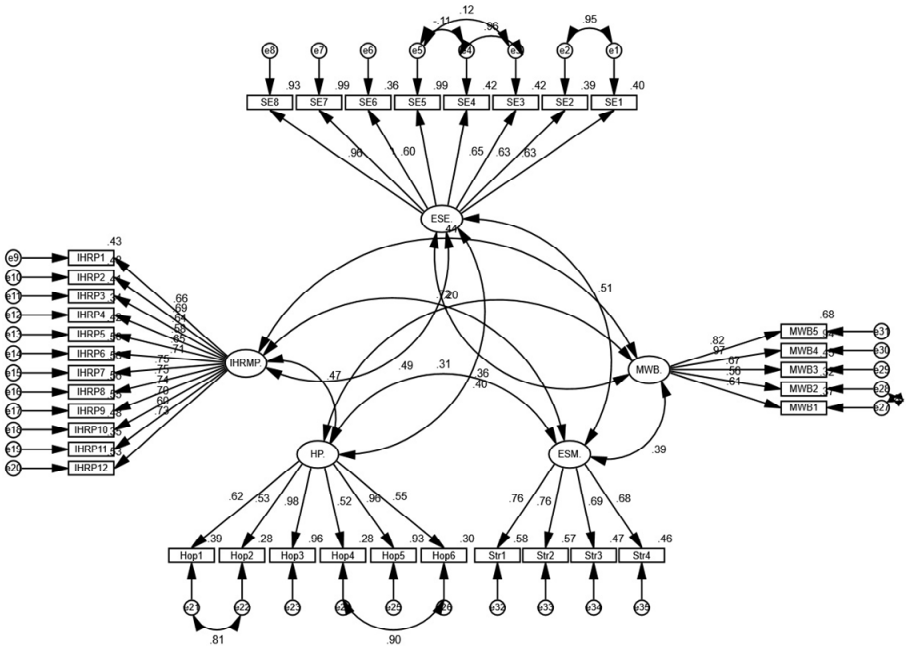
Data normality configuration is eminent in covariance-based structural equation modelling (CB-SEM), as in variance-based structural equation modelling (VB-SEM), attainment of data normality is not vital. Multivariate normality of the constructs, namely, ESM, IHRMP, self-efficacy (ESE), MWB, and hope (HP) was determined. Variance, kurtosis, standard deviation, and skewness are the four core tests through which data normality was estimated. According to Khwaja and Zaman (2020), skewness values, variance and standard deviation must be less than ±2, and kurtosis values must be between ±3. Data normality results portrayed in Table 1 indicate that all the constructs normality values were in the acceptance range, hence, there were no normality issues, and the data was feasible for estimations.

Table 1 Data normality (N = 302)

Constructs	*N*	*Variance*	*SD*	*Kurtosis*		*Skewness*	
	Statistic	*Statistic*	*Statistic*	*Statistic*	*Statistic*	*Statistic*	*S.E*
ESM	302	0.871	0.933	0.020	0.020	–0.581	0.140
HP	302	0.910	0.953	–0.383	–0.383	–0.472	0.140
MWB	302	1.014	1.006	–0.755	–0.755	–0.257	0.140
IHRMP	302	0.723	0.850	0.355	0.355	–0.685	0.140
ESE	302	0.820	0.905	0.462	0.462	–0.866	0.140

Notes: Employee stress management (ESM); hope (HP); mental well-being (MWB); involvement HRM practices (IHRMP); self-efficacy (ESE).

Figure 1 CFA of the conceptual model



4.2 Model estimation using SEM

For model estimation, EFA was conducted in the first phase. EFA (Ψ) items must load on their respective factors, there should be no cross-loadings, and factor loadings must be greater than 0.4 and less than 1 (Khwaja et al., 2019). Items must load on their respective factors as it confirms that the items are statistically explored, vetted and configured on their respective factors. Table 2 illustrate that items loaded on the respective factors, and the item loadings are in the permissible range. CFA (Γ) is consequently conducted after EFA in order to confirm items loadings (Figure 1). A major difference between VB-SEM and CB-SEM is the conduction of CFA. According to Mahmood et al. (2019), CFA values must be between 0.3–1. The results below indicate that CFA values have been in the permissible range too. For construct reliability, Cronbach's alpha (α) values were calculated of the constructs. α value must be between 0.7–1. Composite reliability is also conducted to further get refined reliability outcomes. The permissible range of CR values is also 0.7–1. Average variance extracted (AVE) is another eminent indicator of convergent validity and the outcomes highlighted that they are in defined range of 0.5–1 (Bashir et al., 2020). Furthermore, model fit indices were also precisely determined. Chi-square/degree of freedom ($\chi 2$/df) must be between 1–5, hence the value emerged to be 2.279. Other prominent model fit indices included, goodness of fit index (GFI) 0.804, standardised root mean squared residual (SRMR) 0.078, confirmatory fit index (CFI) 0.931, root mean square error of approximation (RMSEA) 0.065, Tucker-Lewis index

(TLI) 0.924, and normed fit index (NFI) 0.884. All of the aforementioned model fit indices were affirmative and the data was appropriate for further statistical estimations.

