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THE ROLES OF PROACTIVE BEHAVIORS IN MEDIATING ENVIRONMENTAL COGNITION AND INTERNSHIP LEARNING OUTCOMES

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ABSTRACT

The policy of the Chinese government has emphasized the integration of industry and education in vocational education to cultivate high-quality blue collar. The internship is a testing ground for integrating industry and education, an important part of vocational education, a talent pool for the enterprise's human resource accumulation, and a rehearsal opportunity for students to prepare for their future careers. The internship is therefore a special workplace integrating education, learning, and working. This study deconstructs the internship environmental cognition from three dimensions: job demand, resources, and support. Two proactive behaviors are introduced into this research based on the characteristics of learning by doing. The job crafting behavior focuses on job and knowledge management behavior based on learning, which are selected as mediating variables. Firstly, this research emphasizes the conceptual underpinning of internship environmental cognition and proactive behaviors which combine educational and working purposes. According to the literature review, it finds that positive environmental cognition will trigger proactive behavior (job crafting behavior and knowledge management behavior). Secondly, proactive behaviors are helpful in producing good internship learning outcomes. The interns' work environment cognitive feelings and proactive behaviors jointly explain the learning outcome of internship in any circumstance. This study implies a new research framework consisting of enterprise input and personal behaviors as the determinants of internship learning outcomes. Finally, the literature on work environmental cognition and two important proactive behaviors established a reference for internship design. Providing suggestions for enterprises and schools to conduct work design. And give interns behavioral guidance on how to handle the work environment then produce a good internship outcome.

KEYWORDS: intern, environmental cognition, job crafting behavior, personal knowledge management behavior, intern learning outcome

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1. INTRODUCTION

The integration of production and education is an important policy for higher vocational education to achieve high-level sustainable development (Shi & Hao, 2019). Under the background of Chinese in-depth promotion of the integration of industry and education in vocational education, both schools and enterprises have shown a strong demand for the integration of industry and education (Dong & Ai, 2020). The integration of production and education is not unique to China. According to the theory of human capital, human capital is the fundamental growth pole for enterprise survival and industrial economic development. Therefore, the need for in-depth integration of education and industry is two-way, which will speed up the transformation of the training mode of technical and skilled talents. The training of talents with multi-subject participation has broken through the connotation of education and has been extended to the strategy of enterprise and national human capital management and cultivation. Workplace learning is an important part of practical teaching activities in vocational colleges (Yin & Rui, 2021), and research on training effectiveness is the most basic research field.

According to whether the internship is planned or not, it can be divided into planned and unplanned internships. The difference between them is that one type of internship is planned and has curriculum planning, while the other is a form of internship that has no curriculum and has the same work experience and content as those on the job (Ding et al., 2018).

Workplace internships for Chinese students have a long history, but the previous internships were more or less problematic, with low student satisfaction, and irregular operations in schools and enterprises (Chen, 2018). Emphasis on utility rather than value; emphasis on business rather than morality; emphasis on form rather than content, easy to fall into business work, ignoring experience summarization; untrustworthy behavior, despise ability improvement; lazy behavior, lack of professionalism (Ni, 2019). Now, under the advocacy of the state, there is a change in the practice model in the field of higher vocational education, and enterprises are also participating in the cultivation of high-skilled talents, and jointly building a workplace for students to study, exploring a multi-win training model (Li & Long, 2017; Hu, 2022).

Besides the benefits to the students and schools. There are many benefits for enterprises. Companies can obtain skilled workers and qualified job candidates through internships (Anjum, 2020). Enterprises are deeply involved in the training of skilled talents, to improve the level of human capital through workplace learning (Dong & Ai, 2020). Enterprise internship is the transformation process of reducing students from "manpower" to "productivity"(Li & Long, 2017). The enterprise environment is not only an educational scene but also a work scene, which directly affects the learning and work behavior of student workers, which in turn affects its human capital accumulation. It remains to be verified whether internships can help cultivate proprietary or heterogeneous human capital (Albats et al.,2020). However, some studies also found that there is a strong relationship between job design and outcome, poorer job design will result in lower satisfaction and career development (Rogers et al., 2021).

