

A Review of Researches on Employee's Trait Mindfulness

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Abstract. Mindfulness is an ancient concept derived from eastern Buddhism. Mindfulness is defined as "an acceptable attention and awareness of current events and experiences" in workplace studies. In recent years, western empirical studies have found that mindfulness has a positive impact on workplace employees' organizational citizenship behavior, work performance, etc. Mindfulness training has been applied in some well-known companies and received favorable comments from employees. Mindfulness research has great potential in the future in the workplace. However, this kind of research has not attracted much attention in China. Based on the existing research results abroad, this paper introduces the origin, concept and measurement of mindfulness. Then from the antecedent variables, outcome variables and mindfulness as moderating variables, the empirical research and theoretical exploration results of workplace mindfulness are summarized. On this basis, the framework chart of the existing research results is constructed, and the research prospects are put forward for the deficiencies in antecedent variables, outcome variables, moderating effect, measurement and research methods, and localization research.

Keywords: Mindfulness; perception; mindfulness training.

1. Concept and Definition

Mindfulness originates from Buddhism and its original intention is to be clear-headed and attentive in thinking^[1]. In the classic Buddhist concept, mindfulness emphasizes attention and awareness of the present state.^[2] Therefore, awareness and attention are the two core components of mindfulness. Mindfulness meditation, as the core task of the Buddhist tradition, aims to deepen practitioners' awareness of the present. In the field of medicine, researchers have tested the effect of mindfulness meditation on relieving physical and mental diseases of clinical patients in the past 30 years and used it as a stress reduction technique for non-clinical patients.^[3] Mindfulness was introduced into the field of management by Weick and Roberts (1993) in the 1990s, but their definition of mindfulness focuses on emphasizing cognitive flexibility and attention to novelty, which to a great extent differs from the mindfulness connotation in Buddhism. Currently, the commonly accepted definition in the management research literature comes from Brown and his colleagues, who define mindfulness as "an acceptable attention and awareness of current events and experiences."^[4] the mindfulness here can not only refer to an individual's state of consciousness (a state of consciousness), can also refer to an individual trait (personality trait). In short, mindfulness is the process of paying attention to what is happening now—both internal (thoughts, physical feelings) and external stimuli (physical and social environment)—and observing these stimuli without judgment and evaluation does not give them meaning. Therefore, the complete content of mindfulness should include attention, awareness and no judgment on the stimulation of participation.^[4] This definition is closer to the original meaning of Buddhism and is often used in the research of individual mindfulness and its influence in the workplace. The review of this paper is also based on this definition.

The above definition of mindfulness involves four elements: continuous attention, awareness, attention to the present and uncritical acceptance.

1. Continuous attention. It involves focusing on sustained internal and external stimuli. In the state of mindfulness, the individual turns his attention to the object of observation. When the mind is distracted, the attention will be gently and firmly brought back to the original target. This element

has been found to be associated with positive mental health outcomes, including reduced meditation processes.^[5] And anxiety ^[6].

2. Awareness. It is a conscious understanding of a person's internal and external experiences, including physical feelings, thoughts and emotions, as well as external events such as sights and sounds. Awareness is in contrast to automated psychological reactions that often occur unconsciously. A mindful individual has a close awareness of his cognitive process and thus can accurately grasp the essence of prejudice.

3. Pay attention to the present. This involves directing one's attention, with or without effort, to remain aware of what is happening internally and externally at all times. The opposite state is that the mind is occupied by the past or the future. Such as memories, plans or fantasies.

4. Accept without judgment. This involves not judging the thoughts, feelings and events experienced, whether good or bad, what you want or don't want, important or trivial. Acceptance is to allow all pleasant, neutral and painful experiences, including both concrete experience (feeling pain) and abstract experience (feeling of rejection), to arise without attempting to change, control or avoid them. Acceptance allows personal experience and even punishes the existence of self-evaluation (for example, "I am a very bad person"). A mindful person relies on open and flexible thinking, which leads to uncritical acceptance of multiple contents. Acceptance further allows individuals to distinguish between events induced by thoughts or emotions. Therefore, the conscious person can further notice that some events are uncontrollable, but on the contrary, they may be controlled by events. This heightened awareness can, in turn, help to change the environment in which the event occurs. Mindfulness does not necessarily give people greater mental control but enables individuals to better notice the existence of their own mental control and enhances individuals' ability to grasp the environment and self-control by providing awareness of what is controllable and what is uncontrollable.

