Enhancing Workplace Well-Being: A Multidimensional Approach to Person-Environment Fit

Siti Nurul Akma Ahmad, Mohamed Saladin Abdul Rasool, Syahrina Hayati Md Jani, Rahmat Yuliawan, Anwar Ma’ruf, Siti Mariam Ali
1Faculty of Business & Management, Universiti Teknologi MARA, Cawangan Melaka Kampus Alor Gajah, Melaka, Malaysia
2Vocational Studies Universitas Airlangga, Jl. Dharmawangsa Dalam Selatan, Surabaya, Jawa Timur Indonesia
sitinu8498@uitm.edu.my, saladin@uitm.edu.my, syahr520@uitm.edu.my, rahmat,yuliawan@vokasi.unair.ac.id, anwarmaru@fkh.unair.ac.id, smali@uitm.edu.my

Abstract: This review paper covers important gaps in the knowledge of Person-Environment Fit. PE fit is widely described as the compatibility between an individual and their work environment and more specifically the individual level criteria. However, there are several recurring issues in the P-E fit approach to stress, including a theoretical problem of inadequate distinction between different versions of fit; confusion between different functional forms of fit; and methodological problems relating to poor measurement of fit components and inappropriate analysis of the impact of fit on strain. Various studies and reviews have still fallen short of providing a comprehensive measure of PE fit, with most of the previous studies focusing exclusively on single fits of either person-job fit or person-organisation fit. Therefore, the current study aims to review the multidimensional measures of the PE fit study to gain a comprehensive view of the PE fit approach in enhancing workplace well-being. This study contributes to the occupational stress literature by delineating how the multidimensional measures of PE fit are associated with work-related stress and the possible outcomes related to both employees and organizational aspects indirectly. Future research may fill in these gaps and broaden the scope of the person-environment fit study.

Keywords: Person-Environment Fit, Multidimensional Measures, Strain Work-related Stress.

1. Introduction

The concept of Person-Environment (PE) fit is broadly agreed upon as the interaction between individual employees and their working environments, which could be a good match or an unfortunate mismatch. PE fit is widely described as the compatibility between an individual and their work environment and more specifically the individual level criteria (Kristof-Brown et al., 2005). The original work of the PE fit theory was developed by French and Kahn (1962), and French et al. (1974) – cited in Edwards, Caplan, & Harrison, (1998). The research conducted in the early 1960s focused on the impact of environmental factors on the mental health of employees, with a particular emphasis on social psychological factors in large-scale organizations. According to French and Kahn (1962), understanding the effects of the environment requires considering the person-environment field as a whole. French and Kahn (1962) in their study proposed a framework with emphasis on two elements of environmental factors, which are the objective social environment and the psychological environment. They asserted that both the objective and psychological environments become relevant in studying mental health. The objective social environment focuses on the industrial organization, which consists of a group of people, relations or organizational structures, and a group of processes, whereas the psychological environment consists of a “life space organization”, which is an organization as perceived by the individual.

The PE fit framework stands as a highly utilized theory in the context of organizational stress (Cooper et al., 2001). Scholars have extensively defined PE fit as the congruence between an individual and their work environment, with a stronger focus on individual-level factors (Kristof-Brown et al., 2005). The lack of such congruities can result in adverse effects, as pointed out by Chunghun et al. (2016), where stress emerges due to an incongruity between the individual and environmental factors. In short, stress and strain in the workplace are triggered by the interaction of an individual with their environment, and this is particularly true when job challenges present a threat to the individual, resulting in an incompatible PE fit, which in turn leads to physical and psychological strains (Edwards & Cooper, 1990; French et al., 1982). A structure for assessing and forecasting how characteristics of the individual and the work environment jointly influence a worker’s well-being is presented by the PE fit theory, which can further be used to develop a model for...
preventive interventions (Abbas et al., 2013). Specifically, following Edwards et al.'s (1998) notion that stress arises from the mismatch between the individual and the environment, this study proposes that the impact of employees' health critically depends on the perceived fit between person and environmental factors.