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In the process of internship, students are often the passive part. Influenced by the company's job design and school resources, students hope to obtain some benefits from the internship, obtain employment opportunities; obtain knowledge and ability improvement from the internship, or prepare for future employment and development (Hussien & La Lopa, 2018). Therefore, students have a purpose in their practice, and they are also active parts. During the internship process, different behavioral responses will affect the results of the internship. How to interact with job design and personal ability to form a good internship outcome is an urgently needed research question. At all levels, from the perspective of job design, the school enterprise jointly plans the training, and many resources are granted for students to participate in long-term internships (Albats et al., 2020).

Chinese scholar Chen (2018) conducted a survey of 22,617 interns and found that internships are not the length of the internship that can be of the greatest educational value. but rather the kind of content designed and how it is organized. More attention should be paid to the nature of training content, student turnover rate, enterprise scale, enterprise technical characteristics, length of internship, information asymmetry, and the impact of student internship remuneration on the level (quality) of enterprise training (Yin & Rui; 2021; Hussien & La Lopa, 2018); But there are not many studies on total factor analysis in the internship workplace (Zhao et al., 2020).

According to Morgeson and Humphrey (2006), thousands of studies have looked into how work is designed. However, Rogers et al. (2021) pointed out that there are not many studies on the analysis of internships from the perspective of job design, with only 6 published papers. A systematic literature study of internship outcomes found while the scale may be effective at capturing learning outcomes, it may fall short of illuminating the underlying processes that give rise to those outcomes (Çaliş et al., 2022). Workplace learning research is either unsystematic, focusing on the analysis of a single environmental element, or focusing on psychological elements (Hemmler et al., 2022). The students' insights about internships are important to consider to re-frame internships, especially environmental cognition (Hora & Her, 2020). Besides environmental cognition, research on the relationship between the environment and the outcome, although in recent years there has been a shift from psychological behavioral trends, this kind of paper is rare (Hemmler et al.,2022).

Workplace performance research especially work burnout is based on the job demand–resource (JD-R) model, with work engagement and work performance or other concrete manifestations as an outcome, job demand, job resource, and job support as the influencing factors. However, the majority of research, including that of Hackman and Oldham (1976), offered a model that illustrated how specific aspects of an individual's employment affected their psychological states and, eventually, their level of satisfaction. More attention was paid to the psychological level. Through the research of existing literature, it is found that the relationship between environmental factors and outcome is explained by a model (JD-R Model) with strong explanatory power. In addition, the model pays more attention to personal intervention for example job crafting (Bakker et al.,2022). In order to propose management strategies that integrate employee behaviors

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that are crucial to job performance, such as learning, we must reevaluate and modify current theories（Bakker & Vries, 2021）.

Due to the particularity of student workers, there is still no conceptual framework that considers the unique circumstances of learning, working, and achieving learning objectives. In our study, we apply the JD-R model to the individual learning and working context. This study also adds proactive behavior, job crafting behavior, and knowledge management behavior, to enrich the JD-R model (Bakker et al., 2022). Because of the interns' work identity, this study will find support for the model's adaption during the internship to explain the process that contributes to the internship outcome.

2. THEORETICAL PERSPECTIVES

Drawing on JD-R theory to organize our analysis, the conceptual framework model in Figure 1 depicts the influence of job design on two important proactive behaviors that provide a path to internship learning outcomes. From the literature review, the elements of internship workplace design, starting from three elements of job demand, job resource, and job support, we will conduct an analysis of internship job design. At the same time, it focuses on analyzing the two main active behaviors in this paper and analyses the evaluation elements of internship results. Secondly, through literature analysis, construct the impact relationship between job design and two proactive behaviors which are the job crafting behavior, and personal knowledge management behavior. Thirdly, investigate the relationship between job design and internship learning outcomes, especially the effects on the advancement of professional skills and knowledge, consolidation of professional knowledge, and changing learning methods. Fourthly, explore the mediating role of two proactive behaviors between job design and internship outcomes.

