The Impact of Perceived Wellness on In-role Performance

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지각된 웰니스가 역할수행 성과에 미치는 영향

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Abstract Despite the increasing importance that companies currently place on employee wellness, few studies have explored the impact of wellness on individual and team performance in the workplace. Drawing on the broaden-and-build theory, we hypothesize that wellness intention, wellness leadership, and wellness climate influence the performance of both individuals and teams. We tested our hypotheses using data collected from 495 employees of 81 teams in 11 Korean companies. Our analysis indicates that wellness leadership and wellness climate are meaningful interventions between perceived wellness and performance. Wellness intention did not impact perceived wellness. However, the interaction between wellness intention and wellness leadership impacted perceived wellness. Wellness climate negatively moderated the relationship between perceived wellness and performance.

Key Words: wellness intention, wellness leadership, wellness climate, perceived wellness, in-role performance

1. Introduction

Annually, Fortune magazine announces the “100 best companies to work for.” The companies selected not only demonstrate excellent financial performance[17] but also have various advanced health and welfare programs, high levels of job satisfaction, organizational commitment, and work-family balance[21]. When employees experience stability and happiness through job satisfaction, commitment, and work-family balance, it is sometimes referred to as overall satisfaction with life and experiencing positive emotions[28][32]. Realizing that psychological stability and positive thinking increase the performance of individuals and the organization[5][32], companies have been trying to introduce wellness programs[9][21]. Fulmer et al. (2003) argue that the GWP index is positively related to the financial performance of a company, and suggest
the necessity of researching wellness in terms of business administration. So far, research on wellness in terms of business administration has not been actively discussed. However, perceived wellness, resulting in life values and employee happiness,[1][14], warrants further research due to the influence of social trends dealing with employee life values.

2. Theoretical Background

2.1 Definition of Wellness

The first written definition of “wellness” was given as meaning “the opposite of illness” in 1650 in the Oxford Dictionary. However, the word came into practical use in 1950 along with the advent of the wellness movement.[12][39]. The word “wellness” is still considered a new word; it was entered into the American Heritage Dictionary in 2004.[38]. Wellness started to be used as representative of health promotion after 1950.[4][12], however it now entails various meanings, such as health promotion, workplace safety, and psychological well-being, without having any one common definition.[2][12][32]. Despite the physical health oriented meaning of wellness, some studies[1][18] have suggested wellness as a core construct of GWP and a multidimensional construct including physical, spiritual, social, emotional, and psychological wellness. A high level of wellness, which most individuals pursue, means not only high levels of each wellness dimension but also perfect balance between them.[2]. Therefore, based on this wellness concept, we define perceived wellness as the sense that one is living in a manner that permits the experience of consistent, balanced growth in the emotional, intellectual, physical, psychological, social, and spiritual dimensions of human existence.[2].

2.2 Level of Wellness

In a company, perceived wellness could be influenced by the top management’s wellness philosophy and wellness practices along with wellness strategy, the wellness climate, and leadership support for wellness programs within the organization.[18]. This means that wellness must exist on a multi-level platform, not only in individual or group levels. Individual wellness is a continuous processes of increasing the quality of life through the balance and integration of the psychological, emotional, and physical well-being of the individual.[18][33]. Organizational wellness means having wellness policies, strategies, and various wellness programs.[18][34]. Fleisher et al. (1996) argue that the activities and programs required to achieve organizational wellness should be thought of as an organizational goal and a strategy to increase the performance and efficacy of an organization.

2.3 Related Theories

Fredrickson’s (1998, 2001) broaden-and-build theory of positive emotions suggests that the form and function of positive and negative emotions are not isomorphic. Instead, they are distinct and complementary. Whereas many negative emotions narrow individuals’ momentary thought-action repertoires by calling forth specific action tendencies (e.g., attack, flee), many positive emotions broaden individuals’ momentary thought-action repertoires, prompting them to pursue a wider range of thoughts and actions than is typical (e.g., play, explore, savour, and integrate). Broadened thought-action repertoires gain significance because they can build on a variety of personal resources.[25][16]. These resources may include physical resources, social resources, intellectual resources, and psychological resources, which are very similar to the dimensions of perceived wellness.