The conduction of EFA and CFA is eminent in CB-SEM. Initially, the items are determined that they either load on their respective factors or not. According to Khwaja et al. (2019), items must have items loadings greater than 0.4 and less than 1. Meanwhile, in EFA (Ψ), it is vital to examine that the items are loading on their respective factors and there are no cross-loadings. Table 2 indicate that the items loadings had been greater than the threshold value of 0.4 and there were no cross-loadings. Similarly, Kline (2015) stated that CFA (Γ) loadings must be greater than 0.3 and less than 1. The results specify that there have been no items loadings which were less than 0.3. The reliability of the items has been determined through Cronbach's alpha (α) and composite reliability (C.R) tests. Both α and C.R values must be greater than 0.7 and less than 1 (Bashir et al., 2021). Similarly, convergent validity is determined through AVE and the value must be greater than 0.5 and less than 1 (Khwaja et al., 2019). Results indicate that AVE value was in the permissible range. The measurement model fit indices were determined through chi-square/degree of freedom (χ2/df) which emerged to be 2.250, GFI 0.829, adjusted goodness of fit index (AGFI) 0.800, RMSEA 0.061 and SRMR 0.082. Moreover, NFI 0.899, CFI 0.941 and TLI 0.935 was in the permissible range.

Table 2 Factor loadings, reliability, and validity of the measurement model (N = 302)

Constructs and items	*Ψ*	*Γ*	*α*	*CR*	*AVE*
Mental well-being (MWB)			0.870	0.855	0.551
MWB1	0.673	0.609			
MWB2	0.676	0.563			
MWB3	0.691	0.673			
MWB4	0.921	0.969			
MWB5	0.831	0.824			
Employee stress management (ESM)			0.810	0.812	0.521
ESM1	0.537	0.762			
ESM2	0.744	0.756			
ESM3	0.640	0.688			
ESM4	0.527	0.676			

Notes: Model fit statistics: chi-square (χ2) = 1237.437, degree of freedom (df) = 543, P = 0.000, chi-square/degree of freedom (χ2/df) = 2.279, CFI = 0.931, GFI = 0.804, SRMR = 0.078, NFI = 0.884, RMSEA = 0.065, and TLI = 0.924.

Table 2 Factor loadings, reliability, and validity of the measurement model (N = 302) (continued)

Constructs and items	*Ψ*	*Γ*	*α*	*CR*	*AVE*
Self-efficacy (ESE)			0.941	0.923	0.613
ESE1	0.716	0.631			
ESE2	0.718	0.627			
ESE3	0.779	0.648			
ESE4	0.802	0.646			

ESE5	0.922	0.997			
ESE6	0.484	0.603			
ESE7	0.938	0.995			
ESE8	0.903	0.962			
Involvement HRM practices (IHRMP)			0.913	0.915	0.568
IHRMP1	0.656	0.658			
IHRMP2	0.790	0.689			
IHRMP3	0.725	0.644			
IHRMP4	0.621	0.580			
IHRMP5	0.645	0.646			
IHRMP6	0.622	0.710			
IHRMP7	0.694	0.749			
IHRMP8	0.613	0.748			
IHRMP9	0.469	0.742			
IHRMP10	0.431	0.695			
IHRMP11	0.533	0.596			
IHRMP12	0.468	0.726			
Hope (HP)			0.894	0.858	0.522
HP1	0.665	0.622			
HP2	0.547	0.531			
HP3	0.816	0.978			
HP4	0.772	0.525			
HP5	0.832	0.962			
HP6	0.796	0.550			

Notes: Model fit statistics: chi-square ($\chi 2$) = 1237.437, degree of freedom (df) = 543, P = 0.000, chi-square/degree of freedom ($\chi 2$/df) = 2.279, CFI = 0.931, GFI = 0.804, SRMR = 0.078, NFI = 0.884, RMSEA = 0.065, and TLI = 0.924.

Square roots of the individual factors were executed to determine multicollinearity and discriminant validity. According to Khwaja and Zaman (2020), square roots of the individual factors must be greater than the correlation coefficients between that latent variable and other latent constructs. The results presented in Table 3 indicate that there are no multicollinearity issues.