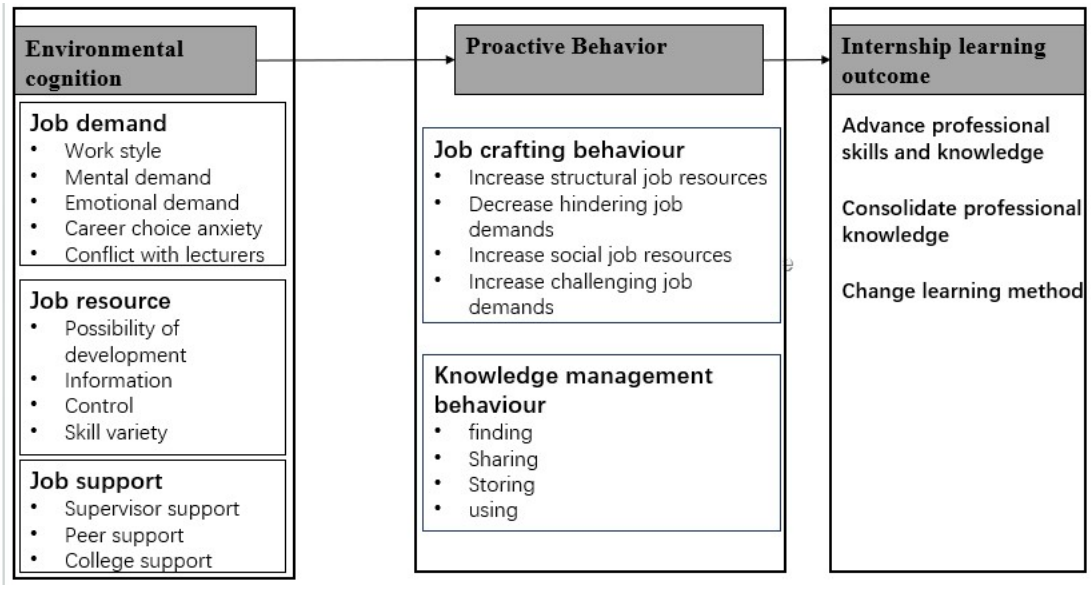

Figure 1: The Interaction of Environmental Cognition, Proactive Behaviors, and Internship Learning Outcomes

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2.1 Environmental Cognition

Companies and schools can intervene by way of job redesign to build positive environmental factors for internships. The job could be the target of redesign. To change the entire organization, departments, or teams, use top-down management. Task reorganization and training managers to deliver job resources are two examples. Therefore, job redesign is a structural intervention that aims to arrange the factors that affect interns' work environment cognition, especially their cognition of job demands and resources (Galanakis & Tsitouri,2022).

Fortunately, a great deal of well-established theories and studies on work design parameters that can trigger meaningful guidance to aid work design in the internship setting have existed (Hackman & Oldham, 1976; Morgeson & Humphrey, 2006). The theories of the JD-R model have also been extensively applied in a number of other fields, including occupational psychology, human resource management, organizational behavior, and many others (Bakker & Demerouti, 2016). The Job Demand-Resources Theory contains two basic concepts, Job demands and job resources. According to Demerouti et al. (2001), job demands are defined as "those physical, social or organizational components of the job that require persistent physical or mental effort and are consequently connected with particular physiological and psychological costs". Job resources are considered to be "those physical, social or organizational aspects of the job that are: functional in achieving work goals; decrease job demands and the associated physiological and psychological costs and enhance personal growth, learning, and development".

JD-R theory can explain the work environment from the perspective of psychological and cognitive aspects which is suitable for any circumstance that does not need to concretize work styles and job categories. The basic hypotheses are that low demand and high job resources will ease work exhaustion(burnout), which will affect individual and organization's job performance (Demerouti & Bakker, 2011). So, job demand and job resources are very important to promote workers' motivation and performance. In addition, personal resources also have significant effects on various outcomes. Various empirical studies have demonstrated the universality of the JD-R model, which is applicable to various work environments, types of work, cultural backgrounds, and gender groups (Bakker & Demerouti, 2014). The effects of job resources and job demands are fairly evident, according to empirical research, however, different empirical studies have different conclusions about the mediating role of personal resources, and more research is required to confirm these findings (Galanakis & Tsitori, 2022).

High job demands and little job resources indicate a high-stress workplace, which can lead to burnout over time (Bakker & Vries, 2021). Thus, it is imperative that supervisors or monitors focus more on optimizing job characteristics, such as establishing challenges and goals that are realistic and appropriately monitoring job autonomy throughout the internship (Bakker & Demerouti, 2016).

2.2 Proactive Behavior

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Scholars continue to study and improve the Model, join job crafting behavior and other proactive behaviors, personal demands, and challenge demands as mediators or moderators, and through empirical research, prove the applicability and heterogeneity of those elements and the model. The JD-R model is mostly used to study the workplace environment, but it is also used for related learning problems, such as Student burnout (Jagodics & Szabó, 2022; Cilliers et al., 2017; Hodge et al., 2019; Williams et al., 2018), the model is also explanatory in educational and learning environment.