Yet, several recurring issues in the P-E fit approach to stress were identified by Edwards and Cooper (1990), including a theoretical problem of inadequate distinction between different versions of fit; confusion between different functional forms of fit; and methodological problems relating to poor measurement of fit components and inappropriate analysis of the impact of fit on strain. Following that, Edwards (1996) in his next research highlighted the two types of PE fit, the first of which is the fit between environmental supplies and employee values (S-V fit), and the second of which is the fit between environmental demands and employee abilities (D-A fit), along with determining which types are more strongly associated with strain. Nevertheless, multiple investigations and reviews have yet to deliver a thorough measurement of PE fit, primarily centering on singular fits, such as either person-job fit or person-organization fit. This trend is evident in earlier studies by Edwards (1991), Witt and Nye (1992), Chunghun et al. (2016), and Herkes et al. (2019). Due to this limitation, studies by Kristof-Brown et al. (2005), Vogel and Feldman (2009), and Chuang et al., (2016) have expanded the PE fit measures into wider distinct types of fit which cover person-job fit (PJF), person-organisation fit (POF), person–group fit (PGF) and person–supervisor fit (PSF). While Vogel and Feldman (2009) have added the other types of person-vocation fit (PVF). Therefore, to have a comprehensive view of the PE fit approach, the current study reviews the multidimensional measures of PE fit supported by Chunghun et al. (2016) study in measuring four different types of fit, which are PJF, POF, PGF, and PSF. In short, the current study reviews the PE fit theory grounded by Caplan et al. (1980), which posits that the stresses in the environment have resulted in strains on the person and, consequently, affect employees' health. Additionally, it incorporates a comprehensive view of PE fit measures developed by Chuang et al. (2016).

The literature suggests that employees’ well-being and work outcomes are issues that must be addressed jointly rather than merely focusing on traditional notions of job satisfaction and work stress (Genaidy et al., 2007). Conventional occupational risks like being exposed to harmful chemicals, extreme temperatures, or excessive noise are no longer the primary health challenges in modernized societies. While they remain significant concerns, especially for manual workers and certain non-professional occupational sectors, a majority of the workforce increasingly faces mental and emotional stressors in the workplace (Siegrist, 2015). Therefore, there is a clear need to address psychosocial work stress to minimize the burden of work-related disease as well as organizational losses (Siegrist, 2015; Yao et al., 2015). The objective of this research is to critically examine a theoretical framework that elucidates work-related stress and its repercussions by leveraging stress theories, notably through the lens of Person-Environment (PE) fit. This study provides a valuable addition to the existing occupational stress literature by illustrating the intricate connection between PE fit, work-induced stress, and the subsequent outcomes impacting both employees and the organization indirectly. The PE fit framework serves as a foundation to comprehend how organizations strategically optimize their human resources. This involves aligning the personal skills, capabilities, and preferences of employees with the expectations of their work environment, encompassing aspects such as the specific job role, the organizational structure, team dynamics, and supervisory relationships. The ultimate aim is to achieve heightened productivity and contribute to the overall success of the organization.