Table 3 Multicollinearity and discriminant validity (N = 302)

Constructs	*ESE*	*IHRMP*	*HP*	*MWB*	*ESM*
ESE	0.783				
IHRMP	0.490	0.684			
HP	0.403	0.469	0.722		
MWB	0.356	0.438	0.204	0.743	
ESM	0.506	0.725	0.311	0.387	0.722

Notes: Dependent variable: MWB; employee stress management (ESM); hope (HP); mental well-being (MWB); involvement HRM practices (IHRMP); self-efficacy (ESE).

4.3 Structural model

Theoretically established relationships among constructs were tested through path analysis. The results of path analysis are depicted in Table 4. The results indicate that the first hypotheses of the study, highlighting relationship between IHRMP and ESM has been accepted since beta value has been reported to be 0.480, t-stats 7.384 and p-value less than 0.05. Second hypothesis of the study depicted relationship between IHRMP and ESE and the results indicate beta value to be 0.583, t-stats 12.673 and p-value less than 0.05. Third hypothesis of the study coined that relationship between ESE and ESM and the results indicate beta value to be 0.250, t-stats 4.166 and p-value less than 0.05. Mediation relationship between IHRMP and ESM was determined through ESE, and the result highlighted that beta value had been 0.145, t-stats 3.625 and p-value less than 0.00. Hence, the first four hypotheses of the study were accepted.

Table 4 Hypotheses outcomes

Hypotheses	*Relationships*	*β*	*S.E*	*t-stats*	*p-values*	*Results*
H1	IHRMP → ESM	0.480	0.065	7.3846	0.00	Supported
H2	IHRMP → ESE	0.583	0.046	12.673	0.00	Supported
H3	ESE → ESM	0.250	0.060	4.1666	0.00	Supported
H4	IHRMP → ESE → ESM	0.145	0.04	3.6250	0.00	Supported
H5	ESM → MWB	0.275	0.052	5.2884	0.00	Supported
H6	ESM → HP	0.350	0.061	5.7377	0.00	Supported
H7	HP → MWB	0.226	0.057	3.9649	0.00	Supported
H8	ESM → HP → MWB	0.174	0.025	6.9602	0.00	Supported

Notes: **$p < 0.05$

Fifth hypotheses of the study proposed ESM strong relationship between MWB and the results depicted beta value of 0.275, t-value 5.288. Sixth hypotheses (H6) coined the relationship among ESM and HP; the results illustrated beta value of 0.350, t-value 5.737 and p-value 0.00. Seventh hypotheses of the study configured relationship between HP and MWB. The results presented beta value of 0.226, p-value 0.00 and t-value 3.964. Lastly, eighth hypothesis (H8) stated the HP mediates among ESM and MWB and the outcomes indicated beta value 0.174, t-stats 6.960 and p-value 0.00. Therefore, all the hypotheses of the study were accepted.

5 Discussion and recommendations

This study was conducted in the backdrop of the COVID-19 pandemic, the forced WFH mode of employment and its impact on employee stress. The TVM (Fireman, 2002) is especially relevant while employees are WFH during the pandemic. The three components of TVM i.e., *community*, *compulsion and comfort* describe why employees may become stressed and/or disillusioned while working from home. WFH is a

compulsion during the pandemic, eroding the sense of *community* that employees experienced at work. According to the demand-control model of stress (Karasek, 1979), losing discretion or control over mode of work and the erosion of the social support can result in rising employee stress. No wonder, studies have shown that employees have experienced increased incidence of stress while WFH during the pandemic (Galanti et al., 2021; Hayes et al., 2020).

The third facet of TVM model i.e., *comfort* describes the overall perceptions of visible and accessible support offered by their organisation while they WFH. IHRMP (being caring, participative, empowering and communicative in nature), can provide such perceptions of visible and accessible support to employees (Demo et al., 2012). According to the demand control model of stress (Karasek, 1979), such support can improve the perceptions of control over one's task and circumstances, leading to better stress coping among employees. Similarly, according to the POS framework (Eisenberger et al., 1986), such support provides employees with emotional resources, resulting in better stress management and coping. This study focused on the support provided by IHRMP and examined their impact on helping employee manage their stress levels while WFH. The sample collected from the employees working in the electromechanical industrial goods sector provided considerable outcomes.

The first theoretical contribution of the study was made when results indicated that involvement HRM practices have a direct impact on employees' stress management levels, moreover, this relationship was mediated by employees' work-based self-efficacy. The second theoretical contribution demonstrated that ESM levels have a positive impact on employees' MWB, while hope mediates this relationship.

Self-efficacy is the conviction that one has the capability and the situational control to cope with demands presented different circumstances (Bandura, 1986). IHRMP can boost employees' belief in their self-efficacy by providing them with care and support as recommended by the POS framework (Eisenberger et al., 2020). Self-efficacy is a great coping mechanism which can help employees cope with stress in various ways (Bandura, 1977); by improving perceptions of situational control as necessitated by the demands-control model (Schaubroeck and Merritt, 1997), being perceiving work demands posed by difficult situations as not threatening and emotionally negative, but challenging and emotionally positive (Leiter, 1992), and by fulfilling their emotional and support needs while working from home (Eisenberger et al., 2020).