In the working environment, the combination of job demands, job resources, personal resources, and personal needs will lead to an outcome, but it is not negligible that students will adopt self-regulation behavior to perform the combination of demands and resources when they encounter difficulties. Based on the above considerations, what rational behaviors can students adopt to improve their personal outcomes? A literature search on job performance revealed, that it is considered possible to take two adaptive self-regulation strategies (job stress recovery and job crafting), one is psychological reaction and the other is behavior (Bakker & Vries, 2021). There are many other behaviors, such as innovative behavior （Montani et al., 2022; Khan et al., 2020; Li et al., 2019, organizational citizenship behavior (Ali & Anwar, 2021), extra-role behavior (Kwon& Kim, 2020), voluntary work behaviors (Mekpor & Dartey, 2017), knowledge management behavior (Shujahat et al., 2020).

2.2.1 Job Crafting Behavior

Job crafting behavior is the most popular proactive behavior that many researchers use to analyze work performance and well-being (Bakker et al., 2022). A behavior that focuses on working from a person-centered perspective. The term "job crafting" refers to the self-initiated improvements that employees make to their occupations, and it was first used in 2001 by Wrzesniewski and Dutton. 15 years later, employees have learned that they may adjust various occupation factors from many aspects, such as tasks, workplace relationships, and their perspectives on work (Wrzesniewski & Dutton, 2001).

However, in recent years, there have been many studies on the adaptive behavior of job crafting behavior. Different groups have different forms of job-crafting behavior. The term "job craft" refers to the adjustments that employees make to their job demands and available resources to improve the job-person fit (Tims et al., 2012). Proactive changes people make to their jobs, interactions, and thoughts to make their work more meaningful and less stressful are called job crafting (Wrzesniewski & Dutton, 2001). By taking the initiative to maximize job demands, look for more challenges, and obtain job resources, people can improve the job-person fit (Demerouti & Peeters, 2018; Tims et al., 2012). Additionally, workers might do cognitive crafting to give their otherwise meaningless labor greater significance by altering their thoughts. For instance, nurses may view themselves as essential members of the hospital and think they play a great role in maintaining patient health (Wrzesniewski & Dutton, 2001).

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2.2.2 Personal Knowledge Management Behavior (PKMB)

Personal Knowledge Management is a kind of behavior in which individuals integrate information into their personal knowledge collection. At the same time, arrange the information from random masses into a systematic document or thought, the purpose of this conversion is in order to broaden our knowledge (Diao et al., 2009). PKMB has many expressions. Knowledge management is a set of methods and activities that actualize knowledge by creating, sharing, saving, and reusing which is a way to handle knowledge (Migdadi et al., 2018). So many published papers have explored behaviors to explain peoples' tactical methods of sharing, concealment, and finding to manipulate knowledge (Wang & Noe, 2010). Thus, PKMB is a higher-order construct with learning orientation which is related to individuals' learning outcomes. It is defined as a process of capturing, storing, sharing, and using knowledge and has many dimensions (Farooq, 2018; Chang & Lin, 2015; Mertins et al., 2001). Knowledge management is a process of people seeing and moving information, making it simply execute in important circumstances and use it in day-to-day situations.

2.3 Internship Learning Outcomes

The original purpose of the internship is for employability, but nowadays internships have the learning purpose that cultivating high-level talents and deeply integrating education and industry. The dimension of the internship is expanded. Internship quality always contains three dimensions, including students' professional skills, professionalism, and personal growth (Zhu, 2021). Internship quality generally encompasses cognitive skills, non-cognitive skills, and personal development. Nghia and Duyen (2019) think internships may have four outcomes. Outcomes related to knowledge, professional skills, changes in attitudes and learning, building career paths, and outcomes related to networking with professionals. No matter what the definition is, learning is not neglected.