The value profit chain model.[19] establishes relationships between profitability, customer loyalty, and employee satisfaction, loyalty, and productivity. The links in the chain are as follows: Profit and growth are stimulated primarily by customer loyalty. Loyalty is a direct result of customer satisfaction. Satisfaction is influenced by the value of services provided to
customers. Value is created by satisfied, loyal, and productive employees. Employee satisfaction, in turn, results primarily from high-quality support services and policies that enable employees to deliver results to customers.

Taking into account the efforts of an organization to enhance external factors (e.g., customer loyalty and product quality), emphasizing internal factors (e.g., employee satisfaction and loyalty) as key in gaining profit is a different perspective. These internal factors may coincide with the purpose of wellness.

3. Hypotheses

Wellness intention means the continuous effort of individuals to pursue physical, emotional, social, intellectual, and spiritual wellness. According to theory of planned behavior[3] and the goal-setting theory[34], individual behavior is influenced by the intention for planned behavior, and the intention to work is one of the key motivational factors. Therefore, when individuals have a higher level of intention for a certain type of work, they would likely exhibit more planned behavior. Regarding wellness, Maes (1990) argues that not only organizations and environments, but also individuals, should take responsibility for promoting the health of employees, suggesting the importance of the role of the individual in perceived wellness.

Hypothesis 1: Wellness intention is positively related to perceived wellness.

The interaction between wellness practices and training provided by an organization is important for effective wellness programs and activities[31][38]. For these programs to be effective, active participation and support based on the leadership of top management and line managers are necessary[36]. This means that the efforts of individuals as well as environments and organizations are required for wellness initiatives to be effective[26]. A study between the behavior of leaders and the well-being of employees was conducted in the late 1970s. Gavin & Kelly (1978) report a strong relationship between leaders’ respect for employees and employees’ well-being. Duxbury, Armstrong, Drew, & Henly (1984) also report that employees working with leaders who have less respect for others and practice work-oriented leadership showed less job satisfaction and a higher burnout rate[35]. Studies indicating the relationship between leadership and wellness were conducted by Bono & Ilies (2006) (e.g., charismatic leadership and positive emotions and mood), Gilbreath & Benson (2004) (e.g., leader behavior and health of employees), Arnold, Turner, Barling, Kelloway, & McKee (2007) (e.g., leadership and well-being), and Sosik & Godshalk (2000) (e.g., leadership and job-related stresses). In particular, in their study, Lee & Ashforth (1996) report that a high level of social support from a leader reduces the incidence of stress and burnout. Wellness programs and activities are communicated by line managers. As the middle-man, line managers know what employees expect and can convey what the organization expects from employees in terms of wellness[30][37]. Consequently, employees are able to behave in the manner anticipated by the organization. Bellavia & Frone (2005) reported the moderating effect of supportive leadership on the association between the perception of work-family conflict and employee behavior.

Hypothesis 2: Wellness leadership moderates the association between wellness intention and perceived wellness.

Several studies between climate and behavior were conducted focusing on the workplace safety climate[41][40] and service climate[23][24]. These studies report that group climate can influence individual behavior. Zohar & Luria (2005) suggest the hierarchical process in which the group climate could impact individual behavior and perception, reporting that the workplace safety climate can positively influence individual safety behavior. In this context, a supportive leadership and climate positively influences
decreased work–family conflict[8][13].

Hypothesis 3: Wellness leadership is positively related to wellness climate.

Hypothesis 4: Wellness climate is positively related to perceived wellness.

Mullen & Kelloway (2009) also report that leadership influences the workplace safety climate and fosters various safety-related activities. Furthermore, Hofmann, Morgeson, & Gerras (2003) argue the moderating effect of a safety climate on the association between LMX and the voluntary safety behavior of employees. This study implies that group level variables can moderate individual variables.

Hypothesis 5: Wellness climate moderates the association between perceived wellness and in-role performance.

Usually, employees who are satisfied and happy work harder than unhappy employees. Improved organizational performance can be achieved by tending to the physical health interests and emotional needs of employees[25][29]. This means that performance-related individual behaviors could be influenced by various cognitive and emotional factors. According to the broaden-and-build theory proposed by Fredrickson (1998), positive emotions are very similar to perceived wellness. In other words, employees having high levels of perceived wellness put more actively effort into increasing their performance and achieving their ultimate goals.

Hypothesis 6: Perceived wellness is positively related to in-role performance.