2. Type of Person-Environment (PE) Fits

Kristof-Brown and colleagues (2005) have formulated a conceptualization of fit, categorizing it into two main types: supplementary fit, which measures the degree of similarity between the individual and the environment, and complementary fit, which gauges how well the individual's characteristics fill a gap in the current environment or vice versa. Moreover, complementary fit can be broken down into i) demand-abilities fit, examining the alignment between the individual’s skills and environmental demands, and ii) need-supplies fit, assessing the extent to which the individual’s needs align with the resources provided by the environment. The absence of these compatibilities can result in adverse outcomes, as noted by Chunghun et
al. (2016), where stress manifests due to an imbalance between the individual and environmental factors. This is in line with the PE fit theory that alludes to the mismatch between the individual and the environment that can result in psychological strain (dissatisfaction, boredom, anxiety, and depression), physical, and behavioral strains (Caplan et al., 1980; Edwards & Harrison, 1993; Harrison, 1978). In addition, earlier PE fit theory by French et al. (1982) suggests that job-related stress is the result of a misfit between the characteristics of the person (e.g., values and abilities) and the work environment (e.g., workload and support). Subsequent studies by Kristof-Brown et al. (2005), Vogel and Feldman (2009), and Chuang et al. (2016) further divided PE fit into four multidimensional measures. This covers person-job fit (PJF), person-organization fit (POF), person-group fit (PGF), and person-supervisor fit (PSF). While Vogel and Feldman (2009) have added the other types of person-vocation fit (PVF). A summary of the four types of fit is presented in Table 1.

Table 1: Types of PE Fit

<table>
<thead>
<tr>
<th>Type of Fit</th>
<th>Concept</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>ii) Person–Organization Fit</td>
<td>The match between organizational demands and individual abilities</td>
<td>Chunghun et al. (2016)</td>
</tr>
<tr>
<td></td>
<td>Value congruence</td>
<td>Chuang et al. (2016), Chatman (1989)</td>
</tr>
<tr>
<td>iii) Person–Group Fit</td>
<td>Interpersonal compatibility between individuals and their work groups</td>
<td>Kristof-Brown (1996)</td>
</tr>
<tr>
<td></td>
<td>Goals match</td>
<td>Chuang et al. (2016), Kristof-Brown &amp; Stevens (2001)</td>
</tr>
<tr>
<td></td>
<td>Values match</td>
<td>Chuang et al. (2016)</td>
</tr>
<tr>
<td></td>
<td>Personality traits</td>
<td>Chuang et al. (2016)</td>
</tr>
<tr>
<td>iv) Person–Supervisor Fit</td>
<td>Value congruence</td>
<td>Chuang et al. (2016)</td>
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</table>
**Person-Job Fit (PJF):** PJF was further classified based on two basic conceptualizations, which are widely followed by other PE fit scholars. As outlined by Edwards (1991), the first concept is the demands abilities fit, where the employees’ knowledge, skills, and abilities are equivalent to the job requirements. The second concept of PJF is described as the match between employees’ needs, desires, or preferences and the supplied attributes of a job that they perform at work. Most scholars have categorized these two basic concepts as the needs-supplies or supplies-values fit, which has been applied by other theories of adjustment, well-being, and satisfaction (French et al., 1974; Harrison, 1978; Locke, 1969). Beasley et al. (2012) used a similar term in their study, labelling these two concepts as Needs-Supplies and Demands-Abilities. To achieve a PJF, the demand or requirements of the job should be well matched with the abilities of employees or vice versa, and also the environmental supply must fulfil the individual needs. The incongruence of employees’ abilities and work demands and also the needs and supply will lead to lower satisfaction (Beasley et al., 2012) and higher psychological strain.

**Person-Group Fit (PGF):** The next type of fit is based on interpersonal compatibility. PGF, which considers “the interpersonal compatibility between individuals and their work groups” (Kristof-Brown et al., 2005), where the group may be defined in many different ways, including as the immediate co-workers or simply as colleagues within any sub-unit of the organization (Kristof, 1996). PGF, also known as “person-team fit” by some scholars, investigates the compatibility between employees and their work groups or team members (Judge & Ferris, 1992; Kristof, 1996; Werbel & Gilliland, 1999). In their study, Kristof-Brown et al. (2005) highlighted the psychological compatibility between co-workers and their influence on employee outcomes. A few scholars have also classified PGF into goals (Kristof-Brown & Stevens, 2000; Witt, 1998) and values characteristics (Adkins et al., 1996; Becker, 1992; Good & Nelson, 1971). Others (Barsade et al., 2000; Hobman et al., 2003; Strauss et al., 2001) measured PGF as personality traits. Past findings have found that similarity in personality leads to better communication among employees and improves their social integration (Schaubroeck & Lam, 2002). The congruence between a person and their group members is substantial since past research evidence has shown that PGF is significantly related to an employee’s performance (Kristof-Brown & Stevens, 2001).