In theory, the effect of mindfulness on human body function is mainly through attention. Research shows that mindfulness can improve the quality of attention-stability, control and attention efficiency. Mindfulness can support attention stability. Brain science research shows that half of the waking time of the human brain is wandering.^[7] but mindfulness can make them pay steady attention to what is happening now ^[8]. Previous studies have found that trait mindfulness is associated with thousands of hours of mindfulness training and reduced mental wandering.^[9] Mindfulness controls attention by reducing the habitual allocation of attention and by reducing attention to distracting information.^[10] Mindfulness affects human body functions including cognitive, emotional, behavioral and psychological functions through this trait, thus shaping workplace functions ^[11].

2. Mindfulness research measurement

At present, self-evaluation is widely used in the measurement of mindfulness research, which is divided into trait mindfulness measurement and state mindfulness measurement. At present, MAAS scale and FFMQ scale are widely used in management.

1.MAAS scale. Mindfulness Attention Awareness Scale (MAAS) was developed by Brown and Ryan in 2003^[12], the scale is mainly used to assess the difference in the frequency of individual trait mindfulness or state mindfulness, focusing on whether there is attention and awareness of current events. The scale is a one-dimensional scale, which contains 15 items, including emotional, cognitive, daily and other areas, such as "I may experience some emotions unconsciously until later to know", "I will break/upset things due to carelessness, distraction or desertion", "I find it difficult to focus on what is happening now". The six-point Likert scale was used to measure, from "almost always" to "very infrequent" to "very infrequent" and "almost not". The scale was scored reversely. The lower the score, the higher the final level of mindfulness. The reliability of the scale was 0.82.

2.FFMQ scale. Five-factor Mindfulness Questionnaire (FFMQ) was proposed by Baer and Smith in 2006^[13]A that is used to measure positive traits. Baer et al. studied the structure and 112 items of the

existing five mindfulness questionnaires (MAAS, FMI, KIMS, CAMS, MQ). Through factor analysis, we found that mindfulness can be divided into five clear and independent dimensions: observation, description, conscious action, non-evaluation of inner experience and non-response, and developed a five-factor mindfulness questionnaire with 39 items. Such as "I notice the smell and fragrance of things (observation)", "I am good at looking for words to describe my feelings (description)", "I find that I am not aware of what I am doing (conscious action)", "I think some of my emotions are bad or not properly experienced, and I should not feel them (without judging the inner experience)", "I do not respond to the emotional experience I feel (without responding to the inner experience)". Using a five-level scoring system, from "never" to "very frequently or always," a higher score indicates a higher level of individual mindfulness. The FFMQ scale contains five subscales, which can be used to measure the state of individual dimensions of mindfulness and to sum up the overall level of mindfulness.

3. Relevant research on staff mindfulness

3.1. Antecedents

The antecedents of employees' mindfulness are relatively few. Reb et al. (2015) examined the antecedents of mindfulness in the workplace and found that organizational constraints and organizational support can predict employees' mindfulness, pointing out that the organizational environment plays an important role in promoting or hindering mindfulness in the workplace^[14]. Valentine et al. (2010) found through a questionnaire survey that organizational moral standards can be used as antecedents of mindfulness to affect role conflicts in the work, and mindfulness plays an intermediary role in this process^[15]. Some studies have shown that individual mindfulness can be developed through meditation^[16]. It is necessary to pay attention to the cultivation of mindfulness in the organization not only as a tool for stress relief, but also to carefully consider the integration of mindfulness training and organizational goals before the organization adopts mindfulness training programs. If the goal is to develop the employees' mindfulness level, we can consider helping the employees to achieve a higher mindfulness state through various technical trainings (such as MBSR, etc.). If the organizational goal is to improve employees' self-regulation through mindfulness training, it can be achieved through self-control exercises or the increase of self-determination at work.^[17] The organization's direct focus on self-regulation in the introduction of mindfulness training may be able to reduce the uneasiness of introducing concepts related to Buddhism into the organization. Finally, the training content should also consider the work situation and should match the specific goals of the organization. For example, the training goal of Google's "Find the Inner Self" project is not to reduce stress or be related to Buddhism, but to promote the development of employees' autonomy, creativity and happy work, all of which are in line with the organizational goals and values.