A climate of wellness leaves individuals comfortable and happy in terms of emotional, social, and physical health and, consequently, positively impacts on their performance[6]. Kopelman, Brief, & Soeters (1990), McGregor (1960), & Roethlisberger (1939) suggest that life and job satisfaction and well-being will positively impact organizational effectiveness. This study was a cross-level study, meaning that perceived wellness on an individual level can influence performance on an organization level. Because individual emotions can form an organizational climate[46], individual perceived wellness at the team level may influence organizational performance. Taking into account that the shared values and behaviors of individuals is one of the elements of group climate[35][24], performance at the group level is influenced by the climate at the same level.

Hypothesis 7: Wellness climate is positively related to perceived team performance.

Organizational goals can be achieved through the goal achievement of individuals and sub-units. The processes for goal alignment between organizations and individuals are as follows: Once an organization’s objectives are set, these objectives should be allocated into sub-organizational units. The objectives of these sub-units are allocated to individuals in cascading processes.

Hypothesis 8: Perceived team performance is positively related to in-role performance.

Team leaders should actively support not only the achievement of team objectives but also individual objectives. Supportive leadership reduces and eliminates some hurdles to bother to do for employees’ work and personal lives[20]. This kind of supportive leadership behavior falls within the same context of wellness leadership in terms of broadening social, emotional, and physical health resources. When the four resources of the broaden-and-build theory are provided for achieving individual objectives, wellness leadership can support the broadening of these resources to realize organizational goals.

Hypothesis 9: Wellness leadership moderates the association between perceived team performance and in-role performance.
4. Methods

4.1 Sampling and Data Collection

Data were drawn from 4 industries, 11 companies, 81 teams, and 495 employees in Korea from August and September 2011. The industries were IT, manufacturing, service, and pharmaceutical. The average number of team members were 6.1. When team leaders distributed the questionnaires to subordinates, they indicated who was in the XX group and who was in the OO group (Marks for the notice on the covers of questionnaires and envelopes were printed in advance). After the team members completed the questionnaires, they submitted them in sealed envelopes to the team leaders. Team leaders checked the members’ actual performance (appraisal result of individual performance in 2010) separately from their in-role performance on the questionnaires. After collecting all data, the team leaders retyrbed all information to the researchers.

4.2 Measures

All items were measured on a Likert-type scale ranging from 1 (“strongly disagree”) to 7 (“strongly agree”). Measures of wellness intention (16 items), wellness climate (7 items), and wellness leadership (11 items) was newly developed based on Group Safety Climate Scale of Zohar (2000) by Stanely M. Gully. Each variables was calculated as the mean of items. To date, the validity of this type of measurement has not been academically reported. At the beginning of 2011, we conducted a large-scale pilot test to validate these measures. Cronbach’s alpha of wellness intention was .80, wellness leadership was .88, and wellness climate was .91.

Perceived wellness was assessed using a 36-item scale based on Adams et al.’s (2000) typology of perceived wellness. Adams et al. (2000) identified six dimensions of perceived wellness: (a) physical wellness, (b) emotional wellness, (c) social wellness, (d) intellectual wellness, (e) intellectual wellness, and (f) spiritual wellness.

We used seven items by Williams & Anderson (1991) to measure in-role performance and four items by Kearney & Gebert (2009) to measure perceived team performance. In-role performance was determined by the team leader, not self-reported to eliminate common method bias. In the case of perceived team performance, efficiency, productivity, quality of innovation, and overall achievement were asked in terms of relative perception compared with other teams in the same organization.

4.3 Analysis

For justifying the construct validity, we performed principal component analysis with varimax rotation. To justify the aggregation of employee responses to the team level, we assessed a variety of psychometric properties (i.e., rwg, ICC(1), and ICC(2)) (see Table 1).

1) rwg(U):using uniform null distribution, 2) rwg(T):using triangular null distribution, 3) ICC= intra-class correlation coefficient

We used three steps for testing cross-level moderating effects through an empirical bayesian
estimation process proposed by Mathieu & Taylor (2007). The results of the HLM analysis testing cross-level effects are presented in Table 3 and 4. Following Hofman and Gavin’s (1998) recommendations for cross-level interaction, the HLM analysis used the group mean centering method.