**Person-Supervisor Fit (PSF):** Meanwhile, the last type of fit, which is PSF, focuses on the dyadic relationship between employees and their supervisors (Adkins et al., 1994; Van Vianen, 2000) and its effect on work outcomes (Griffeth et al., 2001). The sub-dimensions measured under this type of fit include the leader and follower value congruence (Colbert, 2004; Krishnan, 2002), manager and employee goal congruence (Witt, 1998) and the similarity in terms of personality between supervisor and subordinate (Schaubroeck & Lam, 2002). This is consistent with Kristof-Brown et al. (2005), which described PSF as the match between an employee and a supervisor in terms of value congruence, personality similarity, goal congruence, etc. Past findings on PSF show its relationship with in-role performance (Huang & Iun, 2006) and job satisfaction (Ostroff et al., 2005). The person and supervisor match is also significant since some of the employees left the organization due to superior conflicts, as the common adage that “employees do not leave places, they leave managers”, which is often associated with turnover. Leaders or supervisors can also negatively impact the well-being of their employees (Gordon et al., 2019), as interpersonal conflicts within the workplace can exacerbate the strain of stressful work conditions, particularly regarding inadequate support, lack of respect, and unjust treatment by supervisors or colleagues (Siegrist, 2015). Contrary, employees who perceive substantial support from their supervisors tend to display elevated levels of subjective well-being. This heightened sense of well-being can contribute to reinforcing employees’ perceived Person-Environment (PE) fit (Gordon et al., 2019).
3. Person-Environment Fit and Work-related Stress

The concept of work-related stress has received considerable attention in the literature. Various perspectives have been described to reflect the concept, but the majority of them relate to the mismatch between individual capabilities and job demands, workload, and other environmental factors. The latest study described work-related stress as a reaction to job-related demands in the absence of sufficient knowledge, abilities, or skills to cope with workloads (Thielmann et al., 2022). By definition, the early study by Caplan et al. (1980) defined stress as any aspect of the workplace that poses a threat to the individual. He distinguished two types of job stress that could endanger the individual: unreasonable demands or insufficient supplies to meet his needs. In the context of organizational stress, a recent study defined it as a scenario where factors within the work environment interact with an employee, resulting in alterations to the employee’s psychological and physiological state (Sharma & Srivastava, 2020). Likewise, occupational stress is the perception of a mismatch between external demands (stressors) and individual capacities to meet them (French et al., 1982; cited in Caplan, 1987; Topper, 2007; Vermunt & Steensma, 2005).

Simultaneously, scholars in the field of work stress define stressors as environmental demands that surpass an individual's capacity or skill to effectively address the challenge (Siegrist, 2015). This definition is in accordance with the definition by the World Health Organization (WHO), which describes occupational or job stress as "the response people may have when presented with work demands and pressures that are not matched to their knowledge and abilities, and that challenge their ability to cope" (WHO, 2020). This definition underscores that stress arises when an individual’s abilities fall short of meeting the ultimate expectations placed upon them (Mahipalan & Sheena, 2019). Regardless of the various conceptions of work stress, the fundamental concept is that the mismatch between the workplace environment, in general, is the most significant contributor to work stress.

According to French and Kahn (1962), Lazarus and Folkman (1984), and Topper (2007), an individual’s perceptions play the most important role in the stress process, and if he or she perceives the stressor as a threat, it will further trigger negative emotional responses. In the workplace, employees often face a multifactorial stressor, experiencing multiple stressors simultaneously (Cooper, 1983; Sharma & Srivastava, 2020). Sharma and Srivastava (2020) highlighted that these multiple stressors can be categorized into various factors, and their combination distinctly elucidates the root causes of workplace stress. Broadly, these stressors can be classified into two main aspects: work-related stressors and interpersonal conflicts within the workplace. Work-related stressors concern work overload with high demands, work pressure, frequent disruptions, and higher responsibility (Siegrist, 2015).