The first theoretical contribution comes with important recommendations for organisations seeking to reduce employee stress levels and improve their overall well-being. The TVM model suggests that employee involvement and stress levels can suffer because of a losing perceived control over their job and lack of a sense of community with their coworkers. The pandemic has resulted in physical workspaces and interactions are being almost eliminated. A removal from the social fabric of the organisation can result in feelings of estrangement and poses great challenges to employee involvement and engagement (Carnevale and Hatak, 2020; Chanana and Sangeeta, 2020). To cope with uncertainty-based stressors at work, people sought comfort in the familiar people and places, and this comfort has been taken away by the pandemic (Caligiuri et al., 2020). It is important that HRM practices help adjust employees to remote working and the demands of pandemic, which tax their physical and emotional resources (Caligiuri et al., 2020; Carnevale and Hatak, 2020). This study has shown that a perception of involving HRM, i.e., visibly caring, supportive, participative,

communicative and acknowledgement-based HRM practices can improve employee self-efficacy, further boosting their coping resources to manage their stress levels.

Thus, organisations can ensure greater involvement and engagement during the pandemic by offering them visible and explicit support, open communication and feedback channels (Chanana and Sangeeta, 2020), which is beneficial to employee well-being. HRM departments can convey this perception of support through various practices (Hamouche, 2021); by making sure that employees have adequate work-related technical support, effective communication, supervision and performance management, create virtual socialisation activities (e.g., virtual hangouts and coffee breaks). Put simply, the employees need to feel that they are still woven into the social fabric of the organisation through visible and accessible support offered by HRM practices (Hamouche, 2021).

The second theoretical contribution is extremely important as it shows how managing work stress well can spill over into a generalised MWB in one's life. Characterised as a character strength, a vital coping resource, a dynamic life force and motivator (Lazarus, 1999; Peterson and Seligman, 2004), hope is expectation of achieving something good in the future and acting to make it happen (Snyder et al., 1996), and experienced as a positive cognition and emotion (Edwards et al., 2007; Snyder, 2002). This finding furthers the idea that HRM practices can lead to a more holistic level of employee well-being well beyond their impact on work stress (Kowalski and Loretto, 2017). This shows that involving HRM practices can help employees manage their stress levels, which ultimately leads to higher levels of generalised MWB, and the relationship between stress management levels and well-being is enacted by hope.

How work stress management can lead to a generalised hope regarding the pandemic, this effect is primarily explained by *feedback and feed-forward* mechanism of hope (Edwards et al., 2007; Snyder, 2002). This mechanism suggests that hope is strengthened with past or present successes in one area, and then it is experienced as a generalised pleasant cognition and emotion in a broader life-context (Edwards et al., 2007; Snyder, 2002). When employees feel they have managed stress considerably well while dealing with the rising demands of WFH during the pandemic, it gives them hope regarding their future and how the pandemic can ultimately pan out. Hope is linked with multiple facets of well-being, specially while coping with difficult, uncertain and demanding situations in one's life (Lee and Gallagher, 2018a). Similarly in this pandemic, it is shown to a positive impact on their well-being by bolstering expectations of a bright future and the energy to make that future happen for themselves.

Granted, this study has not shown that HRM practices directly contribute to hope. However, through bolstering ESM ability, IHRMP can start an effect which can culminate in improved hope and ultimately, result in higher levels of overall well-being. From a practical standpoint, it demonstrates to HRM managers how their supportive and well-being-oriented practices can ultimately improve employees' overall well-being. This finding presents new opportunities and challenges for HRM practitioners. It is an opportunity in terms of the idea that HRM practices have a far-reaching impact into people's overall well-being and a challenge for them to design, implement, and monitor such far-reaching impact of their interventions. Calls have been repeatedly made to sustain employee well-being in the work context and beyond (Kowalski and Loretto, 2017) as "wider economic system and ultimately the business organizations within it exist to serve human and societal needs rather than the opposite".

5.1 Limitations and future directions

Since this study is cross-sectional in nature, further studies can be conducted using a longitudinal design to examine robust causal relationships between the constructs. Moreover, studies can examine a wider set of managerial practices and WFH protocols implemented by various organisations, to ultimately examine their impact on employee well-being and performance. Moreover, further studies are required on the relationship between supportive managerial practices and specific stressors e.g., feelings of isolation, work-life balance or imbalance and specific COVID-related stressors (risk of contagion, financial insecurities etc.).

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