3.2. Outcome variables

The research results of outcome variables of employee mindfulness are rich, including work attitude, work behavior and workplace spillover results.

Mindfulness and working attitude. The research on mindfulness and work attitude involves emotion, work involvement and happiness. Mindfulness and mindfulness-based training have been associated with decreased levels of burnout and self-reporting.^[18] Reduced perceived pressure^[19] Reduced negative emotions^[20] Closely related. The research by Leroy et al. (2013) explored the positive correlation between employees' mindfulness and job involvement and the mediating role of real behaviors in the process. The results show that real behaviors mediate the positive correlation between mindfulness and job involvement, which partially mediates in static situations and completely mediates in dynamic changes at different time points^[21]. Empirical research by Reb et al. (2015) found that both sides of mindfulness (employee awareness and employee absentmindedness) are related to employee well-being, such as emotional exhaustion, job satisfaction and psychological needs satisfaction^[136]. Specifically, employee awareness is negatively correlated with emotional

exhaustion and positively correlated with job satisfaction and satisfaction of psychological needs. And absent-mindedness is only positively related to emotional exhaustion.

Mindfulness and working behavior. A study by Reb et al. (2015) found that two aspects of mindfulness (employee awareness and employee absentmindedness) were related to task performance, OCB and work deviation behavior.^[15] There are two management journal articles about the research of staff mindfulness and team performance. Cleirigh and Greaney (2015) explored the impact of brief mindfulness interventions on team task performance. The results show that mindfulness has a positive impact on team performance^[22].

Mindfulness and workplace overflow. Allen and Kiburz (2012) found that the higher the level of trait mindfulness, the better the sleep quality and vitality. The trait mindfulness has a positive correlation with work-family balance. Sleep quality and vitality mediate the correlation between mindfulness and work-family balance^[23].

3.3. Research as Regulatory Variable

The role of mindfulness as an important moderating variable has also been verified in the workplace. Schultz et al. (2015) found that self-supporting work atmosphere and mindfulness are directly related to employees' work well-being, mindfulness acts as a moderating variable in this process, i.e. employees with higher mindfulness level are less likely to feel psychological frustration even in non-supportive management environment^[24]. Long and Christian (2015) tested mindfulness as an important work-related moderating variable to buffer meditation and negative emotions caused by unfairness through a 2×2 experimental design of 109 college students and an online survey of 264 employees, i.e. by reducing meditation and negative emotions, retaliation in the workplace can be reduced^[25]. Liang et al. (2016) tested the moderating effect of leader trait mindfulness on subordinates' performance and abusive management in a self-control framework of abusive management^[26]. The study found that the supervisor's trait mindfulness reduces the possibility of hostility to subordinates, and the supervisor with high trait mindfulness increases the attention and awareness of hostility and self-regulation ability, which supports the hypothesis that mindfulness regulates the whole process. Eisenbeiss and van Knippenberg (2015) found that when subordinates have a high level of mindfulness, ethical leadership has a stronger positive correlation with subordinates' freely determined behaviors, including subordinates' extra efforts and subordinates' mutual assistance.^[27]

4. Summary

4.1. Research conclusions

First, workplace mindfulness has broad prospects as a new research topic. On the one hand, in the Internet era, people are facing a huge amount of fragmented information, which puts forward higher requirements on the information management ability of managers and employees. As the characteristics of mindfulness stability and attention control improve people's attention efficiency, they will certainly receive great attention in the future workplace; On the other hand, with the current management research and practice paying attention to staff's health and well-being, mindfulness, as a related variable, will inevitably arouse more discussion and interest. Secondly, although the workplace mindfulness research has achieved certain results, the overall research is still in the initial stage, and the exploration of related issues is insufficient and needs to be improved urgently. Based on the research conclusions of this paper, the research significance and future research of workplace mindfulness will be analyzed and discussed in detail.