3. RELATED LITERATURE

3.1 The Effects of Environmental Cognition on Job Crafting Behavior

The definition and measurement of environmental cognition are slightly different. In this study, the JD-R factors are used to map the working environment. Although many job characteristics can be referred to. Such as JCM, the JCM explanatory model was constructed in 1975 by Hackman & Oldham in their study of work satisfaction. The Job Characteristics Model (JCM), comprising skill variety, task identification, task significance, autonomy, and feedback, is a tool for explaining the nature of a job. Many new job-related criteria were added to the JCM by Morgeson and Humphrey in 2006 with the creation of the Work Design Questionnaire (WDQ). The task characteristics, knowledge qualities, social characteristics, and contextual factors. Maaravi et al. (2021) added work environment characteristics to the JCM model, and then the JD-R model was introduced into the research of internship and learning studies（Wingerden et al., 2018）. Because JD-R theory takes into account all the job demands and job resources that may predominate in a given job, its

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application is more comprehensive than that of earlier models of job stress or job characteristics (Demerouti et al.,2019). So, we draw mainly on the popular job demands-resources model in this study.

How do job demand, job resources, and job crafting relate to each other in the context of JD-R theory? The four job crafting strategies have all been studied (Tims et al, 2015). It appears that job crafting, job resources, and demanding work requirements have the strongest correlation, according to all of these researchers. Various antecedents have been found by existing research on job crafting, such as individual characteristics, attitudes, job characteristics, job demands, and person-job fit, as well as managers and supervisor support. The first study to look into working environments and job crafting was done in 2012 by Petrou et al. They discovered that high levels of autonomy and daily work pressure were positively correlated with day-level resource seeking for example knowledge finding. And negatively related to day-level demand decreasing. According to Kanten's (2014) research, task importance and autonomy had no relationship with job crafting, but feedback and skill variety did. In contrast, decreased job expectations had a positive impact on burnout, whereas pursuing resources and challenges had a favorable impact on work engagement (Petrou et al., 2015).

Job resources will decrease disengagement and boost job crafting, so have a positive impact on work. whereas job demands had a negative impact because they made workers more weary and less able to continue their jobs (Demerouti et.al., 2018). According to Bakker's (2018) research, the relationship between job crafting and work engagement was positively correlated with a number of workplace factors, including growth expectations, performance evaluation, and job content and job definition. When workers are very invested in their work, job crafting attempts seem to be particularly successful. Therefore, both the predictor and the result of employment demands and resources, as well as health and motivational markers, have been studied. Also, moderate levels of Job insecurity of employees will be more likely to engage in cognitive crafting (Buonocore et al., 2020).

Social support and a robust corporate culture are among the contextual elements that assist job-crafting efforts, according to a review of qualitative studies in the field (Lazazzara et al., 2020). Philip (2021) revealed that there was a positive relationship between supervisor support and job crafting on work engagement for students. The hypothesis that social support helps job crafting is supported by many studies.

3.2 The Effects of Environmental Cognition on Job Crafting Behavior

It is uncommon to find empirical research that looks at the connection between PKMB and job design. Whether knowledge workers can effectively manage their own personal knowledge through job design. The work environment, which is incompatible with the job-design theory, will have an impact on employees' PKMB (Hackman & Oldham, 1975; Morgeson & Humphrey, 2006). Low job resources and high job demands create a high-stress work environment that can eventually have negative effects and result in passive behaviors (Bakker & Demerouti, 2017; Demerouti & Peters, 2018a). Specialized forms of job demand and job resources such as job rotation, job

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complexity, and workload have also been shown to be related to personal knowledge management. Due to the fact that aspects of job design can impact workers' requirements and incentives to manage their own knowledge and ultimately enhance job performance (Moreno & Cavazotte, 2015).

Time and energy can be important job demands for learning and transfer. A suitable workload is beneficial for learning and working, but overload will hinder such learning and working. It is found there is a negative relationship between knowledge and skill use and the factors of role adaption, workload, and job stress. Shujahat et al., (2020) conducted quantitative research and the findings showed that job definition, innovation as a requirement for the job, and an emphasis on lifelong learning are three factors that have a favorable effect on workers' personal knowledge management, which boosts productivity. Liu and Belton (2022) found that overall job complexity and analytical task intensity have a positive effect on cognitive skill accumulation, while interactive task intensity has no significant effect. Therefore, suitable job demand may positively affect PKMB.

It is not possible to conclude from JD-R that job resources improve PKMB and job crafting. For instance, there is a positive correlation between university employees' knowledge accumulation and regular job rotation as a job resource (Ahmed, 2021). However, job autonomy as a kind of job resource, may have a negative impact on one's personal knowledge management. It indicated that further efforts are needed to find out the complex relationships between PKMB and job resources.