5. Results

Controlling some variables (e.g., age, marriage, education, psychological well-being), the relationship between wellness intention and perceived wellness, hypotheses 1, was rejected \( r = .42, p > .05 \). However, wellness leadership significantly moderated the association between wellness intention and perceived wellness \( r = .61, p < .05 \). It means that the relationship between wellness intention and perceived wellness is differ depends on wellness leadership. Hypothesis 2 was accepted. The moderating effect of wellness leadership on the association between wellness intention and perceived wellness was higher in the team wellness leadership is high than in the team wellness leadership is low (see Fig. 1).

It is very meaningful finding because wellness leadership is one of key factors for the successful and effective wellness programs and activities in organization. This results are also supported by Verhoeven(1997) & Maes(1990)’s studies. Additionally, we analyzed the direct impact of wellness climate on perceived wellness. The result of this analysis, hypothesis 4, was not rejected \( r = .28, p > .05 \). The relationship between perceived wellness and in-role performance were statistically significant \( r = .02, p < .05 \) (see Table 2).

### Table 2: Hierarchical Linear Modeling Models and Results for Hypotheses 1, 2, and 4

<table>
<thead>
<tr>
<th>Variables</th>
<th>Perceived wellness</th>
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<tbody>
<tr>
<td></td>
<td>Model 1</td>
</tr>
<tr>
<td></td>
<td>Coef(( \hat{r} ))</td>
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<tr>
<td>Individual Level</td>
<td></td>
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<tr>
<td>Age</td>
<td>.02</td>
</tr>
<tr>
<td>Sex</td>
<td>.08</td>
</tr>
<tr>
<td>Marriage</td>
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<tr>
<td>Education</td>
<td>.24</td>
</tr>
<tr>
<td>Grade</td>
<td>.19</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>.65**</td>
</tr>
<tr>
<td>Psychological well-being</td>
<td>2.25**</td>
</tr>
<tr>
<td>Wellness intention(A)</td>
<td>.42</td>
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<tr>
<td>Team Level</td>
<td></td>
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<tr>
<td>Wellness climate</td>
<td>.28</td>
</tr>
<tr>
<td>Team efficacy</td>
<td>.98**</td>
</tr>
<tr>
<td>Work-family Facil.</td>
<td>.36</td>
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<tr>
<td>Family–work Facil.</td>
<td>1.00**</td>
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<tr>
<td>Wellness leadership(B)</td>
<td>.04</td>
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<tr>
<td>A*B</td>
<td></td>
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* \( p < .05 \), ** \( p < .01 \), PW=Perceived wellness.
Hypothesis 6 was accepted. However in case of Model 2, wellness climate negatively moderated the association between perceived wellness and in-role performance with statistical significance ($r_{71}=-.03$, $p<.05$). Actually, the moderating direction was positively proposed. Therefore, hypothesis 5 was rejected in terms of direction. It means that the relationship between perceived wellness and in-role performance are more stronger in low level of wellness climate than in high level of wellness climate (see Fig. 2).

Model 3 is to test hypothesis 8. The result was that perceived team performance have significantly influenced on in-role performance ($r_{60}=.29$, $p<.05$).

Hypothesis 8 was accepted. Model 4 was to test hypothesis 9 which wellness leadership moderates the association between perceived team performance and in-role performance. This hypothesis was not statistically significant ($r_{70}=.02$, $p>.05$). Hypothesis was rejected. To test hypothesis 3, we analyzed multiple regression. The relationship between wellness leadership and wellness climate was statistically significant ($β=.67$, $p<.01$). Hypothesis 3 was accepted. The relationship between wellness climate and perceived team performance was statistically significant ($β=.15$, $p<.05$). Hypothesis 7 was accepted.

This result was similar with Kopelman et al. (1990)'s study which group climate is positively related to performance (see Table 3).

6. Discussion and Conclusion

The main purpose of this study is to determine the
relationship between wellness and performance. The relationship between perceived wellness and in-role performance was statistically significant ($r = .20, p < .05$). In other words, the higher the perceived wellness, the higher the performance. Fulmer et al. (2003) studied the relationship between the GPW index and firm performance. They suggested that positive employee relations (e.g., support and effort by the company to maintain good employee relationships) positively influence the intangible assets of an organization, therefore, impacting the organization’s competitive advantages for sustainable growth. However, instead of measuring wellness itself, Fulmer et al. (2003) measured the GWP index, which is similar to wellness, and analyzed the relationship between the index and a firm’s financial performance. Many companies have been investing in wellness programs to increase their status as a “Great Workplace.” However, few studies have reported whether this kind of investment influences employee performance, or what types of mechanisms exist that translate employee wellness into performance[9][7]. Therefore, the results of this study are meaningful in elucidating the relationship between wellness and performance.