4.2. Research significance

Existing research has found that mindfulness has an important impact on the workplace, and mindfulness has important value and significance for management research. Its theoretical

significance is mainly reflected in the following aspects: firstly, attention efficiency brought by mindfulness broadens the boundary of human bounded rationality. Organizational science assumes that human attention is limited. With the arrival of the information overload era, attention has become a scarce resource in the workplace. Because the mindful individual can pay more stable and effective attention to the current information related to the task, the individual can manage this cognitive resource more effectively, thus expanding the ability of attention. Secondly, mindfulness improves attention efficiency and reduces decision-making errors and non-ethical behaviors at work. Through the improvement of attention efficiency, mindful individuals enhance their cognitive ability and flexibility, promote their sensitivity to turbulent and discontinuous environments, improve their attention quality, and reduce decision-making errors to a certain extent. Thirdly, the existence model of mindfulness "paying attention to the present" challenges the purely goal-oriented cognitive model of organizational life. Management research has always emphasized that planning is first and goal-oriented. Mindfulness emphasizes attention to "present tasks" and represents different thinking and behavior patterns. The existence of the two seems to be opposite and contradictory, but in fact they are two aspects of the same problem. Only by effectively balancing the current task with the future goals can the interests of the organization and the staff be maximized. How to realize the effective integration of the two will be a new challenge for future management research.

The practical value of workplace mindfulness research is mainly reflected in: firstly, enterprises can improve work performance through mindfulness training. The most common mindfulness training program is MBSR. In addition, short-term mindfulness intervention, mindfulness meditation and other activities have also been applied in enterprise practice and achieved certain results. Secondly, enterprises can improve employees' self-regulation ability through mindfulness training and help employees to carry out stress management. Thirdly, we can combine mindfulness training with leadership development. As mentioned in the introduction, mindfulness training is popular in enterprises as part of leadership development. Participants in this training report higher listening ability, strategic thinking ability and innovation ability.

4.3. Research Outlook

As mentioned above, the existing research on workplace mindfulness has achieved certain results, but as the research on this topic is at the initial stage, there is still a lot of room for exploration and improvement in the future. The current shortcomings are mainly as follows: less attention is paid to the antecedents of mindfulness; The research on outcome variables and mechanism of action needs further study. The role of mindfulness as a regulator needs to be explored. In addition, the research on workplace mindfulness is different from the previous experimental research on psychology, and the complexity of management environment puts forward higher requirements for its research design. The existing measurement scales also have their own problems, which need to be improved and perfected. Finally, the localization research of workplace mindfulness also needs to be promoted. Due to the cultural differences between the East and the West, whether the western research conclusions are applicable to the situation in China, and from the perspective of eastern culture, there are still many problems in the study of mindfulness in the western workplace. The development of mindfulness research in the eastern context may provide a new opportunity for the development of mindfulness research in the workplace. Future research can focus on the following two aspects:

1. Explore more antecedents. Current research results focus more on workplace outcome variables, while researches before mindfulness are rare. What factors affect and lead to mindfulness, will directly affect the effect of mindfulness in the workplace. In order to understand the mechanism of workplace mindfulness, it is necessary to study the antecedents of mindfulness. Individual mindfulness is affected not only by individual characteristics, but also by organizational environment, policies and atmosphere. State mindfulness may also be affected by emotions and work events. Subsequent research can discuss the influencing factors of workplace mindfulness from the interaction between individual characteristics and environment.
2. Expanding richer outcome variables and action mechanisms. Current research has found multiple

outcome variables of mindfulness in and out of the workplace, but the process mechanism of these effects is far from being explored, such as the role of mining as a regulator. Because mindfulness endows individuals with stronger self-regulation ability, it may increase individuals' resilience, reduce ruminant behavior, improve empathy, improve emotions, de-center, increase working memory, improve the accuracy of emotion prediction in working relationships, etc. These effects may interact with other factors in the workplace and affect workplace results. The role of mindfulness as a regulation needs to be further explored.

In short, promoting workplace mindfulness research will make new contribution to management theory, provide new value to management practice and enrich our understanding of human behavior in management.

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