Social support can trigger workers' Job crafting and PKMB stably. Researchers proposed that organizational social capital can stimulate knowledge management and impact employees' proactive work behavior positively and significantly (Akram et.al., 2017). Authentic leadership will create a workplace culture that gives much social support and resources to encourage knowledge-sharing and innovation. Study interaction, workplace autonomy, and readiness to learn can influence informal learning behaviors (Lucena & Borges-Andrade, 2022). Job design encourages workers to collaborate with each other, which results in a number of linked knowledge behaviors, including knowledge sharing, knowledge creation, and knowledge application (Gagne et.al., 2019). Coach or supervisors are an important social support factor that influences student knowledge management when they encounter some problems (Podgórny, 2018). And for the effect of leadership, so many papers are illustrated. Different kinds of leadership have different effects on knowledge management (Eroglu& Saracel, 2022). Overall, an organizational supportive work climate may promote knowledge management behavior, which is beneficial for learning outcomes.

From existing research, we can deduce that moderate job demand may have a positive effect on proactive behaviors and then produce better outcomes. Because suitable job demands will trigger workers to adjust all the resources they have and all the abilities they own to meet the high job demand. However, excessively high job demand may cause burnout that may hinder workers' proactive behavior. Job resources may predict proactive behavior and outcomes positively. That depends on what resources it is and the extent of job demand. Job autonomy is a particular job

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resource that may have a U-shape effect on proactive behavior. Social support is a stable factor that may trigger proactive behavior.

3.3 The Effects of Job Crafting Behavior on Internship Learning Outcomes

JD-R theory describes, in essence, how job demand and job resources may influence employee well-being (burnout, job performance, work engagement, or workplace learning) and the process people use proactive and reactive work behaviors to affect job demands and resources, then promote work or learning outcomes (Parker, 2017). In this research, we emphasize two important work and learning behaviors: job craft behavior and knowledge management behavior.

Obviously, previous studies have shown inconsistent findings in the relationship between job crafting and job engagement, suggesting the urgent to investigate the subdimensions of job crafting (e.g., Chen et al., 2014; Petrou et al., 2012; Tims et al., 2012; Lee & Lee, 2018). Studies were limited by selection outcomes, including attitudes (Chen et al., 2014), job satisfaction (Cheng & Yi, 2018, Kim et al., 2018a, Kim et al., 2018b), and behavior. There are two kinds of subdimensions to deconstruction job crafting. In this study, Job crafting is been thought of as a sort of behavior that increase or decrease job demand and job resource. through adjusting the job demands and job resources to make employees comfortable. Then reduce burnout.

All the job crafting behaviors can be categorized into four dimensions. They are an increase in structural and social job resources, an increase in challenging job demands, and a decrease in hindering job demands (Tims et al., 2012). Some studies use JD-R theory and job crafting to explain individual-level outcomes (i.e., burnout, job performance, human resource accumulation). Approach and avoidance of job crafting behaviors have a big influence on work outcomes (Bruning & Campion, 2017). A number of empirical investigations and intervention trials have demonstrated a favorable correlation between job crafting and employee engagement at work (e.g., Petrou et al., 2012; Van Wingerden et al., 2017). Optimizing demands refers to proactive actions to facilitate operations, increase productivity, and avoid ineffective processes (Bakker et al.,2022). Intervention research indicates that optimizing demands is positively correlated with job performance (Demerouti et al., 2018a), work engagement (Demerouti & Peeters, 2018), and readiness to adapt and safety behavior (Demerouti et al., 2021).

Job crafting is seen as a positive means to many individual and organizational outcomes (Scoppetta et al.,2019; Chen, 2021; Van Wingerden, 2016; Van Wingerden et al., 2017). Job Crafting can benefit employees in all roles and organizations across all industries. Job crafting directly shapes and promotes job engagement (Meng et al.,2021). Additionally, work-related self-efficacy and crafting behaviors in the workplace were enhanced by the job-crafting intervention (Sundar & Brucker, 2021). According to Dominguez et al. (2018), job crafting is positively correlated with work engagement and negatively correlated with burnout, which is good for employability stability. Job crafting also can generate life satisfaction, in-role, and extra-role performance (Gupta& Singh 2020; Geldenhuys et al., 2021), positive feelings and attitudes, social relatedness, and work engagement (e.g., Demerouti et al., 2015a; Demerouti et al., 2015b), career success (Plomp et al., 2016)