While other factors, such as workload and relationships at work, are key determinants of burnout (O'Connor et al., 2018). Furthermore, in contemporary work environments, technological advancements and automated systems represent additional work-related factors that significantly contribute to employees’ stress (Siegrist, 2015). Besides, Siegrist also highlighted other stressful organizational features that concern overload at work, including high demands and work pressure, frequent interruptions, or a high level of responsibility. In addition, interpersonal workplace conflicts like lack of respect, supervisor support, and unfair supervisor treatment may exacerbate the stressful work and its burden (Siegrist, 2015). In the study by Bauer and Herbig (2019), work stressors encompass emotional demands, work pace, expectations to conceal emotions, role conflicts, effort-reward imbalance, job insecurity, extended work hours, night shift obligations, and conflicts between work and family responsibilities. Overall, the multifactorial workplace stressor has been extensively researched, but the central point is primarily related to the mismatch between the individual and their environment.

It is widely acknowledged that this workplace stressor has been proven to have adverse effects on the health and overall well-being of employees (Sharma & Srivastava, 2020). This aligns with findings from earlier studies by Siegrist (2015) and Cooper (1983), both of which highlighted the increased risk of health-damaging psychosocial work environments contributing to a rising incidence of work-related diseases and chronic illnesses. This is attributed to the prolonged exposure to work stress, often characterized as a chronic stressor, where an overwhelming and sustained level of stress builds up over time, resulting in burnout. This, in turn, significantly impacts blood pressure and the overall cardiovascular system (Sharma & Srivastava,
There is a widespread consensus that an unhealthy workplace imposes significant economic costs by compromising employees' health, well-being, and work performance. These economic repercussions manifest through heightened absenteeism, decreased productivity, an increased risk of disability pensions, and direct medical expenses stemming from work-related stress (Sharma & Srivastava, 2020; Siegrist, 2015). Nevertheless, it remains disheartening to observe that investments in fostering high-quality work environments and employment opportunities persist at a relatively inadequate level (Siegrist, 2015).