Taking into account the theoretical background of the positive psychology of wellness, wellness may be similar to psychological well-being, one of the concepts of positive psychology[10][33]. We discovered that controlling psychological well-being impacts wellness and, ultimately, employee performance. It is significant that wellness, as one of the concepts of positive psychology, is an antecedent to individual and team performance.

We investigated the role and impact of a wellness climate and wellness leadership at the group level. The results of this examination are noteworthy for practitioners. When a practitioner introduces wellness programs and activities, the importance of wellness leadership and climate is not always considered. Typically, practitioners focus on the wellness programs and activities themselves. However, to conduct more effective and successful organizational wellness programs, it is necessary to use the prevailing wellness leadership and climate as facilitators.

This study suggests that a positive relationship between wellness and performance. Fulmer et al. (2003) reported a positive relationship between the GWP index and a firm’s financial performance. However, that study did analyze wellness perception and individual and team performance. Therefore, the results of the present study offers meaningful implications that wellness is one of antecedents of enhanced performance among individuals and teams. In the past, welfare packages like wellness programs were considered hygiene factors which eliminate dissatisfaction of employees only. It means that wellness program might not be motivation factors. However, we found out new perspectives that wellness program could be antecedents of performance especially both individuals and organizations. It is a little bit opposite meaning of Herzberg’s two factor theory. Therefore, we need to more pay attention to the importance of wellness in workplace to motivate employee and to increase performance.

Even though it was limited, we did find a negative moderating effect of wellness climate on the association between perceived wellness and in-role performance. We did not anticipate this result. Therefore, further study should be undertaken to find other variables and/or theoretical approaches. In particular, this finding brings much needed attention to the questions of how wellness climate may affect perceived wellness and the association between perceived wellness and performance. This role of wellness climate is different from that of safety climate in workplace. Also, we can think that the negative moderating effect of wellness climate between perceived wellness and performance is one of the side effect of wellness program. When wellness climate is high, we can expect that wellness related variables positively affect the performance. However, the finding of this study was a totally
different. What was worse, when wellness climate is low, the performance was better than low wellness climate. Actually, it is really important to the practitioners because, these days, most companies try to introduce wellness program and activities without any considering the side-effect of wellness. In sum, wellness is definitely a critical factor to increase performance both individuals and teams. Wellness leadership and a wellness climate foster wellness programs and activities in organizations. This conclusion will be useful for practitioners because, in the past, nobody considers the importance of wellness leadership and wellness climate along with wellness program and activities.

Wellness is one of the concepts of positive psychology especially focusing on workplace to be “Great workplace”. Theoretically, subjective well-being[11] and psychological well-being are main constructs in positive psychology. Some researchers studied wellness which is similar to psychological well-being. However, in this study, we controlled psychological well-being variables. Even though we controlled this, we found the effectiveness of wellness on the performance. It means even though wellness is similar to psychological well-being in terms of construct, wellness could be one of clear and distinct construct in terms of positive psychology.

Based on the literature review and our empirical study of wellness, we here suggest some limitations and directions for future research. First, more sophisticated measures for wellness at individual, group, and team levels need to be developed. Some studies [1] claim that the meanings of psychological wellness and spiritual wellness are still vague. It means that five dimensions of wellness are still not distinct. Second, we need to study more expanded theories that explain cross-level issues in organizations. We used the broaden-and-build theory in this study, which is appropriate for explaining variables on a single level (e.g., individual level). However, wellness related variables (e.g., wellness leadership, wellness climate, wellness intention, and perceived wellness) are existed on multi-level. Third, the role of wellness leadership and climate should be further studied and discussed in terms of the relationship between wellness and performance. Few studies have explored the role of wellness leadership and wellness climate. However, in this study, we found that a certain role of wellness leadership and climate between wellness and performance. These constructs are not something new. These are similar to supportive leadership and safety climate in workplace. Therefore, we need to clarify these constructs, wellness leadership and wellness climate. Fourth, we need to expand out data set and do a more longitudinal study. The sample data set we used in this study was drawn from only 4 industries and 11 companies, which is not representative of real business world trend.

참고 문헌