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In recent years, job crafting has been seen as an important means of improving individual and organizational outcomes, so research has placed more emphasis on how to improve job crafting. Workers who participate in training interventions can acquire the skill of using job crafting strategically (Oprea et al., 2019). Through learning work interventions, employees acquire the skills necessary to maximize job demands and raise troubles (Demerouti et al., 2021). Job crafting is seen as a kind of proactive behavior that are introduced to employees and give them advice on how to handle job demand and job resource to maintain a stable psychological and behavioral state to strive for better work and learning outcomes.

Nonetheless, certain research has indicated that the correlation between job crafting and work engagement is not entirely evident. The effects and action directions of various combinations of job crafting profiles vary with respect to work engagement. Some prove that job craft helps increase work engagement. there exist several limitations that can affect the effectiveness of this intervention. That depends on employees' orientation. When it is organization-centered, job crafting will benefit work performance. But if it is self-centered, the dark triad personality will influence the good outcome. For the learning outcome, if personal orientation is not to get a better learning outcome, they only want to maintain a comfortable working state. This kind of job crafting will decrease burnout but will have a negative effect on learning outcomes.

The relationship between job crafting and work engagement is also ambiguous (Demerouti et al., 2015a; Demerouti et al., 2015b; Petrou et al., 2012; Petrou et al.,2017). So, job crafting does not always exist on the bright side, sometimes it depends on individual needs or detailed insights into the underlying work pressure, autonomy, social climate, and social relations, then choosing the different job crafting processes. For example, increasing structural and social work resources, or decreasing hindering job demands (e.g., Harju et al., 2016; Petrou et al., 2017). The direction of the relationship between job crafting and learning outcomes is not clear. It is reasonable that job-crafting behaviors tend to be learning-oriented, as these proactive behaviors help optimize the learning demand and search all the beneficial job resources to get more knowledge and skills, then promote work engagement. So, job crafting behavior can explain how to reduce burnout, but the effect on other outcomes is unclear. For the outcome of learning, job crafting should be learning-oriented. That may produce better learning outcomes.

Job crafting is a proactive behavior that always be emphasized, but not popular in the education area. Körner (2022) in a paper named “Fostering Study Crafting to Increase Engagement and Reduce Exhaustion among Higher Education Students.” proposed a viewpoint that study crafting mediated the intervention's effect on engagement and exhaustion. Internship, as a scenario that balances learning and work, work-oriented and learning-oriented are exited at the same time, adhering to these two tendencies, practicing job crafting may promote working and learning during the internship.

3.4 The Effects of Knowledge Management Behavior on Internship Learning Outcomes

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Behavioral inattention will affect human capital accumulation. Aggregation, relation, creation, and sharing of knowledge can enhance learning (Kop, 2011). Or conduct knowledge management through other subdimension learning behaviors, consume, create, connect, and contribute (Milligan et al.,2014). But overall, knowledge management behavior is the process object to knowledge, including seeking new knowledge, gathering information, sharing ideas, asking for knowledge from others, asking for feedback, reflecting, applying what you have learned, and other knowledge management processes (Rigolizzo, 2022). Classroom learning behavior refers to behavioral engagement that pays attention to whether students are working hard in learning activities and the intensity of their participation in learning activities, such as listening carefully in class, not arriving late or leaving early, actively answering questions in class, submitting assignments or papers on time, etc. Behavioral engagement is a cognitive process that using and gathering knowledge. Normally learning has four stages, experience/action, feedback, reflection, and Intent to learn (Decius et al., 2019). There are four knowledge management behaviors, Consuming, Creating, Connecting, and Contributing (Milligan et.al. (2014).

Learning behavior, especially knowledge management behavior affects individual and team performance Kim et al., (2020). Most past studies test the relationship between knowledge-sharing behavior and performance (Jolaee et al., 2014; Mahmoud et al., 2014; Ramayah et al., 2014; Tan & Noor, 2013; Wei et.al., 2014, Rahman et.al., 2016). They found that knowledge sharing has a positive effect on personal performance. Some researchers also prove that the knowledge management process will improve academicians' performance and productivity (Razi et al.,2019; Young & Jin, 2016). The literature review revealed that PKMB is a key learning behavior (Ni, 2019), Which will affect the work and learning directly. So PKMB should be regarded as a very important proactive behavior that can trigger work performance and the accumulation of knowledge and skills.