4. Past Studies on Person-Environment Fit

In reviewing past studies on PE fit, a literature search was conducted based on the keywords (“person-environment fit” and “work stress” and “outcome”) from three databases named Scopus, Science Direct, and Emerald Insight with a time frame from 2018 until 2021. The total number of articles found was 88 (two from Scopus, 19 from Science Direct, and 67 from Emerald Insight). After screening, considering meeting the inclusion criteria and objective of the study as well as removing the redundant articles, 13 relevant articles are reviewed. Of all 13 relevant studies, nine were grounded in the person-environment fit theory, while the remaining were supported by other stress theories such as the Strain Theory of Suicide, the Conservation of Resources Theory, and the Job-Demand-Control Model. Two studies were carried out with a time-lagged or longitudinal design; the rest were cross-sectional studies in nature. The majority of studies in this domain were conducted in South Asian countries, with four studies in India and one in Pakistan. This was followed by studies from European countries, totaling three. Additionally, there were two studies from East Asia (China) and one study each from Australia, North America (USA), and Africa (Nigeria). Unfortunately, the research in this area did not encompass studies from Southeast Asia, underscoring the necessity for conducting relevant studies in this region, particularly in Malaysia. Table 2 provides a summary of literature searches pertaining to PE fit studies.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Stressor</th>
<th>Theory</th>
<th>Study population</th>
<th>Study Design</th>
<th>Country</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Herkes et al. (2019)</td>
<td>P-O and P-G fit</td>
<td>Person-Environment Fit</td>
<td>Staff and volunteers at 31 primary mental health facilities</td>
<td>Cross-sectional</td>
<td>Australia</td>
<td>Burnout (depersonalization and emotional exhaustion), job satisfaction and work stress, Work engagement, subjective well-being, and energy levels/fatigue</td>
</tr>
<tr>
<td>Bauer &amp; Herbig (2019)</td>
<td>Demographics (pilotage and region), work stressors and resources</td>
<td>Person-Environment Fit and Work Engagement Theory</td>
<td>Active Helicopter Emergency Medical Services (HEMS) pilots</td>
<td>Cross-sectional</td>
<td>2 based in Germany and 1 each in Austria, Poland, and the Czech Republic</td>
<td>China</td>
</tr>
<tr>
<td>Liu et al. (2019)</td>
<td>Perceived Social Support and Psychological strains</td>
<td>Strain Theory of Suicide</td>
<td>Medical employees of a large hospital and heterogeneous office employees</td>
<td>Cross-sectional</td>
<td>China</td>
<td>Depressive symptoms, and Suicidal behaviors</td>
</tr>
<tr>
<td>Barthauer et al. (2020)</td>
<td>Burnout</td>
<td>Conservation of resources theory</td>
<td>Academic scientists (PhD candidates and postdocs)</td>
<td>Time-lagged online survey at three points in time</td>
<td>Germany</td>
<td>Turnover intentions</td>
</tr>
<tr>
<td>Tiwari (2021)</td>
<td>Technostress</td>
<td>Person-Environment Fit</td>
<td>Employees in the private sector</td>
<td>Cross-sectional</td>
<td>India</td>
<td>Individual productivity</td>
</tr>
<tr>
<td>Lahlouh (2019)</td>
<td>Person–vocation fit (value congruence), person–organization fit (need–supplies and value congruence), person–group (value congruence) fit, person–</td>
<td>Person–environment fit, Theory of planned behavior, Role theory and</td>
<td>Executives aged 50 and over from private sector companies</td>
<td>Cross-sectional</td>
<td>France</td>
<td>Full retirement intentions and bridge employment intention</td>
</tr>
</tbody>
</table>
Based on recent literature, the foremost predictors in the realm of work stress revolve around two key themes: individual factors and working environment factors. This aligns with the fundamental principle of the PE fit theory, which asserts that stress emerges due to a discord between the individual and the environment (Edwards et al., 1998). Individual factors can be subdivided into two distinct subthemes: i) the individual’s perceptions of potential stressors and ii) the individual’s needs and abilities. On the other hand, environmental factors can be broadly categorized into three subthemes: i) the nature of the job (whether it is demanding, challenging, or unexciting), ii) the people surrounding the workstation (including supervisors and the team), and iii) organizational-related factors (encompassing policies, supplies, motivation, rewards, and adequate training). In summary, the focus of recent studies concerning outcomes can be categorized into two main areas: i) outcomes related to employees, encompassing performance, individual productivity, turnover intention, and well-being; and ii) outcomes associated with the job or work itself, including satisfaction, work engagement, and work stress.

5. Conclusion and Recommendations

In conclusion, the person-environment fit literature has critical gaps that limit our understanding of the multidimensional measures of fit toward workplace context. These gaps need some exploration that best suits the context of the study which might differ by the workplace setting and demands. Addressing these gaps is crucial for employees’ well-being and organizational success, as the good welfare of employees will guarantee their productivity, physical and mental health. To address these gaps, researchers may consider including other measures of person-environment fit, such as family fit, disabled workers fit, elderly workers fit and prioritize research on understudied issues or groups of samples. By addressing these critical gaps, we can gain a more comprehensive understanding of person-environment fit and develop more effective policies and practices that promote a healthy workplace environment for all. It is essential to recognize that person-
environment fit measures are complex and multifaceted factors involved that require intensive studies from a different context to best suit the working environment. This study contributes to the occupational stress literature by delineating how the multidimensional measures of PE fit are associated with work-related stress and the possible outcomes related to both employees and organizational aspects indirectly. Future research may fill in these gaps and broaden the scope of the person-environment fit study.

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