4. DISCUSSION AND CONCLUSION

Through the previous literature review, it is found that the work environment forms an individual's environmental cognition which consists of job demand, job resources, and social support dimensions. Positive environment cognition will promote proactive behaviors and ultimately produce good results. Human capital theory believes that educational resources act on people's work and study behaviors through educational means, thereby forming human capital accumulation. This study put forward four findings here:

4.1 Moderate job demand and relatively sufficient job resources and social support may have a positive effect on interns' proactive behaviors

Higher job demand may cause burnout that hinders interns' performance, especially since there are litter personal resources compared with employees. Interns may be more likely to passively copy with high job demand. In the workplace, interns have to deal with work demands that they are not familiar with, thus, they need more job resources and social support to help them handle the problems.

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4.2 Job crafting which is learning-oriented may have a positive effect on interns' learning outcome

Through literature research, it was found that job crafting may have a negative effect on employees' burnout through four kinds of job crafting processes (adjusting job demand and job resources). But cannot explain all the working and learning outcomes. For example, because of the dark side of personality, they may decrease hindering job demands that do not benefit the learning outcome. So, learning-oriented job crafting can avoid job crafting that just eases their psychological stress but is not good for learning.

4.3 Personal knowledge management behavior may directly and positively affect interns' learning outcome

Learning is related to some behaviors referring to knowledge. Personal knowledge management behavior, especially knowledge sharing, knowledge finding, knowledge storing, and knowledge applying can improve interns' learning outcomes efficiently.

4.4 It is beneficial to improve the interns' learning outcomes through training in job crafting behavior and personal management behavior

These two proactive behaviors are not the skills that interns can own from nature. So, it is very important to give guidance to interns to use these two proactive behaviors. That can be called intern intervention (job intervention) to help interns adopt positive behavioral measures to cope with the internship issues.

4.5 The JD-R model can be an explanatory model to analyze internship learning

Although the JD-R model is always used in the analysis of worker's well-being and performance, it may also be used in workplace learning (Lin et al.,2023; Golle et al., 2020; Decius, 2021). In this study, two important proactive behavior echoes the need for an internship. That is the essence of the internship, "learning by doing".

5. LIMITATIONS AND FUTURE RESEARCH

The internship is a complex process involving multiple stakeholders. This model is just based on the perspective of students. Analyzing the internship process through the method of qualitative literature review. Combined environmental cognition, and proactive behavior into the explanatory model of internship. So, there are three limitations to this study.

Firstly, this study only focuses on the perspective of interns. During the internship, interns are often in a dominant position compared to formal workers. Many members take part in this process. National policies, enterprise management, institutional investment, colleague relationships, and peer assistance, the excessive role transition from students to employees are also related. However, these factors may seem to be detached from or be hidden from the environment and behavior model. Interns' psychological factors are also not mentioned in the model (Montani, 2022). So, in the future, these factors need to be deeply discussed to facilitate the proactive behavior that will be useful in the process of internship.

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Secondly, many other factors play significant roles in the formation of internship outcomes except organizational and individual factors. For example, additional policies on the integration of industry and education, moderators, and other mediators of their effect on the work design which influence interns' environmental cognition might well be tested in the future (Shi, 2019). In recent years, Proactive work behaviors like job crafting and proactive vitality management have been suggested by JD-R theory. However, additional undermining actions must also be investigated. (Bakker et al., 2022; Parker, 2017). Rarely research has tested it in internship circumstances. Therefore, in the future, it is necessary to conduct further in-depth research on more positive and negative behaviors in internships in order to guide students' internships.

Thirdly, the research method has limitations and needs an empirical quantitative survey to test the explanation rate of the model. In this study, the author only tries to introduce a conceptual JD-R model to analyze the internship learning outcome.

6. CONCLUSION

Utilizing established conceptual frameworks (the knowledge management process and the job Demand-Resources model) and building on prior research on job performance, we have developed a conceptual model to improve the explanation of the internship process and the development of internship outcomes. We argue that this model is necessary because there is no generally accepted model to explain the forming process of internship learning from the perspective of job characteristics and proactive behavior. This study can propose a possible model to fill in the gaps.

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